13.08 PLANNING PROPOSAL AMENDEMENT TO CLAUSE 4.1A (3) (b) and (c)

File No. PR22-175
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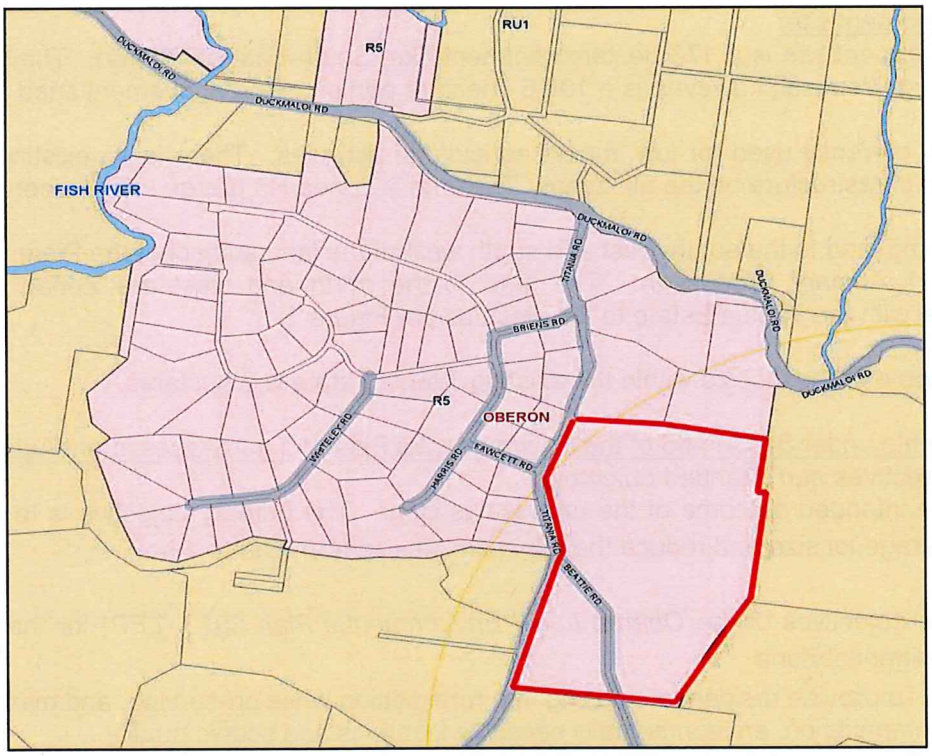
Summary
The subject land is located and known as Lot 1 in DP: 1089862, 175 Titania Road, Oberon (refer to locality map – Figure 1). The site is currently zoned R5 Large Lot Residential with a Minimum Lot Size of 2 hectares and an average of 2 hectares under the *Oberon Local Environmental Plan, 2013* (LEP).

A Planning Proposal and associated subdivision were submitted to Council on the 18th August, 2014 to justify the departure from Clauses 4.1A (3) (b) and (c) of the LEP restricting the minimum lot size of 2ha. The proposal aims to reduce the minimum lot size from 2 hectares to a 1 hectare minimum with the average lot size of 2 ha to remain, therefore not affecting the total yield currently allowed.

Figure 1.



The proposed outcome of the Planning Proposal seeks to amend Clause 4.1A (3) (b) and (c) of the LEP to read:

(b) the area of each lot resulting from the subdivision will not be less than 1 hectare; and
(c) the average size of all lots resulting from the subdivision will not be less than 2 hectares.

Recommendation:

That:

1. The Planning Proposal to reduce the Minimum Lot Size and the proposed amendment to Clause 4.1A (3) (b) and (c) of the Oberon Local Environmental Plan 2013 on Lot 1 in DP 1089862, being known as 175 Titania Road, Oberon be supported; and

2. The proponent be advised that prior to any development associated with the Planning Proposal being determined the preparation of a complete hydrological report, be prepared and submitted to Council in associated to the lodgement of a Development Application, to investigate the potential impacts to ground water quality, ground water vulnerability, waste water disposal impacts bore licensing and requirements impacts for the development site and adjoining properties in consultation with the NSW Department of Primary Industries, Office of Water.

Comment
The purpose of this report is to provide an overview of the Planning Proposal assessment process including the manner in which the conditions in the Gateway determination have been addressed, the issues raised in the public submissions and the issues associated with the submission received by the Department of Primary Industries, Office of Water (DPI Water).

The development site:
The development site is a 178 hectare allotment 5km South East of Oberon. The land subject of the Planning Proposal, however, is a 101.61 hectare portion of the abovementioned allotment.

The site is currently used for low impact agricultural activities. There is an existing dwelling and associated infrastructure on the allotment. The land is zoned R5 (Large Lot Residential).

The adjoining land to the south, east and south west of the land subject of the Planning Proposal is Zoned RU1 Primary Production. The land to the north and west are Zoned R5 Large Lot Residential with the Titania Estate to the west, as per Figure 1.

The average existing lot size within the existing Titania Estate is 2 hectares.

Requirements under Section 55 of the Environmental Planning and Assessment Act. 1979:

1. Objectives and intended outcomes:
   The intended outcome of the proposal is clear. The primary objective is to retain the 2ha average lot size and reduce the minimum lot size from 2ha to 1 ha.

   The objectives of the *Oberon Local Environmental Plan 2013* (LEP) for the R5 Large Lot Residential Zone
   - To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.
   - To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.
   - To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.
   - To minimise conflict between land uses within this zone and land uses within adjoining zones.

   The objectives and intended outcome of the Planning Proposal, as justified by the applicant in their submission, (Attachment 1) are as follows;
   - Traditional 2 hectare lots have not always resulted in good planning outcomes;
   - 2 hectare lots are neither rural nor residential and can become unmanaged or a burden on the owner;
   - The market seeks a variety of lot sizes, depending on buyer's needs and preferences;
   - Dictating consistent lot size is not in the public/market interest;

- Smaller lot sizes will be more affordable , meeting recent needs for housing affordability;
- The developer is local and may include building contracts to achieve a higher quality product;
- There are no site constraints as the proposed land is suitable for all types of building;
- There is currently a shortage of large lot residential proposals in the Oberon Local Government (LGA) area and therefore this proposal is needed to helpmeet identified land use strategy targets for this type of housing. The area proposed has been gazetted for large lot residential development and therefore no question remains related to agricultural potential.

The intended outcome of the Planning Proposal is through the reduction in the Minimum Lot Size, to provide variable sized allotments. The balance for Council in the consideration of this application is the consideration of the principals of practical planning which is a key element identified in the Land Use Strategy (LUS). Practical planning promotes the focus on long term effective solutions rather than short term fixes with a focus on practical vision and measures. This not only increases the likelihood of implementation but also the likelihood of gaining and maintaining confidence and support of the community.

In consideration of this principal and the objectives of the R5 Large Lot Residential Zone to provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and the minimisation of conflict between land uses within this zone and land uses within adjoining zones. Further evidence is required of the applicant in the demonstration of how the impact associated to the Planning Proposal can be mitigated. It is noted however that these requirements exist currently and would need to be addressed as part of any DA development on the land.

2. Explanation of provisions:
   The proposal includes an indicative map, submitted as part of the proposed pattern of subdivision with an associated potential development application. The development application for the proposed subdivision is not being considered as part of the Planning Proposal. The information suppled indicates the minimum lot size changes and also a lot layout for a conceptual subdivision. LEP Map Sheet LSZ_005A for "Area B" would require amendment.

3. Justification and process for implementation:
   The proposal includes information in relation to the strategic planning framework. There is no regional strategy applicable to this land.

   In addition to the justification provided by the applicant (above) the following justification has also been provided:
   - The site has good access to community facilities, shopping facilities and public infrastructure;
   - Having regard to the adjacent Titania Estate and the proximity to the Oberon town centre the proposal to reduce the size of lots will increase the supply of feasible small lots and reduce the shortage of suitable residential accommodation close to Oberon;
   - The subject site would be developed more economically and to its full potential if the minimum lot size was reduced, thus contributing to the much needed residential housing supply in Oberon. Reference pg6 of applicant submission

The Planning Proposal however does not substantially clarify how the reduction in lots size for the proposed residential housing preserves, and minimises impacts on, environmentally sensitive locations, especially in relation to ground water quality. Nor does it fully address the impacts on the potential conflict between land uses within this zone and land uses within adjoining zones. This would be required to be addressed as part of any application for subdivision.

4. Mapping:
   The proposal includes a number of annotated maps and aerial maps to clearly identify the site and the current zoning and Minimum Lot Size as well as the proposed Minimum Lot Size change.

5. Community consultation:
   The Planning Proposal was subject to a 28 day community and agency consultation. During this process Council received comments from DPI Water and objections from Nine (9) adjoining land owners.

   The issues raised by the objectors are summarised in the following Matrix (Figure 2). Whilst many of the issues raised could be addressed as part of a merit assessment undertaken with a subsequent Development Application, consideration must be made, as to their relevance associated to the potential for smaller allotments to be created.

   The LUS provides Council with a strategic framework for the future development of the Local Government Area. In formulating the LUS high level constraints analysis addressed the suitability and capability of particular land for intensification of development having regard to the current status quo and potential the best use of land. This included the identification of some areas rural land for higher density forms of development.

   The difficulty arises in so far as the adjoining land owners have raised concerns as to their concern with the intensification of the use of the land and similarly question the strategic need for the development at this location as in addition to density.

   The position for Council is to balance strategic land use planning pursuing a higher order use on land identified as capable of supporting such a use with the desire of the immediate residents to preserve the character and use of the land for agriculture.

   At this stage it is sufficient to acknowledge that there is capacity to support the development, however, prior to proceeding with the Planning Proposal Council may consider it important that information be provided as to the impacts of the development now and into the future.

   The issues identified, as can be seen in the Matrix, are largely around the potential for land use conflict and the impacts on ground water from a quality and supply perspective. To this the LUS initially identified the subject site as having a potential greater than agriculture because of the proximity to an adjacent large lot residential subdivision.

   As indicated any land rezoning for intensification of use or density where there is likely be conflict needs to be managed and mitigated. With that in mind the following issues have been identified in the following Matrix:

Submissions	Impacts on the adjoining extractive industry.	Increase traffic generation in conflict with Quarry operations	SEPP (mining, Petroleum and extractive Industries) 2007 compliance.	Compliance with the Section 117 Direction	Request for the amendment to the pattern of subdivision to reduce land use conflict	Increase density of the development site & inappropriate size of lot	The effect of the development on the ground water table inc. quality and ongoing supply.	No services proposed	Use and land use conflict including the impact on stock by dogs	Unaware of rezoning as a result of LEP 2013 or not originally notified of the proposal	Oversupply of small lots – no demand.	Impacts on Rural outlook	Relevance and compliance with LUS	Bushfire protection concerns.	Weeds and ongoing control	Water quality issues including reduced runoff	Buffers between residential and rural	Threatened species impacts.
Submission 1	X	X	X	X	X	X												
Submission 2						X	X	X	X									
Submission 3						X	X	X	X	X	X	X	X	X				
Submission 4							X		X						X	X	X	X
Submission 5						X	X										X	
Submission 6						X		X		X								
Submission 7						X		X		X								
Submission 8						X	X	X	X	X								
Submission 9						X	X				X							
Submission 10						X												

Figure 2 Submissions Matrix: As can be seen by the matrix the main issues raised relate to the increase in density the reduction in the minimum lot size (50%), the impacts on bore water quality and supply (33%) and concern over the lack of services to the proposed development (27 %).

Proposal Assessment

1. **Strategic Merit Assessment:**

Metropolitan Strategy: Not Applicable

Regional Strategy/Regional growth Plan/Subregional Delivery Plan: No regional strategy or growth plan is currently or applicable to the subject land.

Land Use Strategy: The Oberon Land Use Strategy (LUS) is applicable to the subject application. The Planning Proposal provides comments in relation to compliance with the LUS (refer to page 7 of the applicants proposal).

The adoption of the LEP 2013, resulted in the current lot average. The Planning Proposal, aims to further reduce the MLS to 1 hectare. However, the resultant number of lots to be created is equivalent.

The vision for the Local Government Area (LGA) identified within the LUS is "*To Build on the strengths and diversity of the Oberon LGA by incorporating opportunities aimed specifically at the provisions of social equality through additional employment whilst maintain environmental sustainability.*"

A subregional vision for Oberon relative to the Oberon township and surrounds is "*To build on the prosperity of Oberon and surrounding areas, through the provision of improved services and facilities aimed at attracting an increase in both tourists to the area and the residential population, while still maintain rural atmosphere.*"

It is acknowledged that there is no vacant 1(c) equivalent Zoned land within the LGA by the LUS. It is also acknowledged that the availability of increased larger residential lots will reduce the need for dwellings in rural zoned land. Essentially by virtue of sound planning design practices a development can be provided to the development site, with a reduced Minimum Lot Size, having regard to such issues as buffers, lot locations and environmentally sensitive design. It is important to note that staff have concerns regarding the proposed subdivision design, however these issues can be dealt with as part of a merit based subdivision assessment, separate to this process.

An environmental sustainability analysis of a proposal requires any development to be directed away from environmentally sensitive areas including those with ground water vulnerability. This site has been identified by the NSW Department of Primary Industries, Office of Water (DPI Water) as being vulnerable to the impacts of development on the ground water table. And it is also acknowledged that the reduction of the MLS could exacerbate this environmental concern.

The consideration of MLS and environmental impacts associated to the development of un serviced lots was considered in the LUS. The LUS considered the requirements of the Environmental Health Guidelines (1998) which indicates that an appropriate minimum allotment size must be governed by the following components:

- Provision of sufficient land for buffers to neighbouring properties; and
- Provision of sufficient land for the installation and operation of on-sire waster water management facilities; and
- Provision of sufficient land for a house, associated structures, vehicular access and social and recreational areas.

Generally it is considered by the Environmental Health Guidelines (1998) that new subdivisions for residential development involving on-site waste water sewage management systems require a minimum 5,000 sqm total area per household to manage medium to long term impacts.

The Planning Proposal is considered to be broadly consistent with the LUS and LEP, as the subject land has been identified in the Strategy for residential subdivision (pending the outcome of the Hydrological assessment) and is zoned R5 Large Lot Residential.

Oberon Local Environmental Plan 2013.

The LEP states in respect to Lot averaging subdivision in Titania Estate, Oberon (clause 4.1A) that
(1) The objective of this clause is to ensure that lot sizes and subdivision patterns for residential accommodation conserve and provide protection for the environmental values of the land by encouraging buildings to be appropriately sited.
(2) This clause applies to the land identified as "Area B" on the Lot Size Map.
(3) Despite clause 4.1, development consent may be granted to the subdivision of land to which this clause applies if:

(a) the consent authority is satisfied that the land to be subdivided is proposed to be used for the purpose of residential accommodation, and
(b) the area of each lot resulting from the subdivision will not be less than 2 hectares, and
(c) the average size of all lots resulting from the subdivision will not be less than the minimum size shown on the Lot Size Map in relation to that land, and
(d) the consent authority is satisfied that the development retains, and is complementary to, the environmental attributes of the land and its surrounds.

Clause 4.1A (3) (d) is the important subsection of this clause which has not been adequately detailed within the Planning Proposal.

The concept provided aims (via a potential Development Application) to create:

- 25 lots less than the 2ha – ranging from 1ha to 1.6ha; and
- 10 lots of 2ha or more – ranging from 2.03ha to 2.63ha; and
- 3 lots in excess of 3 ha – ranging from 3.13ha to 24.92ha with an associated residue of 76.39ha.

Whilst it is important to consider that the Council is only assessing the merits of the Planning Proposal and that staff have concerns regarding the layout and pattern of the proposed subdivision. That the reduction in the MLS will increase the density of the development and could, without the submission of further information, have a negative impact upon the environmental attributes of the land and its surrounds.

2. S117 Directions

Section 117 Direction	Strategies
1.2. Rural Zones (19 July 2007 – reissued 9 May 2008) Section 4 states that: A draft LEP shall: a) not rezone land from a rural zone to a residential, business, industrial, village or tourist zone. b) not contain provisions that will increase the permissible density of land within a rural zone (other than land within an existing town or village). Section 5 states that a draft LEP may be inconsistent with this direction only if it satisfies the Director-General that the inconsistencies are justified by a strategy / environmental study, in accordance with a regional strategy or of minor significance.	These changes largely recognise areas with a dominant and/or existing approved large lot residential character and with an already constrained agricultural capability. The proposal will result in an increase in the number of lots that can be developed on the application site within an existing R5 large lot residential zone. **The Planning Proposal is consistent with Direction.**
1.3. Mining, Petroleum Production and Extractive Industries (Issued 19 July 2007) Section 4 states that in the preparation of a draft LEP affected by this direction, the council shall: (a) consult the Director-General of the Department of Primary Industries (DPI) to identify any: (i) resources of coal, other minerals, petroleum or extractive material that are of either State or regional significance, and (ii) existing mines, petroleum production operations or extractive industries occurring in the area subject to the draft LEP, and (b) seek advice from the Director-General of DPI on the development potential of resources identified under (4)(a)(i), and (c) identify and take into consideration issues likely to lead to land use conflict between other land uses and (i) development of resources identified under (4)(a)(i), or (ii) existing development identified under (4)(a)(ii).	The original LUS addressed the requirements of the SEPP and S117 direction by modifying and by reviewing R5 zone boundaries (particularly Titania) setbacks, seeking to avoid any increase in development density near known major mineral deposits and reflecting the SEPP (Mining) in the land use permissibility's. The proposed development is out side the existing resource area. **The Planning Proposal is consistent with Direction.**
1.5. Rural Lands Sections 4 & 5 state that in the preparation of a draft LEP affected by this direction, the council shall: (4) A draft LEP to which clauses 3(a) or 3(b) apply must be consistent with the Rural Planning Principles listed in State Environmental Planning Policy (Rural Lands) 2008. (5) A draft LEP to which clause 3(b) applies must be consistent with the Rural Subdivision Principles listed in State Environmental Planning Policy (Rural Lands) 2008.	Section 3.2.10 of the endorsed LUS contains a detailed assessment of the proposed rezoning's against the rural subdivision principles. The findings of the Strategy have been to identify suitable locations for new large lot residential locations, whilst given consideration to the rural planning principles outlined in the SEPP **The Planning Proposal is still considered consistent with Direction.**
3.4. Integrating Land Use and Transport (19 July 2007) Section 4 states that: (4) A draft LEP shall locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of: a) Improving Transport Choice – Guidelines for planning and development (DUAP 2001), and b) The Right Place for Business and Services – Planning Policy (DUAP 2001).	The planning proposal is consistent with this direction. The existing and planned road system is considered to be adequate for the additional traffic that would be generated by the increase in density of the subject land. School and public passenger bus routes operate in the vicinity of the land. The distance of the land from the Oberon township does not warrant the provision of pedestrian or cycling paths. **The Planning Proposal is consistent with Direction.**

Section 117 Direction	Strategies
4.4. Planning for Bushfire Protection (19 July 2007) Sections 4 to 6 state that: (4) In the preparation of a draft LEP a Council shall consult with the Commissioner of the NSW Rural Fire Service under section 62 of the EP&A Act, and take into account any comments so made, (5) A draft LEP shall: a) have regard to Planning for Bushfire Protection 2006, b) introduce controls that avoid placing inappropriate developments in hazardous areas, and c) ensure that bushfire hazard reduction is not prohibited within the APZ. (6) A draft LEP shall, where development is proposed, comply with the following provisions, as appropriate: a) provide an Asset Protection Zone (APZ) incorporating at a minimum: b) an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and c) an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road, d) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the draft LEP permit Special Fire Protection Purposes (as defined under section 100B of the Rural Fires Act 1997), the APZ provisions must be complied with, e) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks, f) contain provisions for adequate water supply for fire-fighting purposes, g) minimise the perimeter of the area of land interfacing the hazard which may be developed, h) introduce controls on the placement of combustible materials in the Inner Protection Area.	Council has consulted with the NSW Rural Fire Service in the preparation of the supporting land use strategies and LEP during the LUS Process. However the proposal is inconsistent with this direction at this time, as written confirmation of the NSW RFS has not been obtained It is considered that his can be obtained as a condition of Gateway determination. **The Planning Proposal is consistent with Direction.**

3. Site Specific merit assessment

Opportunities and constraints of the site.

The subject land is zoned R5 Large Lot Residential, and already has the opportunity to be subdivided with a Minimum Lot Size of 2ha. Any increased in density of the site is potentially restricted by ground water impacts which is unresolved at this time.

Natural environment.

DPI water have been involved in and provided comments to Council in the development of the LUS as well as the assessment of the Planning Proposal. Copies of the correspondence from DPI Water and the applicants response to their concerns follows this report for information.

Essentially the concerns raised by DPI Water relate to:

- The documentation provided by the applicant has not considered the water demands (non-potable and potable) for the proposed lots and the ability to meet these demand via appropriate and authorised sources. It is recommended that due to the large number of potential lots that reticulated water be provided for non – potable demands;
- It is suggested that reticulated for non-potable demands could be supplied by single or multiple bores adjacent to the site or connection to the town water supply.
- Of bores would require hydrological assessment to determine impacts, which would in turn require larger lot sizes to adequately source groundwater and mitigate impacts to other users and the environment.
- The geotechnical study provided by the applicant recommends an on-site waste water disposal system, however office of water require additional information in relation to:
    - Disposal area requirements and the ability to function with the proposed lot sizes;
    - Water quality of the effluent disposal of and potential change to the existing ground water quality;
    - The cumulative impact within the project area and adjacent lands and waterways;
    - The ongoing maintenance of on-site effluent systems are not considered.

DPI Water recommends that the Minimum Lot Size can be reduced on the basis that the lots under 2ha are provided with reticulated water and/or waste water services or are otherwise serviced to ensure that ground water bores will not be required on lots under 2ha.

In response to these initial concerns raised by DPI Water an on site meeting was conducted between the Department of Planning, the Office of Water, the applicant and Council to address the abovementioned issues. In response the applicant provided further information on how the abovementioned issues were to be addressed in the Planning Proposal and follow for information.

The DPI water, however in their response dated 9 November, 2015 indicate they still maintain their recommendations (outlined above). The proposal has the ability to source adequate portable and non-potable water to meet predicted demands of the proposed land use.

The proposal to bring in potable water (as suggested by the applicant) is not recognised as a sustainable or strategic planning approach to meet the sites water demands by DPI Water. It is recommended that adequate water supply be sourced at the site or reticulated to the site.

DPI Water also maintains its recommendations to consider mechanisms to prohibit bores if the reticulation of water is not to be provided. The current proposal provides for the individual land owner to install bores which may result in a proliferation of bores within a small area and resultant impact on each other and potentially adjacent sites.

It must be noted at this time the authority bound to issue licences to allow bores to be installed is DPI Water.

The applicant has undertaken a desk top assessment of the site in relation to the disposal of on-site waste water disposal to determine the impact that the proposed Minimum Lot Size reduction and subsequent subdivision will have on the land.

The study, however, does not address the impacts of the increased density on ground water quality or the associated impacts of the installation of bores on the property as a potential for land use conflict. As no reticulated water is proposed or can be accessed to the development site this is potentially a major impact that needs to be addressed in consideration of the landform, geology and hydro geological conditions and the balance of lot sizes.

Services and Infrastructure.
It is proposed to include a sealed internal road network as well as utilising the existing Beattie Road access from Titania Road.

The applicant is proposing on releasing the development in stages, based on demand for the lots and the provision of roads and services.

Overall in the consideration of the Planning Proposal the subject land is zoned R5 Large Lot Residential, and already has the opportunity to be subdivided with a Minimum Lot Size of 2ha. The consideration of impacts associated to the reduction of the Minimum Lot Size will not increase the yield but does prevent a number of considerations that require further assessment as part of a merit based subdivision assessment under the provisions of 79C of the Environmental Planning and Assessment Act 1979. In this regard the Planning Proposal should be supported in accordance with the recommendation.

175 Titania Road, Oberon, NSW 2787

Planning Proposal to amend Oberon Local Environmental Plan 2013

21 August 2014

fragar
planning & development

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Introduction

Fragar Planning & Development was engaged by the owners, Chris & Vanessa O'Neill, to prepare and lodge a planning proposal related to altering the restrictions in the *Oberon Local Environmental Plan 2013 (LEP 2013)*, restricting the minimum lot size of lots to 2 hectares on a portion of Lot L 1 DP 1089826.

This planning proposal seeks to amend LEP 2013 to allow a minimum 1 hectare lot size (currently 2 ha) with an average lot size of not less than 2 hectares (currently 2 ha).

Background Information

The proposal to apply a 1 hectare minimum lot size and 2 hectare average to the application site has been the subject of numerous correspondence between Oberon Council, Department of Primary Industries, Office of Water, NSW Department of Planning and Infrastructure and Fragar Planning and Development on behalf of the applicant.

The rationale behind the existing 2 hectare average and 2 hectare minimum seems to relate mainly to the NSW Office of Water having concerns related to any *"ground water vulnerable areas where reticulated water and sewer are not available"*

The proposal is therefore to apply for a minimum lot size of 1 hectare and 2 hectares average. This is consistent with the former Council decision dated 18 June 2013, its final meeting to consider public submissions to the exhibition of the Draft Local Environmental Plan. Oberon Council resolved to support the proposal, the subject of this current planning proposal and Development Application, ie a proposal for a 2 hectare lot average with a minimum 1 hectare lot size.

Subsequent to this Council decision, this office entered into substantial discussions with the Oberon Council, NSW Office of Water (NOW) and the NSW Department of Planning.

It is our understanding that the reason for the LEP 2013 not being gazetted in accordance with our proposal (2 hectare average and 1 hectare minimum lot size) are as follows:

a) the Department of Planning were concerned that the proposal was not formerly part of the exhibited DLEP. Noting that the proposal had substantial public consultation with no formal opposition. It remains a fact forever that the 2 hectare / 1 hectare proposal was not formally part of the DLEP as exhibited.
b) The NSW office of Water (NOW) at that time did not have sufficient technical advice in front of it to be satisfied that on site effluent disposal systems could operate in accordance with proper environmental outcomes relating to disposal and ground water vulnerability.

Note: A report on site testing and recommendations now forms part of this planning proposal. **See Appendix 1.**

Planning Proposal

Part 1 – A statement of the objectives and intended outcomes of the proposed instrument

The north-western part of 175 Titania Road, Oberon, NSW, 2787 is zoned R5 – Large Lot Residential and the south-eastern part is zoned RU1 – Primary Production, as shown on **Diagram 2**. A minimum 2 hectare and average lot size of 2 hectares applies to the part of the site zoned R5 – Large Lot Residential in terms of the *LEP 2013*. **Diagram 3** refers.

The part of the site that forms the subject of this planning proposal consist of the north-western portion of the site that is zoned R5 – Large Lot Residential, as shown outlined in blue on **Diagram 1**. This part of the site is referred to as the application site. The overall site is shown highlighted in yellow. The total area of Lot 1 DP 1089826 is 178 hectares. The application site is 101.61 hectares and contains a dwelling and a shed.

The objective of this planning proposal is to reduce the minimum lot size for the application site from 2 hectares to 1 hectare. Retaining the existing 2 hectares average will allow greater flexibility in the size of lots that can be provided on the application site. The proposed 1 hectare minimum lot size will result in a negligible change in the number of additional lots that can be developed on the site, having regard to the average lot size of 2 hectares that will still apply to the site.

Part 2 – The provisions that are to be included in the proposed instrument

The proposed outcome will be achieved by:

- Amending the *Oberon Local Environmental Plan 2013* Minimum Lot Size Map to allow a minimum lot size of 1 hectare on the application site.
- Amending clause 4.1A (3)(b) and (c) of the *Oberon Local Environmental Plan 2013* to read:

  (b) the area of each lot resulting from the subdivision will not be less than 1 hectares, and
  (c) the average size of all lots resulting from the subdivision will not be less than 2 hectares.

Part 3 – Justification for those objectives, outcomes and the process for their implementation

Section A – Need for the planning proposal

Q1. Is the planning proposal a result of any strategic study or report?

The Oberon Land Use Strategy (LUS) recognises the need for suitable residential accommodation in close proximity to Oberon. The aim of the LUS was to provide a strategic planning basis for the preparation of the *Oberon LEP 2013* and to provide key land use policies and principles for the Oberon LGA until 2035. Prior to the adoption of the *Oberon LEP 2013*, the proposal to apply a 1-hectare minimum lot size to the application

site has been considered by the Oberon Council, Department of Primary Industries, Office of Water, and NSW Department of Planning and Infrastructure.

The *Oberon LEP 2013* was, however, approved with the application of a 2-hectare minimum lot size for the application site and therefore the need for this planning proposal to reduce the minimum lot size.

There are reasonable grounds for the LEP 2013 to apply a 1-hectare minimum and retain the 2-hectare average lot size to the application site. The considerations supporting a 2-hectare average and 1-hectare minimum lot size are:

- Traditional 2-hectare lots have not always resulted in good planning outcomes;
- 2 Hectare lots are neither rural nor residential and can become unmanaged or a burden on the owner;
- The market seeks a variety of lot sizes, depending on buyer's needs and preferences;
- Dictating consistent lot size is not in the public/market interest;
- Smaller lots generally have lower maintenance in terms of control;
- Smaller lot sizes will be more affordable, meeting recent needs for housing affordability;
- The developer is local and may include building contracts to achieve a high quality product;
- There are no site constraints as the proposed land is suitable for all types of building.
- There is currently a shortage of large lot residential proposals in the Oberon local government area and therefore this proposal is needed to help meet identified land use strategy targets for this type of housing. The area proposed has been gazetted for large lot residential development and therefore no question remains related to agricultural potential.

Q2. Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The planning proposal is the best means of achieving the intended outcome for the application site.

Clause 4.1A of the *Oberon LEP 2013* reads as follows:

4.1A Lot averaging subdivision in Titania Estate, Oberon

(1) The objective of this clause is to ensure that lot sizes and subdivision patterns for residential accommodation conserve and provide protection for the environmental values of the land by encouraging buildings to be appropriately sited.
(2) This clause applies to the land identified as "Area B" on the Lot Size Map.
(3) Despite clause 4.1, development consent may be granted to the subdivision of land to which this clause applies if:
(a) the consent authority is satisfied that the land to be subdivided is proposed to be used for the purpose of residential accommodation, and
(b) the area of each lot resulting from the subdivision will not be less than 2 hectares, and
(c) the average size of all lots resulting from the subdivision will not be less than the minimum size shown on the Lot Size Map in relation to that land, and
(d) the consent authority is satisfied that the development retains, and is complementary to, the environmental attributes of the land and its surrounds.

The application site is identified as Area B on the Lot Size Map, as shown on Diagram 3. Therefore, a minimum and average lot size of 2 hectares applies to the application site.

The land to the south, east, and south-west is zoned RU 1 – Primary Production. The land to the north and west is zoned R5 – Large Lot Residential in terms of the *Oberon Local Environmental Plan 2013*. The minimum lot size of the land zoned RU1 – Primary Production is 100 hectares. The minimum lot size of the land zoned R5 – Large Lot Residential is 2 hectares.

The site is located approximately 5 km south-east from the Oberon town centre. Directly to the west opposite Titania Road is Titania Estate, which is a large lot residential development.

The site has good access to community facilities, shopping facilities, and public infrastructure located within Oberon. Having regard to the location of the adjoining large lot residential development to the west and the proximity of the site to the Oberon centre, the proposal to reduce the size of the lots that can be developed on the application site will increase the supply of feasible, smaller lots and will reduce the shortage of suitable residential accommodation close to Oberon.

The applicant intends to develop the land as shown on the site layout plan, **Appendix 2 to 5** refers. A total of 49 lots will be developed on the overall site. Lot 49, the remainder of the site, will be 76.39 hectares in extent. The lots proposed on the application site will range in size between 1.01 hectares and 24.92 hectares. The development will be completed in 5 stages:

- Stage 1: Lots 1–12
- Stage 2: Lots 13–24
- Stage 3: Lots 25–36
- Stage 4: Lots 43–47
- Stage 5: Lots 37–42

The subject site would be developed more economically and to its full potential if the minimum lot size applicable to the site was reduced from 2 hectares to 1 hectare. This would allow the provision of more feasible smaller lots that can be developed on the application site, thus contributing to the provision of the much-needed residential housing supply in Oberon. The proposal to reduce the minimum lot size would provide for a greater variety in the size of large lot residential sites that can respond to market demand and increase the supply of affordable housing in close proximity to Oberon.

Development of the land as proposed will be consistent with the objectives of the R5 – Large Lot Residential zone, as shown below:

- To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.
- To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.
- To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

Therefore, it is considered that the proposed amendments to the minimum lot size map and clauses 4.1A (3)(b) and (c) of the *Oberon Local Environmental Plan 2013* will be the best means of achieving the intended objective to develop the site for large lot residential purposes.

Section B – Relationship to strategic planning framework

Q3. Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

There are no regional or sub-regional strategies applicable to the site.

Q4. Is the planning proposal consistent with a Council's strategy or local strategic plan?

The proposal is consistent with the Oberon Land Use Strategy (LUS). The LUS identifies a large portion of the application site as 'Future Rural Lifestyle', as shown in **Diagram 4.** Compliance with the relevant sections of the Oberon LUS is provided below:

Section		Compliance Comment
Executive Summary	**Settlement** • Focus on the principle of cluster planning, creation of critical mass for the provision of higher order services and facilities within the LGA and limiting current and future land use conflicts.	The application site is located 5 km from Oberon. The proposal to reduce the minimum lot size to 1 hectare will increase the number of smaller, more feasible sites that can be provided at this location. The proposed reduction of the minimum lot size to 1 hectare will result in a more compact development along the western boundary of the application site and contribute to the creation of a critical mass for the provision of critical services in the area, such as economic development, and provision of higher order services.
	• Encourage an increase in the percentage of residential and rural lifestyle living developments through the provision of a suitable level of appropriately zoned land.	The proposal to provide smaller lots within the application site will increase the number of more feasible rural lifestyle dwellings that can be developed in the site. The proposal will contribute to: • meeting demand for large residential lots located close to Oberon; • providing accommodation close to employment opportunities in Oberon.
2.5.2	**Supply and Demand** • There are limited residential lands within the 2(v) zoning (Equivalent LEP 2013 zone is RU5 – Village) at Oberon and Black Springs. • There is an estimated long-term under-supply of suitable residential lands in these villages. • The provision of rural residential land (currently 1(c) zone) (Equivalent LEP 2013 zone is R5 – Large Lot Residential) should be limited to sites that encourage a strengthening of the villages and existing enclaves and do not contribute to rural fragmentation of the LGA. • There are currently 242 people working in the timber industry not residing in the Oberon LGA, primarily due to lack of suitable accommodation and lack of availability to meet appropriate residential requirements.	The proposal to reduce the minimum lot size to 1 hectare on the application site will contribute to the provision of suitable, smaller, more feasible residential lands close to Oberon. The application site adjoins an existing large lot residential development. The proposal will contribute to strengthening the Oberon village and the Titania Estate enclave and therefore not result in rural fragmentation.

3.1.12	**Rural Lifestyle Living – Strategic Directions and Actions** Council has endorsed the following criteria in identifying future rural lifestyle living sites: • New rural residential development should take into consideration a broad range of constraints including vegetation, bush fire, slope, water catchment, availability of water supply and land clearing. The development should not result in the clearance of remnant vegetation, and should incorporate native vegetation into the character and design of the development. • Rural residential development should be designed to maintain and enhance catchment health and should preferably not take place in catchments which are already significantly degraded. • Areas which are particularly visible from key visual points and which would impact on the historic, rural character of the Oberon LGA are not favoured for rural residential development. • New rural residential development should have reasonable proximity to one of the LGA's primary or secondary service centres. • Rural residential development should be located within reasonable proximity to primary and high schools, with links to the public transport network and opportunities for students to walk or cycle, wherever possible. • Rural residential development should form part of an efficient road pattern, with links to public transport services. • Rural residential development should be planned as part of a coordinated, logical settlement pattern, and should not generate disproportionate demands for services and infrastructure. • Rural residential development should not displace or conflict with significant agricultural land uses. • Rural residential development should not be located in areas where there will be irreconcilable conflict with existing or proposed future land uses.	Site constraints were considered prior to the zoning of the application site to R 5 – Large Lot Residential. The application site is not affected by significant threatened, rare, or endangered vegetation. The owners have a record of additional tree planting and retention. The existing pine trees on the site will be retained and incorporated into the proposed lots. The application site is largely clear of vegetation and not affected by bushfire risk. Suitable arrangements can be made for the provision of water supply and wastewater treatment. The site is located in close proximity to all services provided within the Oberon, such as schools, shops, and medical services. The site is bounded by Titania Road to the west and will be accessed from this road onto Beattie Road. Titania Road intersects with Duckmaloi Road, which is the main access road to Oberon from the east. The existing intersection of Beattie Road onto Titania Road will be moved slightly south to achieve an improved T intersection configuration. The realignment of these roads and intersections will result in an improved access outcome for the overall site. The proposed development is a logical extension of the existing large lot residential development to the west. The development will strengthen the existing land use pattern and therefore not contribute to conflict with existing or proposed future land uses.
	Objectives – Rural lifestyle development 1. Provide opportunities for additional rural residential subdivision and development in suitable locations, and enable a range of different types of rural residential development. Provide for a supply of rural residential lots at an	The proposal to apply a lot size of 2-hectare average with 1-hectare minimum is appropriate for the locality to meet the market demand for smaller, more feasible large lot residential development.

	annual rate sufficient to encourage progressive increase in settlement with a focus on existing settlement areas. 2. Ensure that adequate infrastructure and services are available for rural residential lots. 3. Ensure that the supply of zoned rural residential land does not unreasonably exceed demand. New rural residential areas must relate to the long term preferred settlement structure (i.e. not be located on land with potential for urban development in the long term) and provide adequate transport accessibility. Where possible and economically viable, smaller lots on the fringe of Oberon should have reticulated sewer provided. 4. Apply criteria to identify the best location for rural residential estates and balance socioeconomic goals associated with new rural residential development with the need to preserve areas of high agricultural, scenic or environmental value.	Suitable arrangements can be made to provide water and sewer to the application site. Macquarie Geotechnical Pty Ltd. has undertaken a geotechnical investigation to evaluate the application site for on-site disposal of domestic effluent in accordance with AS1547 - 2012 "Disposal Systems for Effluent from Domestic Premises", and the combined NSW government departments Environmental Health Protection Guidelines (EHPG); "On-site Sewage Management for Single Households" (1998). The recommendations in the letter received from Macquarie Geotechnical Pty Ltd dated 6 August 2014 is contained in **Appendix 1** and advises as follows: • the disposal of domestic effluent on-site is feasible for the subject lots using a Wisconsin Mound such as an "ecomax" or "fujichem" system. • the design of the Ecomax & Wisconsin Mound provided that it is designed and operated correctly, we would expect a zero overflow outside of the impervious membrane liner of the mound. Because of the impervious liner there would be no potential for drawdown of water which could contaminate a water supply, and even if there was the water quality is such that it would have minimal impact on the extractions, no more so than the existing rural land use. • Table R1 of AS1547:2012 gives guidelines for horizontal and vertical setback distances for effluent disposal with the minimum range from a bore or well being 15 - 50m dependent on several factors. Even if we were to work on a "worst case" scenario then the setback from a bore to an effluent disposal system would be 50m. • Based on the geotechnical investigation carried out a consistent soil profile of low to medium plasticity silty CLAY to a depth of 1.0m overlying silty GRAVEL was identified. Referring to Table R1 of AS1547 2012 Items A & H, the good effluent quality produced using an Ecomax system and the category 4 soil identified on site would be classified at the lower end of the constraint scale when considering set back distances. • Based on this, we see no reason for the setback distance to be 250m, and argue that it can be reduced to 50m. The zoning of the application site will not be changed. Therefore, the planning proposal will not impact on land with potential for urban development or preserved areas.

	Strategic Actions – Rural residential development a) Rural residential around Oberon Township must ensure that future urban growth options are not constrained by rural residential development, and that the road hierarchy allows flexibility for future growth of the town. e) Consider both minimum and average lot size (and possibly maximum) as a requirement. Allows for more flexible design to reflect environmental and planning constraints. g) Ensure appropriate minimum areas for on-site disposal depending upon soil type, slope, proximity to watercourse, and amount of effluent likely to be generated. h) Consider a range of minimum lot sizes for rural residential development.	The application site is appropriately zoned for large lot residential purposes. Reducing the minimum lot size will result in a minor change to the development potential of the site; therefore, it will not impact on future urban growth options. The proposed 1-hectare minimum and 2-hectare average lot size will allow a greater range of different lot sizes throughout the site and increased flexibility in meeting market demand for large lot sites close to Oberon.

Q5. Is the planning proposal consistent with applicable State Environmental Planning policies?

The planning proposal is consistent with the following relevant state environmental planning policies (SEPPs).

SEPP 55 – Remediation of Land

The aim of this policy is to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

It is unlikely that the subject site contain activities that would cause contamination on the site.

State Environmental Planning Policy (Infrastructure) 2007

Schedule 3 of this policy requires a referral to the RTA where a subdivision of land proposes 200 or more allotments and where subdivision includes the opening of a new road.

The maximum number of allotments on the subject site will be less than 200. This policy is, therefore, not applicable.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007

The aims of this policy are:

(a) to provide for the proper management and development of mineral, petroleum and extractive material resources for the purpose of promoting the social and economic welfare of the State, and

(b) to facilitate the orderly and economic use and development of land containing mineral, petroleum and extractive material resources, and

(b1) to promote the development of significant mineral resources, and

(c) to establish appropriate planning controls to encourage ecologically sustainable development through the environmental assessment, and sustainable management, of development of mineral, petroleum and extractive material resources, and

(d) to establish a gateway assessment process for certain mining and petroleum (oil and gas) development:

(i) to recognise the importance of agricultural resources, and

(ii) to ensure protection of strategic agricultural land and water resources, and

(iii) to ensure a balanced use of land by potentially competing industries, and

(iv) to provide for the sustainable growth of mining, petroleum and agricultural industries

The land is currently zoned R5 – Large Lot Residential, which does not permit mining, petroleum production, and extractive industries on the land. The area zoned R5- Large lot Residential has been resolved through the DLEP process and has a suitable buffer from the existing quarry located to the east.

Having regard to the location of existing large lot residential development and the existing zoning of the site, the proposed development constitutes a minor change to the existing and future land use pattern in the area. The proposal to reduce the minimum lot size to 1 hectare would, therefore, not contribute to a further compromise of the extraction of state or regionally significant reserves of coal, other minerals, petroleum, and extractive materials.

State Environmental Planning Policy (Rural Lands) 2008

The aims of this policy are as follows:

(a) to facilitate the orderly and economic use and development of rural lands for rural and related purposes,

(b) to identify the Rural Planning Principles and the Rural Subdivision Principles so as to assist in the proper management, development and protection of rural lands for the purpose of promoting the social, economic and environmental welfare of the State,

(c) to implement measures designed to reduce land use conflicts,

(d) to identify State significant agricultural land for the purpose of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,

(e) to amend provisions of other environmental planning instruments relating to concessional lots in rural subdivisions.

The planning proposal to reduce the minimum lot size from 2 hectares to 1 hectare will not have an adverse impact on the economic use and development of rural lands. The proposal will result in minor change in the number of lots that can be developed on the application site. The provision of smaller lots will result in a more compact and efficient use of the land at this location, reducing the future demand for agricultural land to be used for residential purposes.

Q6. Is the planning proposal consistent with applicable Ministerial Directions (s117 directions)?

The following section 117 directions are applicable to the subject site:

Direction 1.2 Rural Zones

The objective of this direction is to protect the agricultural production value of rural land.

The planning proposal to reduce the minimum lot size from 2 hectares to 1 hectare will not have an adverse impact on the economic use and development of rural lands. The proposal will result in a minor change in the number of lots that can be developed on the application site. The provision of smaller lots will result in a more compact and efficient use of the land at this location, reducing the future demand for agricultural land to be used for residential purposes.

Direction 1.3 Mining, Petroleum Production and Extractive Industries

The objective of this direction is to ensure that the future extraction of state or regionally significant reserves of coal, other minerals, petroleum, and extractive materials are not compromised by inappropriate development.

The land is currently zoned R5 – Large Lot Residential, which does not permit mining, petroleum production, and extractive industries on the land. No known mining, petroleum production, or extractive industries exist or have been approved or are planned on the site.

Having regard to the adjacent large lot residential development to the west and the R5 – Large lot residential zoning of the site, the proposed development constitutes a minor change to the existing and future land use pattern in the area. The proposed development of the site for smaller large lot residential purposes would, therefore, not be affected by noise, dust, vibration, or reduced visual amenity from any nearby future extractive industry any more than the adjoining Titania residential estate development. The proposal to reduce the minimum lot size to 1 hectare would, therefore, not contribute to a further compromise of the extraction of state or regionally significant reserves of coal, other minerals, petroleum, and extractive materials.

Direction 1.5 Rural Lands

The objectives of this direction are to:

I. Protect the agricultural production value of rural land,

II. Facilitate the orderly and economic development of rural lands for rural and related purposes.

The planning proposal will not change the zoning of the land and, therefore, will have no impact on the production value of rural land.

Direction 3.4 Integrated Land Use and Transport

The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision, and layouts achieve the following planning objectives:

(a) improving access to housing, jobs and services by walking, cycling and public transport,
(b) increasing the choice of available transport and reducing dependence on cars,
(c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car,
(d) supporting the efficient and viable operation of public transport services, and
(e) providing for the efficient movement of freight.

The application site has good road access to Oberon via Titania Road. The application site is located within 5 km of Oberon, relatively close to community facilities such as churches, shops, and parks. Therefore, the proposed development is consistent with this direction.

Direction 4.4 Planning for Bushfire Protection

The objectives of this direction are:

(a) to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
(b) to encourage sound management of bush fire prone areas.

The site is not affected by bushfire risk. A large part of the site is clear of vegetation. The proposed lots are large enough to provide any future buffer zones and to site buildings so as to minimise any future fire risk. Building materials and proposed planting can be addressed at development application stage for individual dwellings.

Direction 4.1 Acid Sulphate Soils

The objective of this direction is to avoid significant adverse environmental impacts from the use of land that has a probability of containing acid sulphate soils.

The Oberon LEP 2013 does not address acid sulphate soils mapping.

Direction 5.2 Sydney Drinking Water catchments-

The objective of this direction is to protect water quality in the hydrological catchment.

The proposed development will be designed to prevent any adverse impact on groundwater through the correct design of wastewater treatment systems that comply with the relevant guidelines.

Section C – Environmental, social and economic impact

Q7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

A small part of the site containing existing trees is mapped as High Biodiversity Sensitivity as illustrated on the plan referred to as **Diagram 5**. The site does not contain any threatened, rare, or endangered vegetation that would prevent the development as proposed. The owners have a record of additional tree planting and retention. The site is mainly clear of vegetation, with a small portion of the site containing existing trees. These trees are incorporated into the proposed site layout plan, as shown in **Appendix 3 and 4**. The boundaries of the proposed sites containing existing trees are such that the existing trees will be retained and integrated into future landscaping of individual sites. If required the trees on lots 18 to 23 can also be retained and preserved through the registration of a section 88 B instrument.

Q8. Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

The planning proposal could have an impact on the following environmental effects:

Access and Traffic

The site is bounded by Titania Road to the west and will be accessed from this road onto Beattie Road. Titania Road has a bitumen road surface and is of adequate standard to accommodate future additional lots on the application site. Titania Road intersects with Duckmaloi Road, which is the main access road to Oberon from the east. The existing intersection of Beattie Road onto Titania Road will be moved slightly south. The realignment of these roads and intersections will result in an improved access outcome for the overall site. The proposed intersection design of Beattie Road with Titania Road is included in this report and shown in **Appendix 6.**

No additional access points to the proposed lots will be provided onto Titania Road. The development has been designed to provide access to individual lots via new internal roads to be constructed. Therefore, the proposed development will have no adverse impact on traffic safety along Titania Road.

The proposed development will not result in a significant increase in lot yield on the overall site, having regard to the average lot size of 2 hectares that will remain the same. With regards to traffic considerations, the proposal to reduce the minimum lot size from 2 hectares to 1 hectare and resultant traffic movements is not considered to result in any adverse impacts upon the capacity of the local road network.

Traffic generated from the site's development will represent a relatively minor proportion of total traffic generated within the wider area. Titania Road is a designated heavy vehicle route carrying large volumes of traffic. The capacity of the public roads serving the site is not at capacity and will be able to accommodate additional trip generation as a result of the proposed development. There is no proposal for individual lot access to Titania Road.

Ground water pollution

Macquarie Geotechnical Pty Ltd. has undertaken a geotechnical investigation to evaluate the application site for on-site disposal of domestic effluent in accordance with AS1547 - 2012 "Disposal Systems for Effluent from Domestic Premises", and the combined NSW government departments Environmental Health Protection Guidelines (EHPG); "On-site Sewage Management for Single Households" (1998).

The recommendations in the letter received from Macquarie Geotechnical Pty Ltd dated 6 August 2014 is included as **Appendix 1** and advises as follows:

- The disposal of domestic effluent on-site is feasible for the subject lots using a Wisconsin Mound such as an "ecomax" or "fujichem" system.
- The design of the Ecomax & Wisconsin Mound provided that it is designed and operated correctly, we would expect a zero overflow outside of the impervious membrane liner of the mound. Because of the impervious liner there would be no potential for drawdown of water which could contaminate a water supply, and even if there was the water quality is such that it would have minimal impact on the extractions, no more so than the existing rural land use.
- Table R1 of AS1547:2012 gives guidelines for horizontal and vertical setback distances for effluent disposal with the minimum range from a bore or well being 15 - 50m dependent on several factors. Even if we were to work on a "worst case" scenario then the setback from a bore to an effluent disposal system would be 50m.

- Based on the geotechnical investigation carried out a consistent soil profile of low to medium plasticity silty CLAY to a depth of 1.0m overlying silty GRAVEL was identified. Referring to Table R1 of AS1547 2012 Items A & H, the good effluent quality produced using an Ecomax system and the category 4 soil identified on site would be classified at the lower end of the constraint scale when considering set back distances.
- Based on this, we see no reason for the setback distance to be 250m, and argue that it can be reduced to 50m.

Q9. Has the planning proposal adequately addressed any social and economic effects?

Social Effects

The planning proposal will contribute to the provision of suitable residential accommodation in close proximity to employment opportunities and other services within Oberon and provide an increased choice in residential lot sizes available to residents.

Economic Effects

The provision of a greater choice in the size of large lot residential sites in close proximity to Oberon parks, schools, and existing infrastructure will optimise the use of these resources and allow for a more economically viable development on the land.

Q10. Is there adequate public infrastructure for the planning proposal?

The subject site has access to essential public infrastructure that can be extended to the site including, electricity, and telecommunication.

Q1. What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

The planning proposal can be further considered based on comments received following consultation.

Part 4 – Maps to identify the intent of the planning proposal and the area to which it applies

Diagram 1 – Aerial photo showing Lot L 1 DP 1089826 *in yellow. The application site is highlighted in blue*

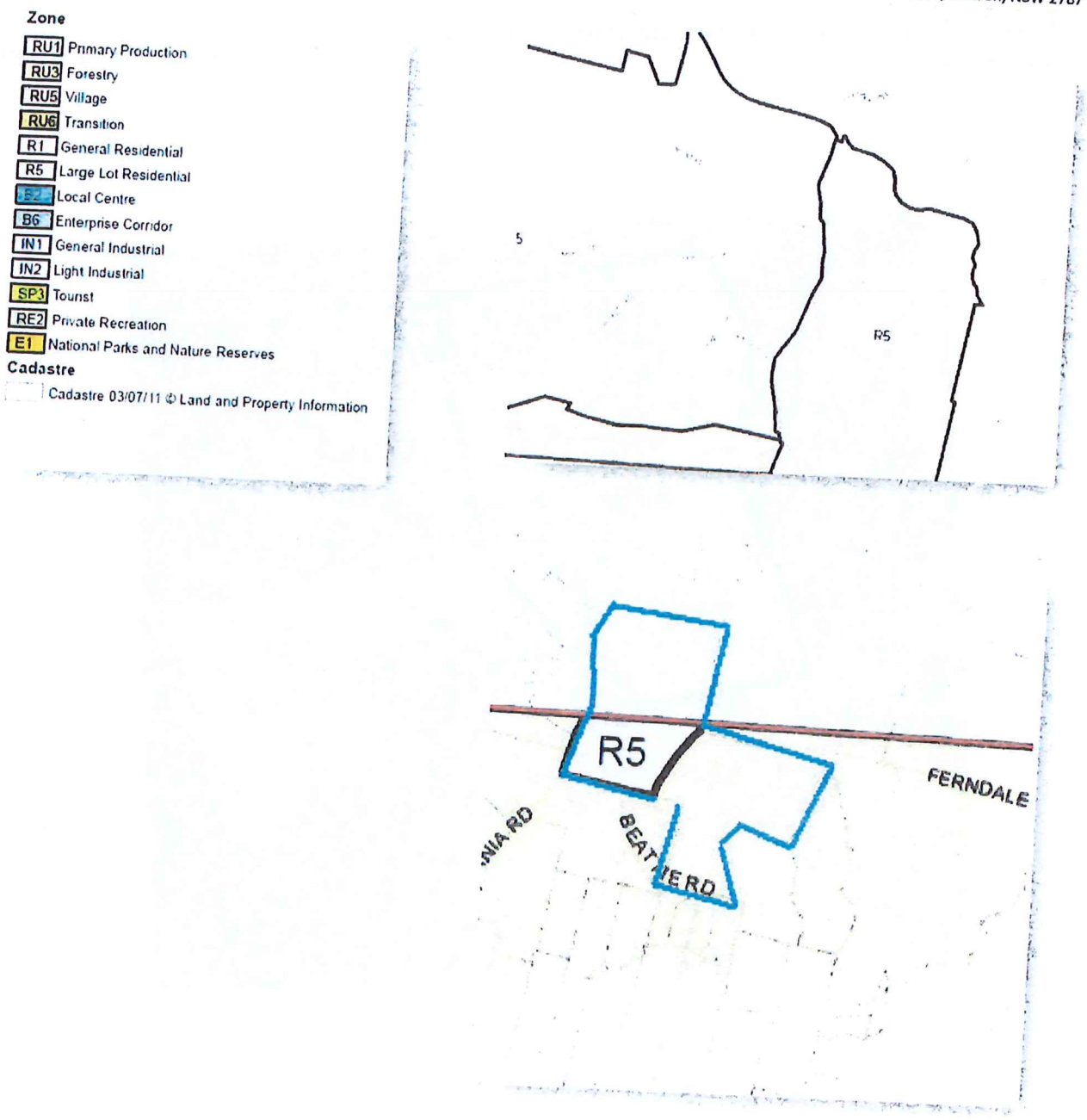


Diagram 2 – The application site is zoned R5 – Large Lot Residential. The remainder of the site is zoned RU1 – Primary Production

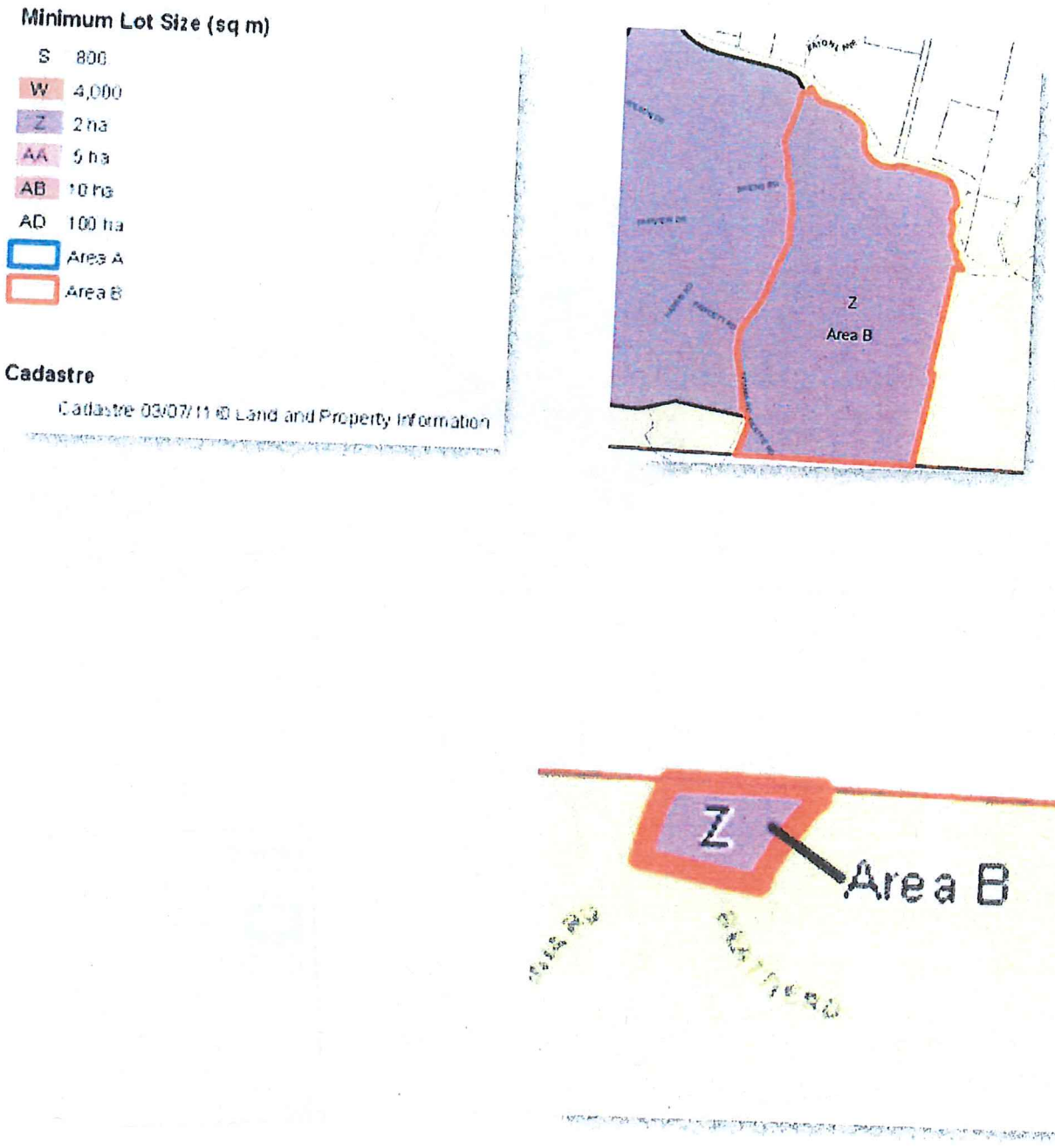


Diagram 3 – The minimum and average lot size permissible on the application site is 2 hectares

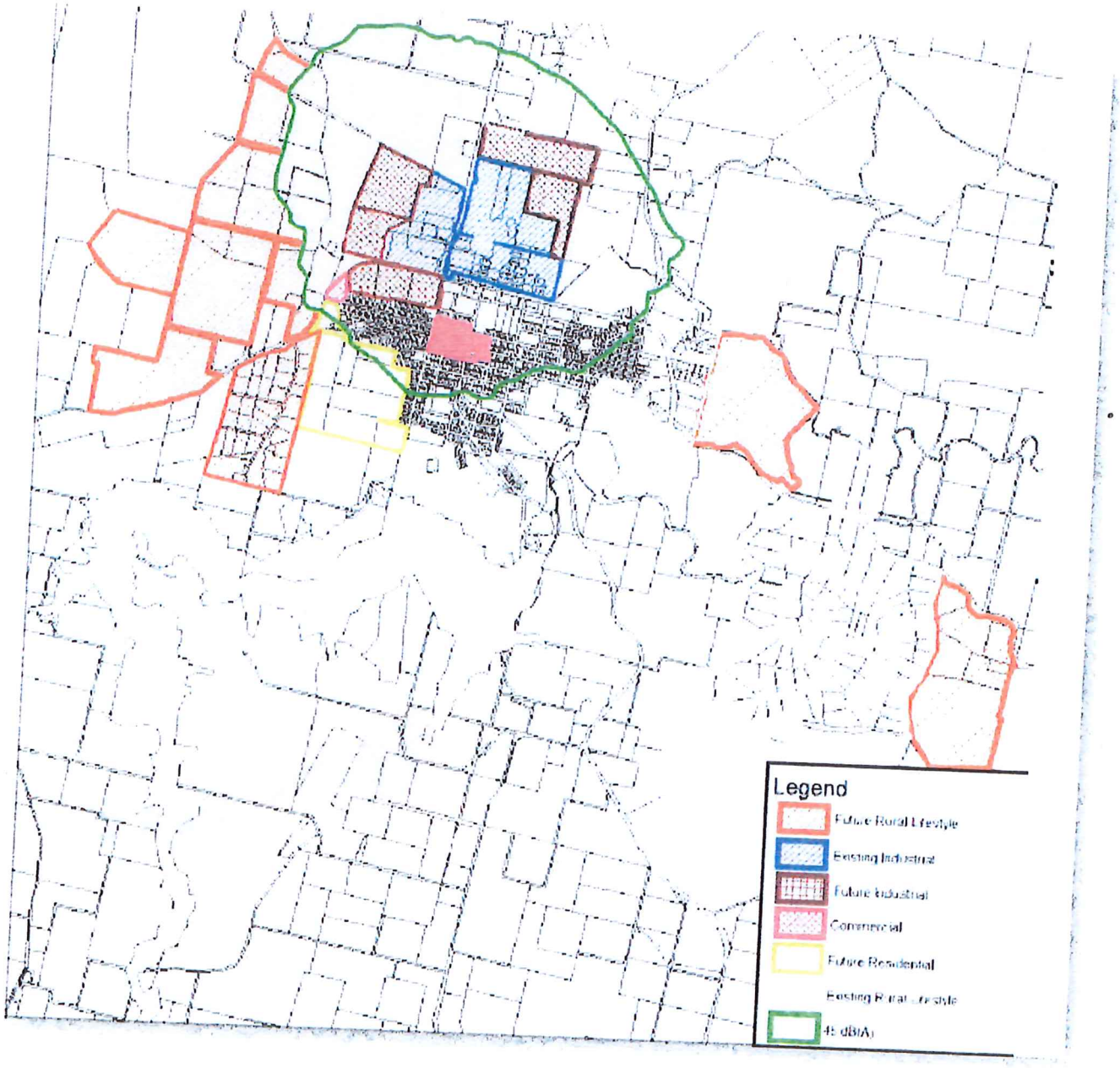


Diagram 4 – Extract from Figure ES1: Oberon and Surrounds Framework Plan

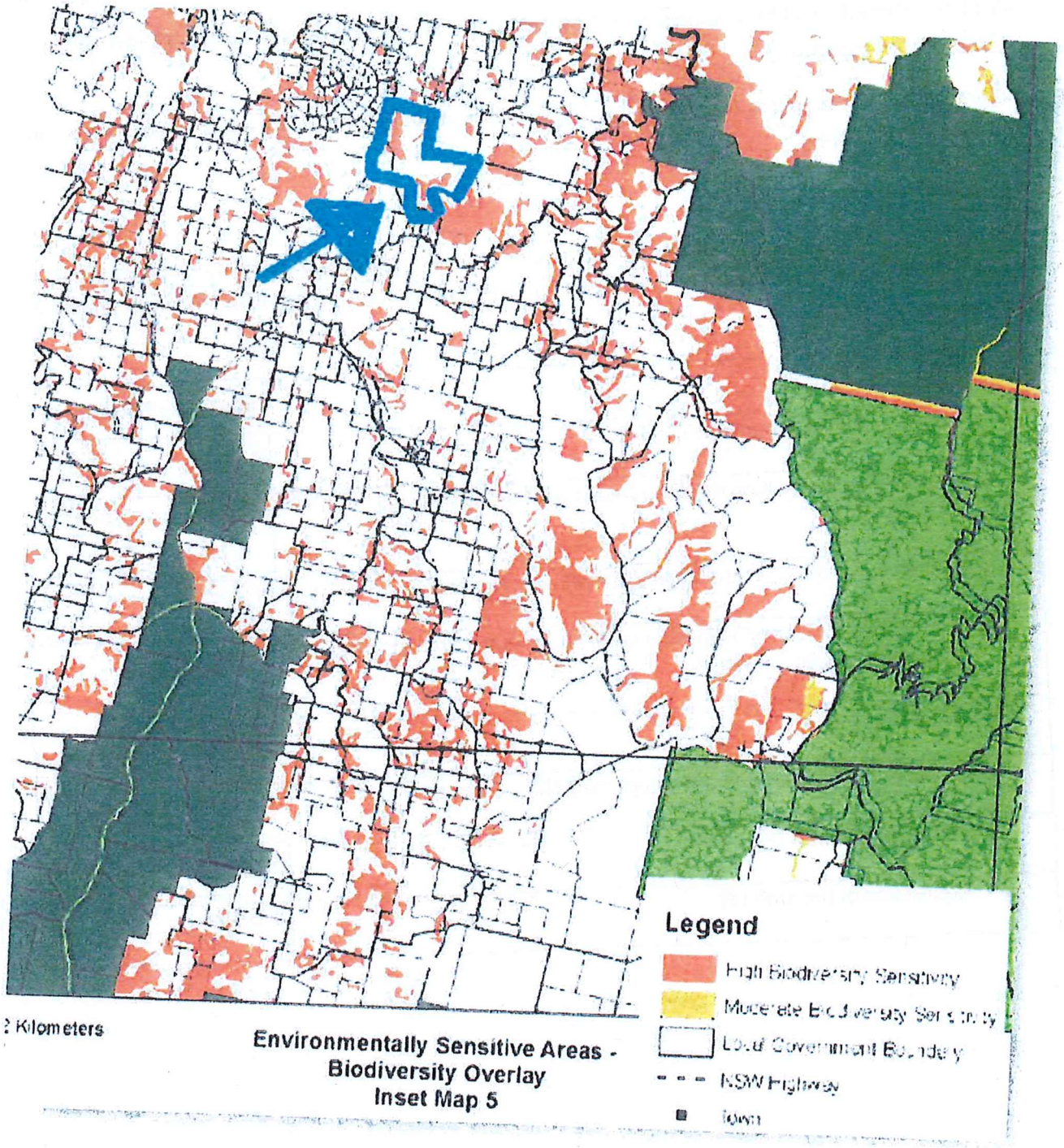


Diagram 5 – Biodiversity Overlay. The application site is highlighted in blue

Part 5 – Details of the community consultation that is to be undertaken on the planning proposal

A period of 14 days for public exhibition should be adequate to ensure sufficient community consultation for this planning proposal.

Part 6 – Project timeline

The Department of Planning and Infrastructure: 'A Guide to preparing local environmental plan' requires that a project timeline clearly identify time frames for each project phase. An indicative timeline is provided below:

Project Phase	Indicative Timeline
1. Report planning proposal to Council	2 weeks
2. Gateway Determination issued by Department of Planning and Infrastructure	4 weeks
3. Government agency consultation and Public consultation	4 weeks
4. Consideration of public submissions and preparation of report on the planning proposal to Council	4 weeks
5. Report to Council	4 weeks
6. Preparation of a draft LEP and request to DP&I	6 weeks
7. Making of the draft LEP	6 weeks
8. Notification of the draft LEP	2 weeks

Appendices

Appendix 1- Assessment for Onsite Effluent Disposal

MACQUARIE GEOTECH

Geotechnical Engineers & Engineering Geologists
NATA Accredited Construction Materials Testing
Laboratory for Soils, Aggregates and Concrete
Geotechnical & Environmental Drilling

NATA

6 August, 2014

Max Fragar
Fragar Planning & Development
11 Jersey Ave
Leura NSW 2780

Dear Max

Onsite Effluent Disposal Investigation for Proposed Subdivision/DLEP Titania Road Oberon NSW 2849

Assessment for On-site Effluent Disposal

Introduction

Macquarie Geotechnical Pty Ltd has undertaken a geotechnical investigation at the above site. This work was done to evaluate the site for on-site disposal of domestic effluent in accordance with AS1547 - 2012 "Disposal Systems for Effluent from Domestic Premises", and the combined NSW government departments Environmental Health Protection Guidelines (EHPG); "On-site Sewage Management for Single Households" (1998).

Method

Eighty four test boreholes were drilled and logged on the 8th and 9th of July 2014 by an Engineering Geologist and Senior Geotechnical Officer from our Bathurst office. The boreholes were drilled using a 4wd mounted Innovative Sampla 24LT with solid 125mm augers.

Results

The boreholes drilled at the site were used to determine the indicative permeability of the site soils. The assessment was based on the observed soil texture and structure and the indicative information in AS1547:2012 – Table 5.2.

The assessment is summarised in table 1 below:

Table 1: Sub-surface conditions

Depth	Material Description
0.00 – 1.00	Silty CLAY trace sand and gravel: red brown, low to medium plasticity clay, fine to coarse sand, fine to coarse gravel, firm, moist, moisture content ~ plastic limit (RESIDUAL).
1.00 – 1.50	Silty GRAVEL trace sand and clay: light yellow brown, fine to coarse sand, fine to coarse gravel, dense, slightly moist (RESIDUAL).

Note: Groundwater was not encountered.

Table 2: Permeability Assessment

Soil Category	Soil Texture	Soil Structure	Indicative Permeability (m/day)
4	CLAY LOAM	Weakly Structured	0.50

Based on the foregoing, a permeability of 0.50m/day was adopted for design.

Mound Systems

We advise that the disposal of domestic effluent on-site is feasible for the subject lots using a Wisconsin Mound such as an "ecomax" or "fujichem" system.

Permeability and Design Effluent Loading

As noted previously the permeability of the site soils is **0.50 m/day**.

With reference to Table N1 of AS1547:2012 a Design Loading Rate (DLR) of **8mm/day** should be used for the mound system.

Installation and General Requirements

The following paragraphs outline installation and general requirements for the effluent disposal system.

- The area be sited within the recommended area as indicated on the individual site plans in a location receiving good sunlight and exposure to prevailing breezes and where possible away from general access and play areas;
- A suitable diversion drain should be installed on the high side of the disposal area to minimise run on surface stormwater flows.
- The area be located so that the following minimum horizontal set back distances are complied with:
  i. 3m from any property boundary or residence if higher than the disposal area; or 6m from any property boundary or residence if lower than the disposal area;
  ii. 3m from any pathway or walkway;
  iii. 6m from the edges of a swimming pool.
  iv. 40m from any dams or water courses.
- Planting of suitable vegetation shall be carried out prior to commissioning of the system. The design assumes that a perennial pasture will be planted over the area; if alternative vegetation is contemplated then further geotechnical advice should be obtained.

With reference to your summary of points raised from the meeting with the NSW Office of Water.

With regards to the likely water usage requirement of the residential lots, we would expect the following;

Design wastewater loading for each potential bedroom	Reticulated / bore water	Tank water
1-2 potential bedrooms	600L/d	400L/d
3 potential bedrooms	900L/d	600L/d
4 potential bedrooms	1200L/d	800L/d
More than 4 potential bedrooms	1200L/d plus 150L for each additional bedroom	800L/d plus 100L/d for each additional bedroom
Source: NorBE Assessment Guideline (Sydney Catchment Authority, 2011). Note: the Sydney Catchment Authority adopts a conservative approach for wastewater design calculations. Water saving fixtures should be standard in all new dwellings.		

"For greywater-only systems, use a value of 65% of the design wastewater load calculated above. Otherwise greywater systems are treated exactly the same as other wastewater systems."

Concerning the second issue of 'standards for onsite disposal', and based on an "Ecomax" system being installed and used with a Wisconsin Mound, the Ecomax Treatment Performance is below;

Parameter	Final Concentration	Removal Efficiency
Total persulphate phosphorus	0.01 – 0.05mg/L	>99.6%
Total persulphate nitrogen	2.0 – 10.0mg/L	>80%
Ammonia nitrogen	<5mg/L	>90%
BOD	<10mg/L	>90%
pH	7.5 – 8.5	
Suspended Solids	<10mg/L	>90%
Faecal coliform	0 – 500/100ml	>99.95%

With the design of the Ecomax & Wisconsin Mound provided that it is designed and operated correctly, we would expect a zero overflow outside of the impervious membrane liner of the mound. Because of the impervious liner there would be no potential for drawdown of water which could contaminate a water supply, and even if there was the water quality is such that it would have minimal impact on the extractions, no more so than the existing rural land use.

Table R1 of AS1547:2012 gives guidelines for horizontal and vertical setback distances for effluent disposal with the minimum range from a bore or well being 15 - 50m dependent on several factors. Even if we were to work on a "worst case" scenario then the setback from a bore to an effluent disposal system would be 50m.

Based on the geotechnical investigation carried out a consistent soil profile of low to medium plasticity silty CLAY to a depth of 1.0m overlying silty GRAVEL was identified.

Referring to Table R1 of AS1547 2012 Items A & H, the good effluent quality produced using an Ecomax system and the category 4 soil identified on site would be classified at the lower end of the constraint scale when considering set back distances.

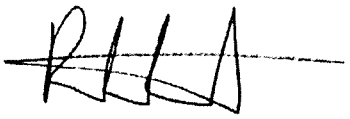
Based on this, we see no reason for the setback distance to be 250m, and argue that it can be reduced to 50m.

We trust the foregoing is sufficient for your present purposes, and if you have any questions please contact the undersigned.

Yours sincerely

Karl Addison
Engineering Geologist
BSc (Hons) Environmental Management

Reviewed by



Robert Cox
Principal Engineering Geologist
B.App.Sc (Geology) Affil MIEAust

References:

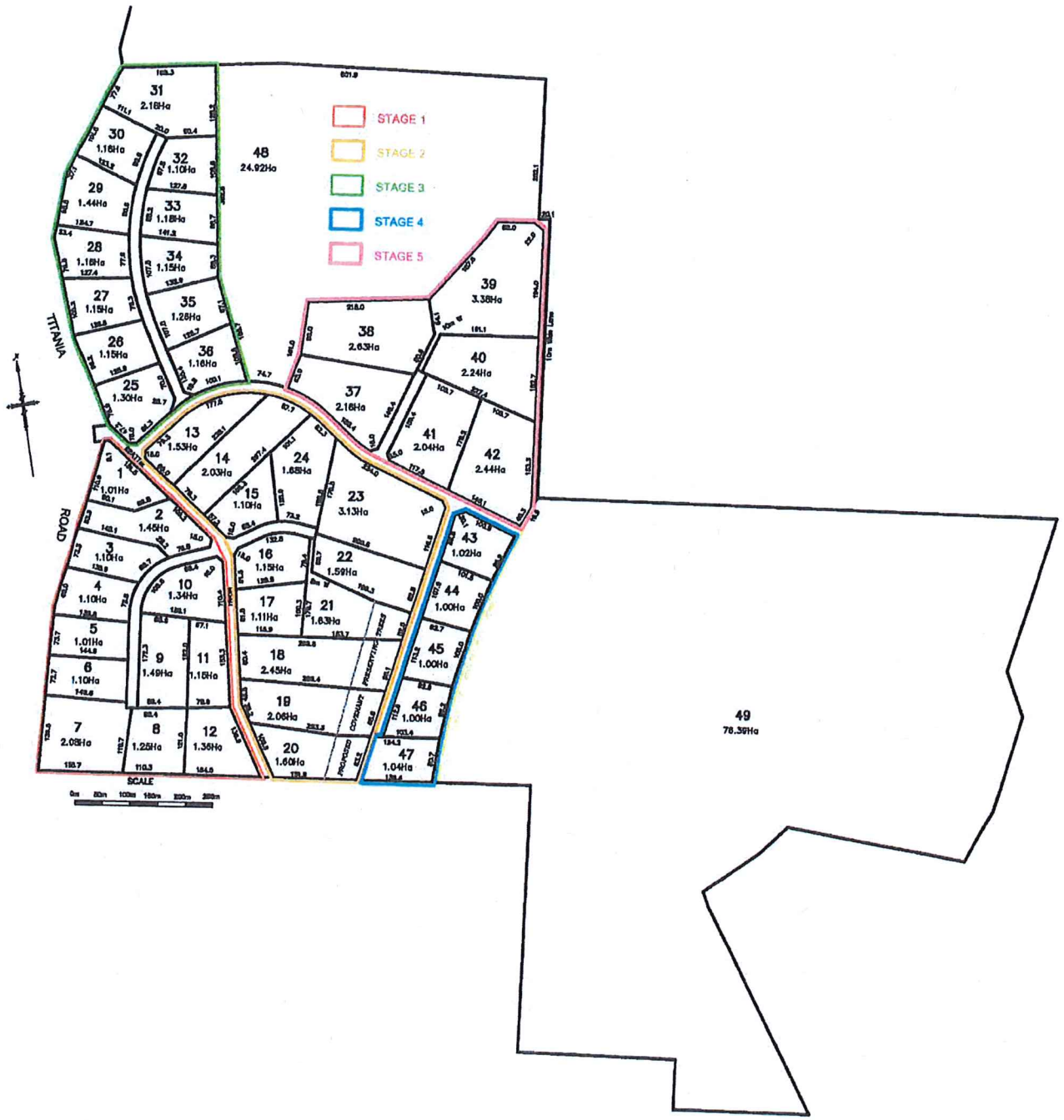
NorBE Assessment Guideline (Sydney Catchment Authority, 2011).

Fig 8.2 Cross Section of an amended soil mound – Design and Installation of On-Site Wastewater Systems – Sydney Catchment Authority 2012.

AS/NZS 1547:2012 On-site Domestic Wastewater Management

Appendix 2 – Proposed Subdivision Lot Dimensions and Staging Plan

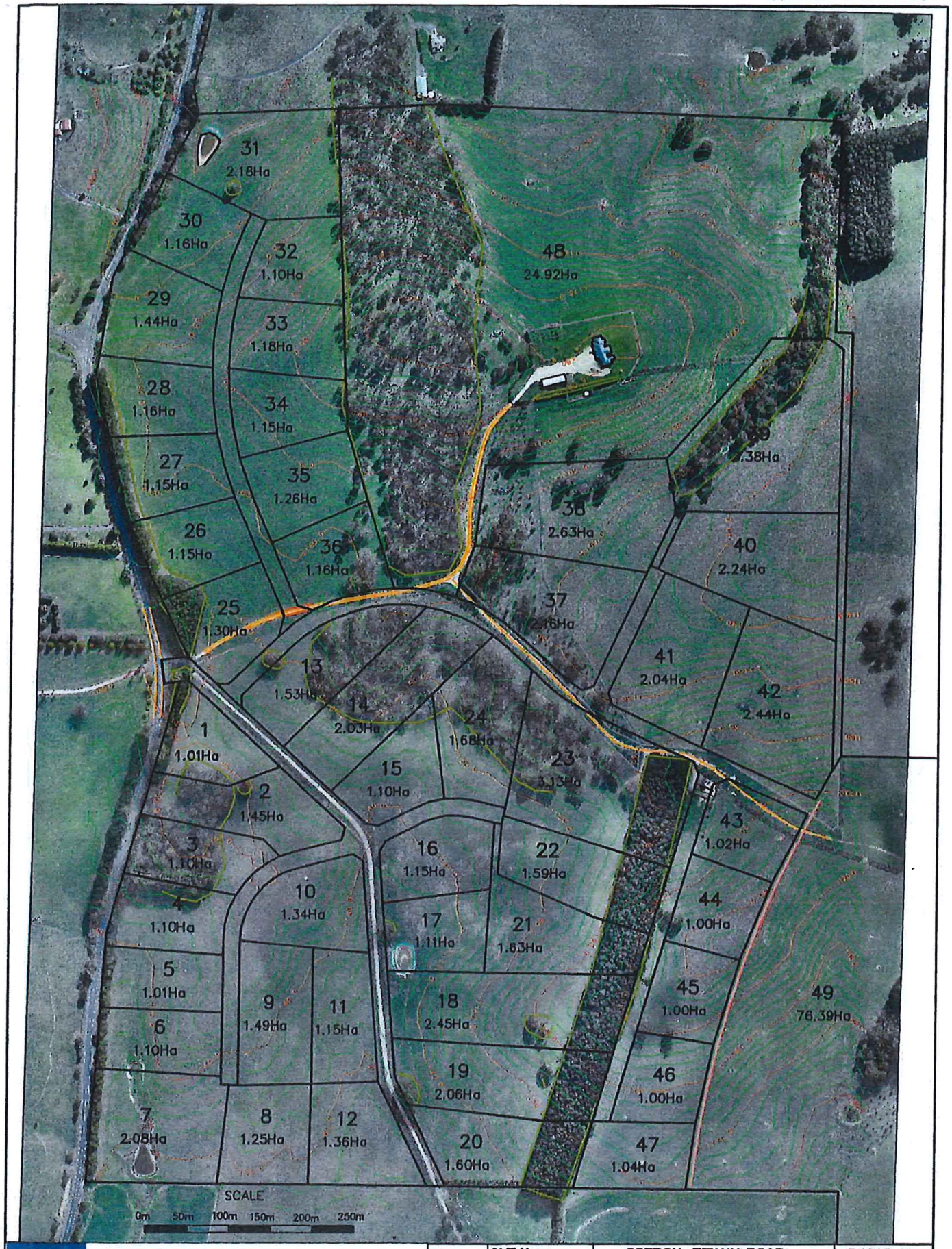
Appendix 1: Lot dimensions and staging showing lot 49



CEH SURVEY	DATE	07-08-14	OBERON - TITANIA ROAD LOT 1 DP 1089826 PROPOSED SUBDIVISION LOT DIMENSIONS & STAGING SHOWING LOT 49 - RESIDUE
	AMENDED	08-08-14	
	SURVEYOR	T.H./CEH	
	DRAWN	K.L.F.	
	CHECKED		SCALE - 1 : 7500 (A3 SHEET)

DWG No TITANIA8_LOTS2
CEH REF 4/4634

Appendix 3 – Proposed Subdivision Photo Overlay



CEH SURVEY
CONSULTING AND ENGINEERING AND MINE SURVEYORS

DATE	31-07-14
AMENDED	08-09-14
SURVEYOR	T.H./CEH
DRAWN	K.L.F.
CHECKED	

OBERON - TITANIA ROAD
LOT 1 DP 1089826
PROPOSED SUBDIVISION
PHOTO OVERLAY

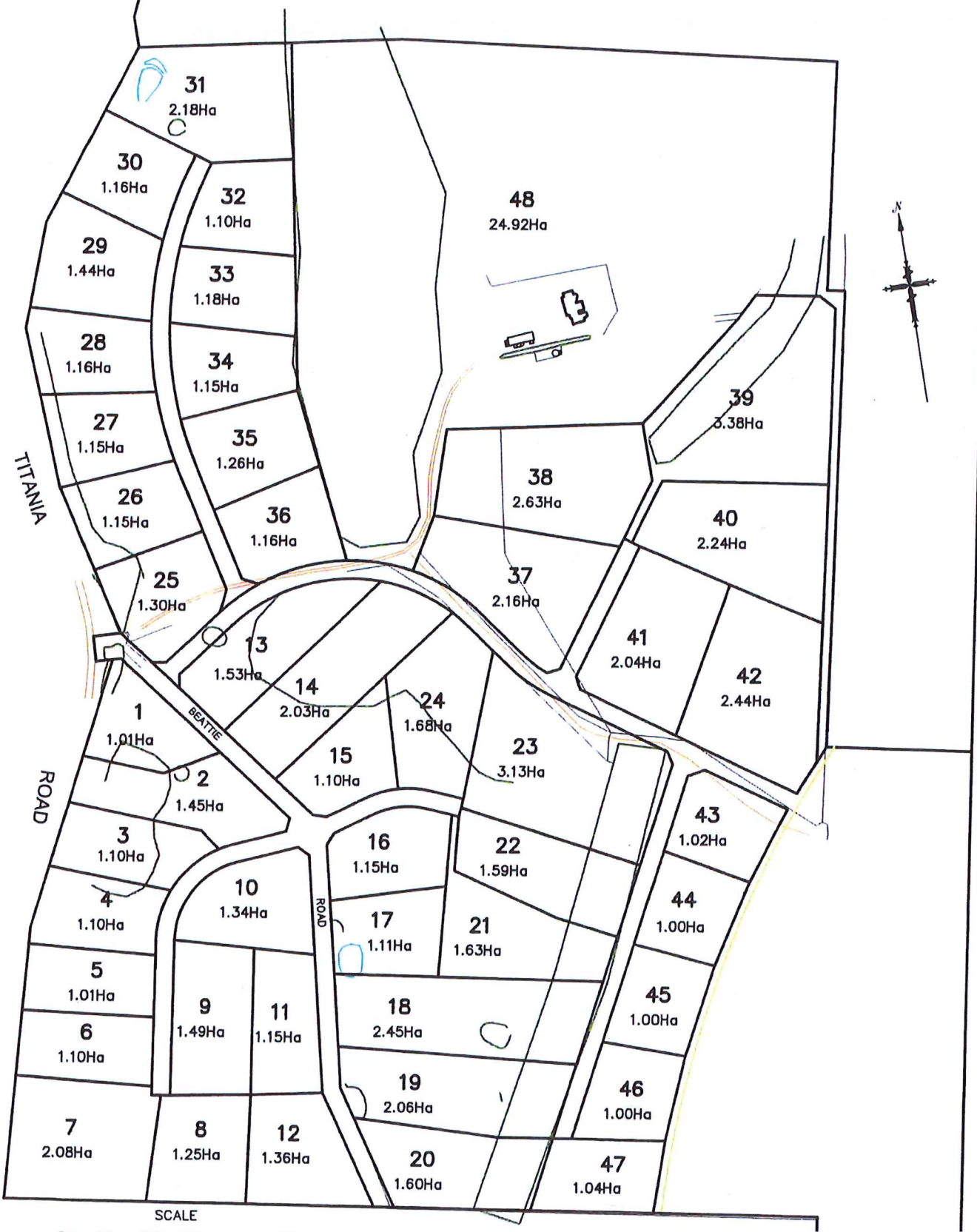
SCALE - 1 : 4000 (A3 SHEET)

DWG No
TITANIA8_
IMAGE
CEH REF 4/4634

Appendix 4- Proposed Subdivision Staging Plan

Appendix 5- Proposed Subdivision Detail Survey and Lot Layout Plan

Appendix 5 - Detail survey and lot layout



CEH SURVEY

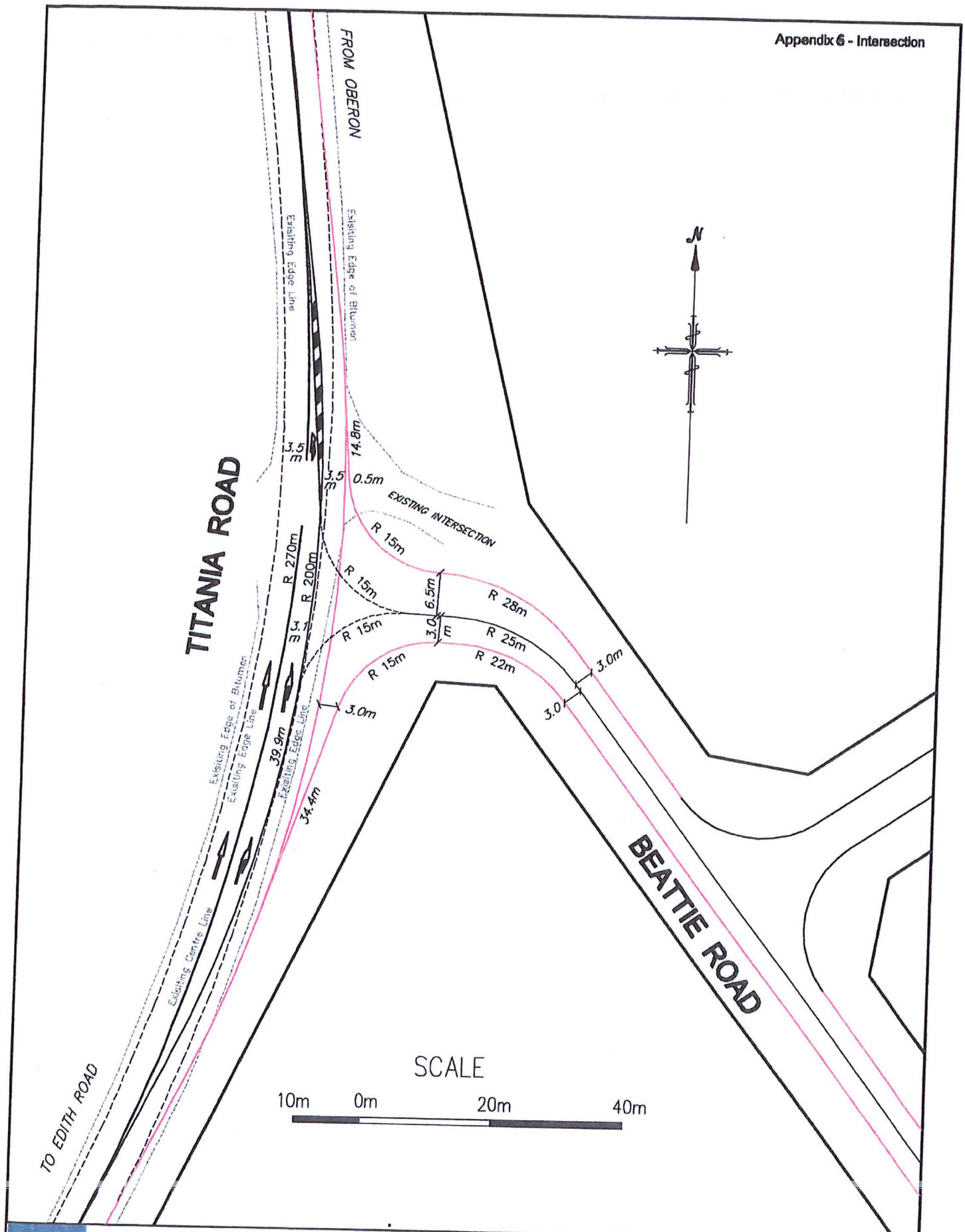
DATE	31-07-14
AMENDED	
SURVEYOR	T.H./CEH
DRAWN	K.L.F.
CHECKED	

OBERON - TITANIA ROAD
LOT 1 DP 1089826
PROPOSED SUBDIVISION
DETAIL SURVEY AND LOT LAYOUT
SCALE - 1 : 4000 (A3 SHEET)

DWG No
TITANIA8_
DETAIL
CEH REF 4/4634

Appendix 6 -Proposed Intersection- Beattie Road

Appendix 6 - Intersection



CEH SURVEY

DATE	09-05-14
AMENDED	
SURVEYOR	T.H./CEH
DRAWN	K.L.F.
CHECKED	

OBERON - TITANIA ROAD
LOT 1 DP 1069826
PROPOSED SUBDIVISION
PROPOSED INTERSECTION - BEATTIE ROAD
SCALE - 1 : 500 (A3 SHEET)

DWG No
TITANIA_
INTERSECTION
CEH REF 4/4634

MACQUARIE GEOTECH
Geotechnical Engineers & Engineering Geologists
NATA Accredited Construction Materials Testing
Laboratory for Soils, Aggregates and Concrete
Geotechnical & Environmental Drilling
NATA

6 August, 2014

Max Fragar
Fragar Planning & Development
11 Jersey Ave
Leura NSW 2780

Dear Max

Onsite Effluent Disposal Investigation for Proposed Subdivision/DLEP Titania Road Oberon NSW 2849

Assessment for On-site Effluent Disposal

Introduction

Macquarie Geotechnical Pty Ltd has undertaken a geotechnical investigation at the above site. This work was done to evaluate the site for on-site disposal of domestic effluent in accordance with AS1547 - 2012 "Disposal Systems for Effluent from Domestic Premises", and the combined NSW government departments Environmental Health Protection Guidelines (EHPG); "On-site Sewage Management for Single Households" (1998).

Method

Eighty four test boreholes were drilled and logged on the 8th and 9th of July 2014 by an Engineering Geologist and Senior Geotechnical Officer from our Bathurst office. The boreholes were drilled using a 4wd mounted Innovative Sampla 24LT with solid 125mm augers.

Results

The boreholes drilled at the site were used to determine the indicative permeability of the site soils. The assessment was based on the observed soil texture and structure and the indicative information in AS1547:2012 – Table 5.2.

The assessment is summarised in table 1 below:

Table 1: Sub-surface conditions

Depth	Material Description
0.00 – 1.00	Silty CLAY trace sand and gravel: red brown, low to medium plasticity clay, fine to coarse sand, fine to coarse gravel, firm, moist, moisture content ~ plastic limit (RESIDUAL).
1.00 – 1.50	Silty GRAVEL trace sand and clay: light yellow brown, fine to coarse sand, fine to coarse gravel, dense, slightly moist (RESIDUAL).

Note: Groundwater was not encountered.

Table 2: Permeability Assessment

Soil Category	Soil Texture	Soil Structure	Indicative Permeability (m/day)
4	CLAY LOAM	Weakly Structured	0.50

Based on the foregoing, a permeability of 0.50m/day was adopted for design.

Mound Systems

We advise that the disposal of domestic effluent on-site is feasible for the subject lots using a Wisconsin Mound such as an "ecomax" or "fujichem" system.

Permeability and Design Effluent Loading

As noted previously the permeability of the site soils is **0.50 m/day**.

With reference to Table N1 of AS1547:2012 a Design Loading Rate (DLR) of **8mm/day** should be used for the mound system.

Installation and General Requirements

The following paragraphs outline installation and general requirements for the effluent disposal system.

- The area be sited within the recommended area as indicated on the individual site plans in a location receiving good sunlight and exposure to prevailing breezes and where possible away from general access and play areas;
- A suitable diversion drain should be installed on the high side of the disposal area to minimise run on surface stormwater flows.
- The area be located so that the following minimum horizontal set back distances are complied with:
    i. 3m from any property boundary or residence if higher than the disposal area; or 6m from any property boundary or residence if lower than the disposal area;
    ii. 3m from any pathway or walkway;
    iii. 6m from the edges of a swimming pool.
    iv. 40m from any dams or water courses.
- Planting of suitable vegetation shall be carried out prior to commissioning of the system. The design assumes that a perennial pasture will be planted over the area; if alternative vegetation is contemplated then further geotechnical advice should be obtained.

With reference to your summary of points raised from the meeting with the NSW Office of Water.

With regards to the likely water usage requirement of the residential lots, we would expect the following;

Design wastewater loading for each potential bedroom	Reticulated / bore water	Tank water
1-2 potential bedrooms	600L/d	400L/d
3 potential bedrooms	900L/d	600L/d
4 potential bedrooms	1200L/d	800L/d
More than 4 potential bedrooms	1200L/d plus 150L for each additional bedroom	800L/d plus 100L/d for each additional bedroom
Source: NorBE Assessment Guideline (Sydney Catchment Authority, 2011). Note: the Sydney Catchment Authority adopts a conservative approach for wastewater design calculations. Water saving fixtures should be standard in all new dwellings.		

"For greywater-only systems, use a value of 65% of the design wastewater load calculated above. Otherwise greywater systems are treated exactly the same as other wastewater systems."

Concerning the second issue of 'standards for onsite disposal', and based on an "Ecomax" system being installed and used with a Wisconsin Mound, the Ecomax Treatment Performance is below;

Parameter	Final Concentration	Removal Efficiency
Total persulphate phosphorus	0.01 – 0.05mg/L	>99.6%
Total persulphate nitrogen	2.0 – 10.0mg/L	>80%
Ammonia nitrogen	<5mg/L	>90%
BOD	<10mg/L	>90%
pH	7.5 – 8.5	
Suspended Solids	<10mg/L	>90%
Faecal coliform	0 – 500/100ml	>99.95%

With the design of the Ecomax & Wisconsin Mound provided that it is designed and operated correctly, we would expect a zero overflow outside of the impervious membrane liner of the mound. Because of the impervious liner there would be no potential for drawdown of water which could contaminate a water supply, and even if there was the water quality is such that it would have minimal impact on the extractions, no more so than the existing rural land use.

Table R1 of AS1547:2012 gives guidelines for horizontal and vertical setback distances for effluent disposal with the minimum range from a bore or well being 15 - 50m dependent on several factors. Even if we were to work on a "worst case" scenario then the setback from a bore to an effluent disposal system would be 50m.

Based on the geotechnical investigation carried out a consistent soil profile of low to medium plasticity silty CLAY to a depth of 1.0m overlying silty GRAVEL was identified.

Referring to Table R1 of AS1547 2012 Items A & H, the good effluent quality produced using an Ecomax system and the category 4 soil identified on site would be classified at the lower end of the constraint scale when considering set back distances.

Based on this, we see no reason for the setback distance to be 250m, and argue that it can be reduced to 50m.

We trust the foregoing is sufficient for your present purposes, and if you have any questions please contact the undersigned.

Yours sincerely

Karl Addison
Engineering Geologist
BSc (Hons) Environmental Management

Reviewed by

Robert Cox
Principal Engineering Geologist
B.App.Sc (Geology) Affil MIEAust

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Fig 8.2 Cross Section of an amended soil mound – Design and Installation of On-Site Wastewater Systems – Sydney Catchment Authority 2012.

AS/NZS 1547:2012 On-site Domestic Wastewater Management

NSW GOVERNMENT | Department of Primary Industries
Office of Water

Contact Tim Baker
Phone 02 6841 7403
Mobile 0428 162 097
Fax 02 6884 0096
Email Tim.Baker@dpi.nsw.gov.au

Our ref ER22320

Gary Wallace
Oberon Council
PO Box 84
OBERON NSW 2787

Dear Mr Wallace

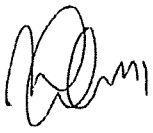
Planning Proposal (PP_2014_OBERO_001_00) and Development Application (10.2014.70.1) – 175 Titania Rd, Lot 1 DP 1089826

I refer to your letter dated 17th December 2014 requesting comments on a planning proposal and development application for a proposed subdivision on Lot 1 DP1089826. Reference is initially made to comments provided by the NSW Office of Water on this matter in a letter dated 21 January 2015. As Council is aware further discussion has been held on this matter with Department of Planning and Environment and Council to progress the matter, in addition to the review of further reports provided by the proponent (eg. Macquarie Geotech Report, Feb 2015 and a letter from Max Fragar dated 20th Feb 2015). The following comments are provided to confirm the advice provided to the Department of Planning and Environment and additional matters for Council to consider in addressing the water supply for the proposed development.

- In terms of likely water demands, the NSW Office of Water's guideline titled, "*How much water do I need for my rural property*" can be accessed at the following link: http://www.water.nsw.gov.au/Water-Licensing/Basic-water-rights/default.aspx This guideline indicates water requirements to maintain a garden area of 0.1ha in the tablelands requires approximately 0.2ML/yr and a 4 person household with a septic requires approximately 0.256ML/yr. This totals 0.456ML/yr not including fire fighting requirements. It is recommended Council consider the ability of the proposed development to source the water demand from rainfall capture. Where there is a risk additional water is required, it is recommended lots under 2ha be provided with reticulated water or are otherwise serviced to ensure that groundwater bores will not be required on lots under 2ha. This is to ensure adequate water supply is available and to mitigate future potential landuse conflict between bores accessing water on adjacent lots.
- It is understood the use of a s.88B instrument to prohibit bores would require enforcement by Council. It is recommended Council consider the merits of this for future compliance demands.
- The NSW Office of Water supports the statements in Max Fragar's letter that 1) a hydrogeological assessment would be required to assess a proposal for bores to supply the subdivision, and 2) reticulated water from common bores is a solution for water supply to small lots.
- The AEWS 2015 report indicates the proposed on-site effluent disposal system is of a high standard. However it does have maintenance requirements at 6 monthly and 3-5 yearly intervals in addition to mowing and runoff design requirements which will be critical to ensure suitable functioning.

Should you have any further queries in relation to this submission or wish to discuss further in a teleconference please do not hesitate to contact Tim Baker on (02) 6841 7403.

Yours sincerely



Mitchell Isaacs
Manager Strategic Stakeholder Liaison
16 June 2015

NSW GOVERNMENT | Department of Primary Industries
Office of Water

Contact Tim Baker
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Fax 02 6884 0096
Email Tim.Baker@dpi.nsw.gov.au

Our ref ER22320

Jaclyn Burns
Oberon Council
PO Box 84
OBERON NSW 2787

Dear Jaclyn

Planning Proposal (PP_2014_OBERO_001_00) and Development Application (10.2014.70.1) – 175 Titania Rd, Lot 1 DP 1089826

I refer to your letter dated 27th October 2015 requesting comments on a letter submitted by the applicant dated 21st October 2015 in relation to a planning proposal and development application for a proposed subdivision on Lot 1 DP1089826. It is recognised this consultation follows a site inspection with Council, DPI Water and the applicant on 15th September 2015. DPI Water has reviewed the letter and provides the following comments.

- DPI Water maintains its recommendation to ensure the proposal has the ability to source adequate potable and non-potable water to meet the predicted demands of the proposed landuse. Council are recommended to consider the water demands of the proposed landuse as detailed in DPI Water's letter dated 16th June 2015.
- The proposal to bring in potable water is not recognised as a sustainable or strategic planning approach to meet the sites water demands. It is recommended adequate water supply be sourced at the site or reticulated to the site.
- DPI Water maintains its recommendation to consider mechanisms to prohibit bores if reticulation of water is not to be provided. The current proposal gives the opportunity for individual landholders to install bores which may result in a proliferation of bores within a small area and resultant impact on each other and potentially on adjacent properties. It is understood there is an existing spring in the south-western corner of the site which provides flow off the project site. A proliferation of bores may have an impact to the flow rate of this spring and potentially others if present.
- Following a subdivision existing dams will need to be considered in terms of the Maximum Harvestable Rights Dam Capacity which relates to the size of the individual lot the dam is located on. This may require resizing of the dam or licensing and the purchase of entitlement. Based on the aerial photograph this is relevant to lots numbered 7, 17 and 31 and potentially more if present. Further detail on MHRDC can be obtained at the following link: http://www.water.nsw.gov.au/water-licensing/basic-water-rights/harvesting-runoff

Should you have any further queries in relation to this submission or wish to discuss further in a teleconference please do not hesitate to contact Tim Baker on (02) 6841 7403.

Yours sincerely

Tim Baker
A/Manager Strategic Stakeholder Liaison
9 November 2015

Department of Primary Industries
Office of Water

Contact Tim Baker
Phone 02 6841 7403
Mobile 0428 162 097
Fax 02 6884 0096
Email Tim.Baker@water.nsw.gov.au

Garry Wallace
Oberon Council
PO Box 84
OBERON NSW 2787

Our ref ER22320

Dear Mr Wallace

Oberon LEP 2013 – Titania Estate Lot Size

I refer to a letter from the NSW Office of Water dated 18th June 2013 regarding the minimum lot size for the proposed Titania Estate extension and a subsequent teleconference on the 12th November 2013. The Office of Water has considered Council's request for the potential of a hydrogeological study to support a lesser buffer distance between a bore and an on-site sewage disposal system. The following comments are provided:

- The Office of Water considers that a hydrogeological study will not be able to adequately support the proposed subdivision with lot sizes of 2ha and a reduced buffer zone between bores and on-site sewage disposal systems. This is due to the fractured rock geology of the Titania Estate and the potential for preferential pathways which pose the highest risk of contaminating the water supply bores.
- The Office of Water maintains the recommendation of a buffer distance of 250m between bores and on-site sewage disposal systems. This distance is advocated within the "*On-site Sewage Management for Single Households* (Environment & Health Protection Guidelines, 1998)" and Clause 38(1a) of the Water Sharing Plan for the Murray Darling Basin Fractured Rock Groundwater Sources 2011.
- The NSW Office of Water maintains the recommendation of a Minimum Lot Size of 5ha for the proposed Titania Estate extension if no reticulated water supply and on-site sewage disposal is proposed.
- It is recommended Council ensure the water demands (non-potable and potable) of the proposed lot sizes have the potential to be obtained via appropriately authorised water sources.
- An alternative for the proponent to achieve a reduced lot size is the potential for reticulated off-site sewage disposal, or reticulated groundwater supply from a single or multiple bores adjacent to the site. A hydrogeological study would be required to support such alternatives and assessment requirements are provided in Attachment 1. The study would also require consideration of the cumulative impact of groundwater extraction of the entire subdivision.

Should you have any further queries in relation to this submission or wish to discuss further in a teleconference please do not hesitate to contact Tim Baker on (02) 6841 7403.

Yours sincerely

Mitchell Isaacs
Manager Strategic Stakeholder Liaison
13 December 2013

*Copy to Planning.
DD(A)
-Landuse/Plann/LEPs/

ATTACHMENT 1

HYDROGEOLOGICAL STUDY ASSESSMENT REQUIREMENTS – TITANIA ESTATE

- A description of the activity including:
  - previous activity;
  - proposed activity;
  - need for modification of the planned activity against LEP of the council.
- Describe the existing environment of the Groundwater Resource including:
  - description of current status;
  - identify potential impacts;
  - describe groundwater flow direction,
  - occurrence & vulnerability to pollution;
  - identify potential impact on groundwater;
  - description of current use & quality;
  - compliance with statutory requirements.
- An impact assessment for the **entire Titania** (stage 1 & the proposed) subdivision project including:
  - describe, show and quantify groundwater extraction;
  - describe any potential impact on aquifer quantity & quality;
  - describe any health impact which may result from the activity;
  - demonstrate that activity causes acceptable impact on public health and safety over time;
  - assess the impact of activity on the existing and proposed users,
  - identify any groundwater dependent ecosystem;
  - quantify the potential impacts;
  - likelihood of impact on groundwater;
  - the level of confidence on the prediction of impact;
  - the reversibility of the impact;
  - impact management plan and its effectiveness;
  - compliance with policies and plans.
- A Groundwater Resource Protection & Mitigation Strategy indicating the ability to:
  - prevent pollution;
  - prevent and monitor impacts;
  - mitigate or avoid impacts;
  - manage waste production;
  - compliance with statutory requirements.

End of Attachment 1

21 October 2015

Mr Gary Wallace
Director of Planning and Development

Dear Gary,

Thanks for attending an onsite meeting on Tuesday 15th September.

As discussed we are confirming that we do not support a reticulated bore system proposed as an option by the Office of Water.

It is in our opinion that the water demands for the smaller 1ha blocks can be met by:

- Onsite water catchment via a minimum 125,000 litre rainwater tank off the main house and added rainwater catchment from shed tank storage.
- Potable water can also be brought in if required. The above options could be a solution to not require the need for a bore for non-potable usage.
- Oberon is a cool climate with high rainfall therefore minimising the requirement to draw water from underground sources.
- We will be recommending a building governance of a minimum 25/30 square home giving it a large roof for water catchment.
- Groundwater is a natural resource and there are no guarantee's that water can be found when drilling and no guarantee for supply even if water was found. The risk is on the purchaser if they decide to drill for water.
- We recommend the use of an eco-max on-site septic system for the disposal of on-site waste.

I hope the above options satisfy the requirements of the Office of Water for the rezoning and endorsement of the Development Application.

Kind Regards

C & V O'Neill