



AGRICULTURAL LAND ASSESSMENT

**Sand Quarry Extension
Lot 10 DP 1090880, Keighley Road Somersby
(Existing Quarry Location on Lot 33 DP 755246
Reservoir Road, Somersby)**

PREPARED FOR: HANSON CONSTRUCTION MATERIALS

SEPTEMBER 2009

**COVER PHOTO: EXISTING ENTERPRISES OPERATING ON THE SUBJECT SITE –
POULTRY SHEDS, FIREWOOD AND AVOCADO ORCHARDS****AGRICULTURAL LAND ASSESSMENT
HANSON CONSTRUCTION MATERIALS****LOT 10 DP 1090880, KEIGHLEY ROAD SOMERSBY
(EXISTING QUARRY LOCATION ON LOT 33 DP 755246, RESERVOIR ROAD, SOMERSBY)**

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CONTENTS

1.0 INTRODUCTION & BACKGROUND	1
1.1 METHODOLOGY	1
2.0 HISTORY AND CURRENT AGRICULTURAL LANDUSE	6
2.1 AVOCADOES	6
2.2 CHICKEN (MEAT) PRODUCTION	6
2.3 FIREWOOD	7
2.4 SUMMARY OF FINANCIAL POSITION	7
3.0 LAND MANAGEMENT PLANNING INSTRUMENTS	8
3.1 GOSFORD PLANNING SCHEME ORDINANCE (INTERIM ORDER NUMBER 122)	8
3.2 POLICY FOR THE PROTECTION OF AGRICULTURAL LAND (2004) – DEPARTMENT OF PRIMARY INDUSTRIES	8
3.3 SYDNEY REGIONAL ENVIRONMENT PLAN No. 8 (CENTRAL COAST PLATEAU AREAS)	8
4.0 PHYSICAL SETTING	10
4.1 GEOLOGY, SOILS AND LAND DEGRADATION	10
4.2 TOPOGRAPHY AND ASPECT	13
4.3 NATIVE VEGETATION AND WATER	13
4.4 CLIMATE	13
5.0 AGRICULTURAL LAND CLASSIFICATION	14
5.1 REVIEW OF AGRICULTURAL LAND CLASSIFICATION	17
6.0 LAND CAPABILITY	19
6.1 LAND CAPABILITY RESULTS	19
7.0 RECOMMENDATIONS CONCERNING LAND PLANNING INSTRUMENTS	21
7.1 NSW AGRICULTURE POLICY ON THE PROTECTION OF AGRICULTURAL LAND (2004)	21
7.2 SYDNEY REGIONAL ENVIRONMENT PLAN No. 8 (CENTRAL COAST PLATEAU AREAS)	21
8.0 CONCLUSION	23
9.0 REFERENCES	24
10.0 ABOUT THE AUTHOR	24

FIGURES

Figure 1 Topographic map of subject site (from Gosford 1:25 000 Topographic Map, 2001)	2
Figure 2 Aerial photo location	3
Figure 3 Existing land cadastre	4
Figure 4 Site survey.	5
Figure 5 Soils of the property as mapped by Department of Natural Resources (1993)	10
Figure 6 Soils of the property as mapped by PEAK LAND MANAGEMENT	12
Figure 7a Agricultural land classification map	15
Figure 7b Key from the agricultural land classification map prepared by Department of Primary Industries for this area under SREP No 8.	16
Figure 8 Agricultural land classification map (prepared by PEAK LAND MANAGEMENT).	18
Figure 9 Land Capability	20

TABLES

Table 1 Estimated financial position/annum	7
Table 2 Soil physical properties test results	11
Table 3 Land Capability System	19

APPENDICES

APPENDIX 1	DEPARTMENT OF PRIMARY INDUSTRIES POLICY FOR PROTECTION OF AGRICULTURAL LAND, 2004
APPENDIX 2	SYDNEY REP NO. 8 (CENTRAL COAST PLATEAU)
APPENDIX 3	PHOTOS OF SITE

1.0 INTRODUCTION & BACKGROUND

Insite Planning Engineering Economic & Social has been engaged to prepare an Agricultural Lands Assessment on land located at **Lot 10 DP 1090880 Keighley Road, Somersby (Figures 1 & 2)**.

The land is 8 hectares in extent (hereafter referred to as 'the subject land' or 'site').

Photos of the site are shown in **Appendix 3**.

This report aims to provide more information about the subject land in relation to *Department of Primary Industries Agricultural Policy (2004)*, with an emphasis on assessing the agricultural capability of the site.

It will address *Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas) (SREP 8)*, and assess the land in regard to whether the land is prime land or not as classed under both *SREP 8*, and the Department of Primary Industries system of Agricultural Land Classification.




The report is to inform the Department of Planning in its consideration of an application for extension to the existing Somersby quarry.

This report takes into account soil characteristics (fertility, texture, structure, acidity, salinity, compaction, erosion, dispersability, etc), pasture/crop species and condition, native vegetation distribution, aspect, past land management practices, identification of current land management practices and any problems/land degradation, viability of those enterprises, level of soil improvement and current infrastructure (including irrigation setup, licences, fences, buildings, etc), farm water supply, slope and any other factors affecting the agricultural classification of the land.

From this information an assessment has been made of the current agricultural land classification, and future agricultural potential.

1.1 Methodology

To develop this report the following methodology has been used:

-  The subject land was inspected and assessed on Thursday 25 June 2009;
-  Soils were inspected through on-site soil auger testing across the property as well as through visual assessment of road cuttings and landscape features (including the existing quarry). Reference was also made to soils maps produced by Department of Natural Resources; and
-  This report has been produced using on site information listed above, and in reference to relevant topographic maps, Department of Natural Resources (Soil Landscape Maps), Department of Primary Industries Agricultural Land Classification Map (from *SREP 8*), and in consultation with Mr Kevin Britten (current owner of Lot 10 Keighley Rd) as well as information sourced from other relevant staff (other consultants working on the project, Gosford Council etc).

The Agricultural Land Assessment follows the accepted method developed by Department of Primary Industries (2004) making reference to *SREP 8* land classification.

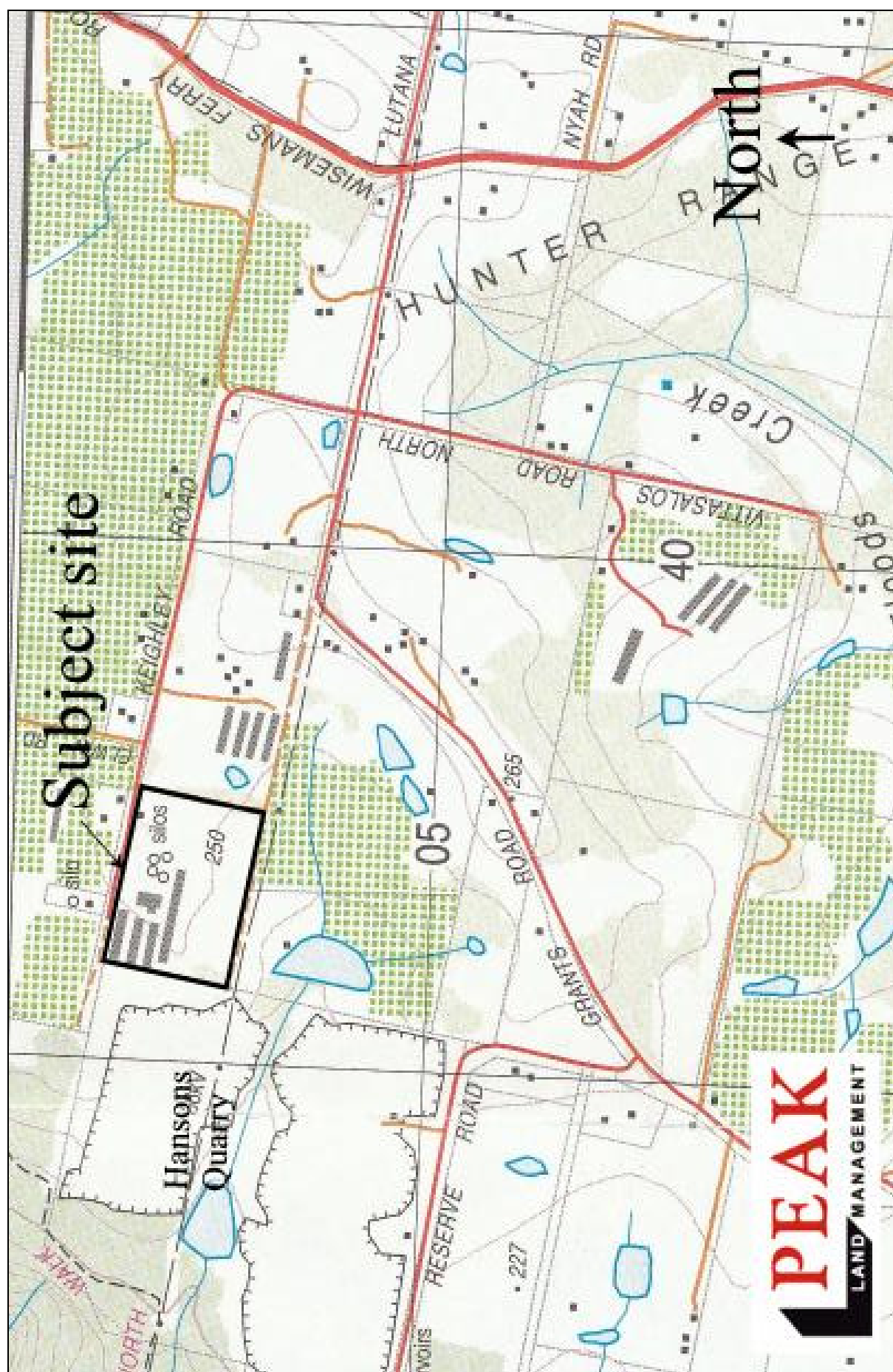


Figure 1: Topographic map of subject site (from Gosford 1:25 000 Topographic Map, 2001)



Figure 2: Aerial photo location

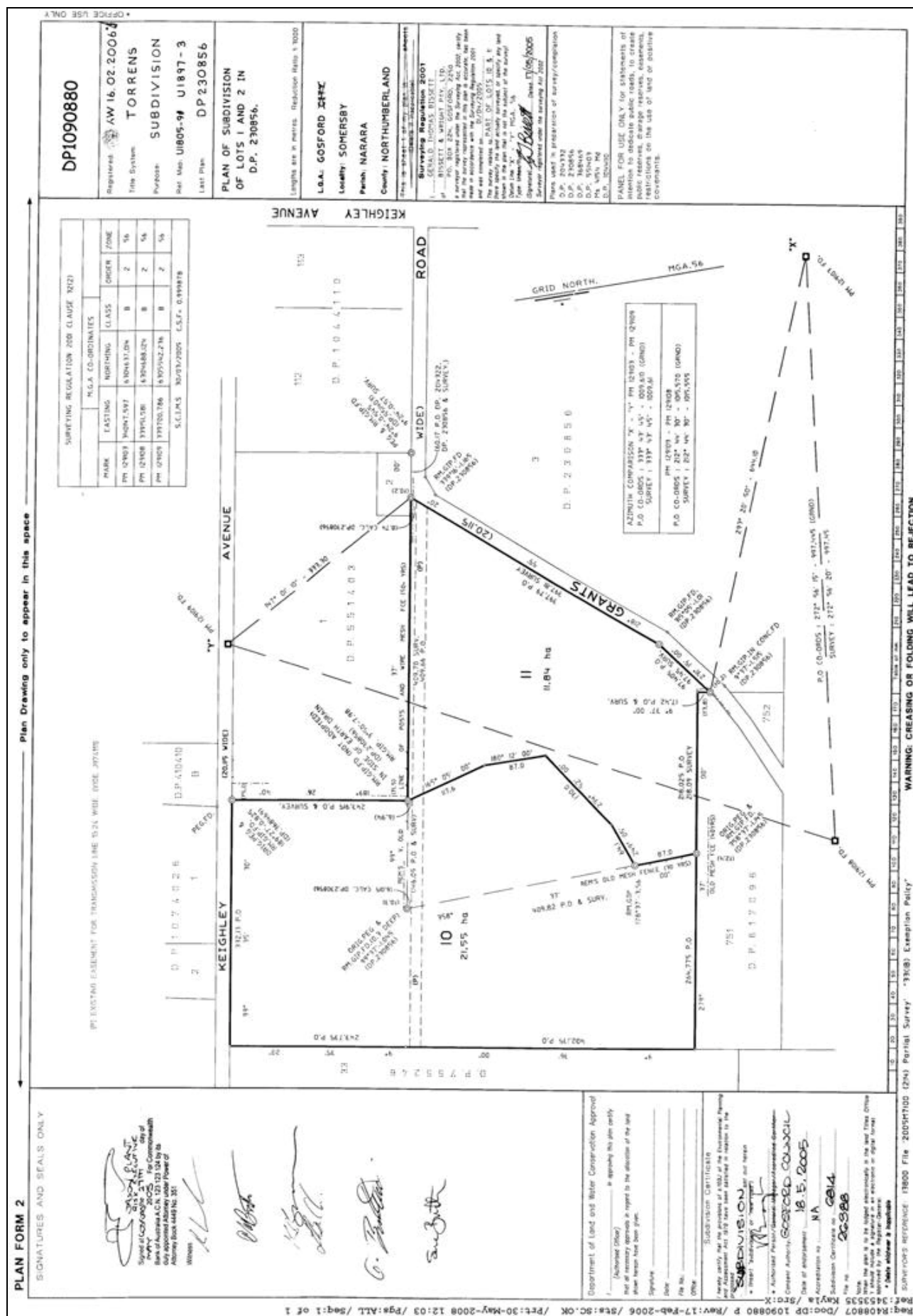


Figure 3: Existing land cadastre

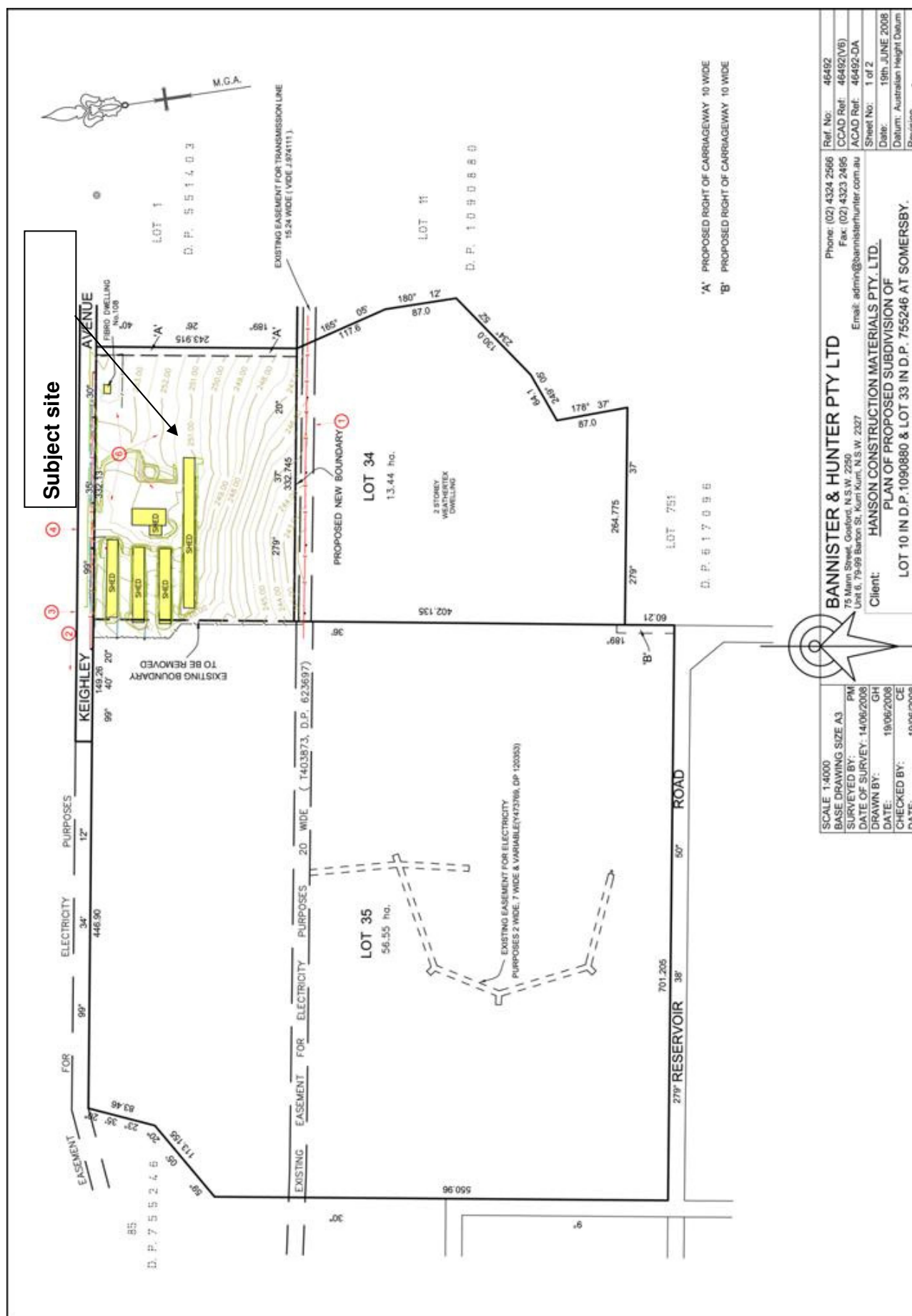


Figure 4: Site survey.

2.0 HISTORY AND CURRENT AGRICULTURAL LANDUSE

Mr Kevin Britten (land owner) was interviewed and described a brief history of his property and agricultural business as follows:

“The property has been in the family for four generations. My father and I and at least one other full time worker (plus other seasonal contractors) work the land, with the current enterprises consisting of poultry (for meat production), avocados and some oranges (Note: these are on an adjoining parcel of land), and firewood in winter.

*The **chicken sheds** have been there for 40 years. We contract to Ingham Chickens. Inghams have stated they need the sheds upgraded in order for me to get a new 5 year contract. In order to upgrade to new technology (all computerised with temperature, humidity, tunnel ventilation, evaporative cooling, etc) will cost approx \$1 million. The sheds will need a major rebuilding. It will increase bird densities slightly from 15 birds/m² to 19 birds/m², but this does not offset the cost to upgrade. It is not really a viable proposition at present.*

*The **avocados** are Hass variety, and have been in 7 or 8 years. They range from good to poor depending on where they are located, and degree of infestation with phytophthora, a disease that causes root rot. We control it where possible with AgPhos (an acid). The trees are irrigated, and we sell to the market in Oct/Nov/Dec. This is a niche time for us due to less product being available from other avocado producing regions (as they are not in season).*

*The **firewood** collection and splitting only occurs in the cooler winter season. We buy in logs from areas such as Bulahdelah (State Forests and private landowners) and split the wood and sell it. We have a mill and equipment (generally older machinery) to do this.*

We are limited by the soils which are shallow and rocky in parts which impedes drainage and limits productivity, phytophthora and future chicken shed upgrade cost. We intend to stay

on the adjoining land which we own (proposed Lot 11) which has better deeper soils and replace existing orange orchards which are worth little to avocados. We have a large dam which will be retained for irrigation”.

Mr Britten has kindly given some estimated income and expenses figures for the farm business in order to show the current financial situation of the property (**Table 1**). Please note this is intended to be a guide only. It may also vary from year to year dependant on seasonal conditions.

He employs 3 fulltime staff (including himself) with additional seasonal contractors employed for firewood splitting (one casual), and tree spraying /fruit picking (two contract pickers).

2.1 Avocados

The existing orchard is well established over the upper parts of the property with the most mature plantings being around 4m in height.

There are significant variations in tree health and viability over the subject land with very poor tree health (stunted/dead trees) over the lower parts of the land. As noted above the orchard has been subject to phytophthora attack, with a regular spraying program in place in an attempt to control this.

2.2 Chicken (Meat) Production

Chicken meat is supplied under contract to Ingham's Chickens. The farm has four (4) sheds, with one shed being nearly twice as large as the others (so effectively has the capacity of five (5) sheds). They house around 100,000 birds in total. The farm produces, on average, around 5.3 - 5.4 batches/year (varies). Therefore as a rough guide the farm turns over 513,000 birds/annum on average, taking into account 5% mortality rate. Average return is 61cents/bird. As noted earlier the sheds are around 40 years old, and need to be upgraded in order to continue production for Ingham's.

2.3 Firewood

Split firewood is produced on site from logs bought in from other areas.

Logs are cut using a large circular saw, and split using machinery located on the property. Firewood is then bagged and sold commercially.

2.4 Summary of Financial Position

A summary of the current financial position of the property is given in **Table 1**.

Table 1: Estimated financial position/annum

Enterprise	Income	Expenditure
Meat Chickens	\$312,930	\$118,000
Avocadoes	\$80,000	\$37,400
Firewood	\$100,000	\$20,000
Entire Operation (overheads)		
- Labour 3 persons @ \$4000/wk		\$208,000
- Vehicles/ machinery		\$40,000
- Mortgage repayments (\$750 000 @ 5% interest)		\$37,500
- Other (insurance, etc)		\$20,000
TOTAL	\$493,000	\$481,000

The estimated profit is around \$12,000/year.

Other improvements were noted over parts of the subject land including:

- ☞ A large covered machinery bay, timber cutting mill equipment and other farm machinery was present;
- ☞ New lock-up large shed;
- ☞ A fibro clad house was present over the corner of the subject lot, with the land being serviced by electricity, and phone lines;
- ☞ Irrigation mains and sub mains from the large dam present on proposed Lot 34 (drip fed orchard);
- ☞ Regular soil improvement through fertilizer application (chicken litter);
- ☞ Regular orchard crop management through application of AgPhos (to control phytophthora), chemical weed control, and normal crop management activities (picking fruit, etc);
- ☞ Fencing infrastructure (boundary fencing only); and
- ☞ The property had a sealed road leading to it (Keighley Road) which is outside the property boundary.

The general condition of most of the farm machinery appeared old and somewhat run down (but generally serviceable).

3.0 LAND MANAGEMENT PLANNING INSTRUMENTS

The primary Environmental Planning Instruments that are relevant to this site in terms of an agricultural assessment include the *Gosford City Council Planning Scheme Ordinance (Interim Order Number 122)*, *Department of Primary Industries Agricultural Land Policy (2004)*, and *Sydney Regional Environmental Plan No 8 - Central Coast Plateau Areas (SREP 8)*.

The Department of Planning (through the Director Generals requirements) have made reference to the need to address these instruments.

3.1 Gosford Planning Scheme Ordinance (Interim Order Number 122)

The land is a zoned as *1(a) Rural Agriculture* which is the 'general' agriculture zoning throughout the Gosford LGA. The zoning aims to protect agricultural lands as well as environmental characteristics (including visual and amenity characteristics) whilst permitting for a range of associated uses which are complimentary to the zone. Further details of the planning implications of the Gosford Interim Development Order are included within the Environmental Assessment Report.



3.2 Policy for the Protection of Agricultural land (2004) – Department of Primary Industries

This policy has the aim of protecting agricultural land from urbanisation, erosion, salinity and other forms of land degradation. It also aims to maintain the availability of land for agriculture, avoiding any unnecessary limitations on the use of that land, and promoting agricultural enterprises that are consistent with the principles of Environmentally Sustainable Development (NSW Agriculture Policy 2004).

The Department of Primary Industries policy is to support the retention of prime agricultural land. However, they recognise that some alienation of prime crop and

pasture land is inevitable as a consequence of population growth and economic development.

Department of Primary Industries advocate environmental planning which takes account of:

-  The agricultural productivity and suitability of the land
-  The nature and requirements of agricultural industries in the area being considered.

Prime agricultural land is defined as Agricultural Land Classification Classes 1, 2 or 3.

This land has not (to the authors knowledge) been mapped by the Department of Primary Industries under this well recognised system. It appears to have been mapped under the *SREP 8* system (see below), and is covered by the legislation pertaining to this *SREP 8*.

3.3 Sydney Regional Environment Plan No. 8 (Central Coast Plateau Areas)

The general aims of *SREP No 8* are set out below.

"The general aims of this plan are:

- (a) to provide for the environmental protection of the Central Coast plateau areas and to provide a basis for evaluating competing land uses,
- (b) to encourage the use of land having a high agricultural capability for that purpose and, as much as possible, to direct development for non-agricultural purposes to land of lesser agricultural capability,
- (c) (Repealed)
- (d) to protect regionally significant mining resources and extractive materials from sterilization,
- (e) to enable development for the purposes of extractive industries in specified locations,

- (f) *(Repealed)*
- (g) *to protect the natural ecosystems of the region, and*
- (h) *to maintain opportunities for wildlife movement across the region, and*
- (i) *to discourage the preparation of draft local environmental plans designed to permit rural residential development, and*
- (j) *to encourage the preparation of draft local environmental plans based on merits”.*

The pertinent aims which will be addressed in this report relate to aim (b) *agricultural land use*.

It is noted under Section 6 (Prime Agricultural Land) that development consent cannot be granted for a development other than agriculture on land mapped as prime agricultural land unless satisfied that:

“2(b)carrying out of this development would not adversely affect the present or future use of other prime agricultural land for the purposes of agriculture.”.

5unless it is satisfied that no other land to which this policy applies, not being prime agricultural land, could provide a viable or workable alternative site for the carrying out of the development.”

The map completed by Department of Primary Industries shows the subject land (where mapped) as being a mix of Classes 1A, 2 and 4, although, it is difficult to discern parts of the numbering system from the map as a result of the scale, age and quality of the mapping.

The whole site appears to be mapped as “*Prime Agricultural Land*” under *SREP 8* (see **Figure 7a**).

4.0 PHYSICAL SETTING

4.1 Geology, Soils And Land Degradation

Soils and their unique characteristics occur as a result of weathering of parent material, geology, slope, time, landscape position, landuse, aspect, and to a lesser degree vegetation and climate.

The **geology** of the study area consists of a deeply weathered medium to coarse grained Hawkesbury Sandstone (Murphy, 1993).

Soil landscapes are mapped using a combination of slope, soil type, and terrain to give a broad picture of major soil groups occurring over the landscape. Soil landscape ground truthing occurred by soil augering on site, in combination with landscape assessment (elevations, geomorphology, soil colour, vegetation species present and vigour and surrounding landuse). This found that Murphy, 1993 Soil Landscape map was accurate, except that the soil had been disturbed through earthmoving/levelling for the poultry sheds and surrounds. **Figure 5** shows the soil landscapes map for the subject site. This is important as the soils determine to a large degree potential carrying capacity of the land, and agricultural suitability rating.

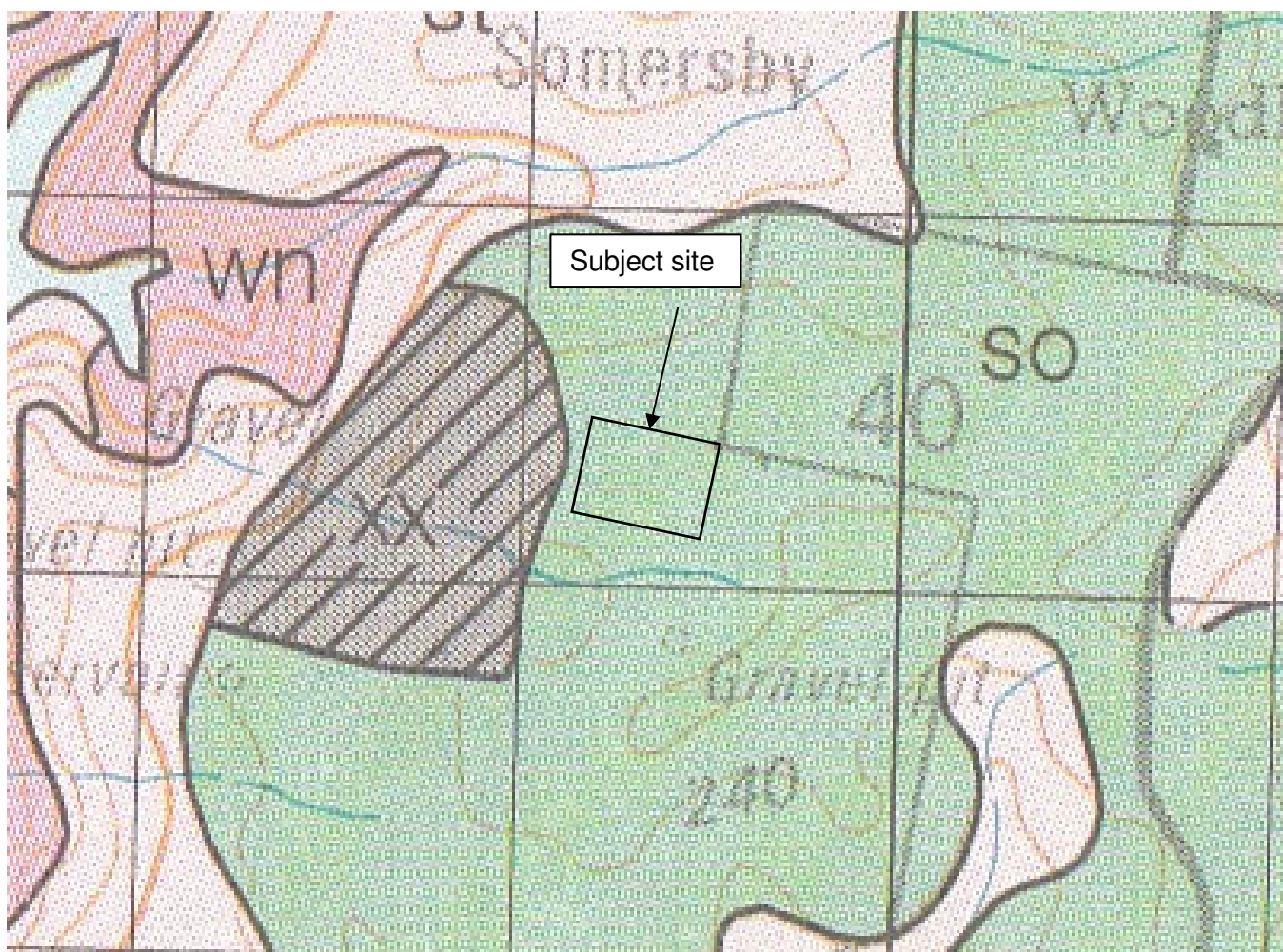


Figure 5: Soils of the property as mapped by Department of Natural Resources (1993)

The major soil landscapes present on the site are described below (from *Murphy, 1993*).

Somersby (so)

“Moderately deep (100cm) to deep (300cm) Yellow Earths and Earth sands on crests and slopes with Grey earths in poorly drained areas and Leached sands and Siliceous sands along drainage lines.

Limitations: localised permanent and seasonal water logging, moderate erosion hazard, stoniness, very low soil fertility, highly permeable soil.”

This soil landscape is mapped as occurring over the entire site.

Table 2: Soil physical properties test results

Location	Sites 1 & 2	Sites 3 & 4
Type	Yellow Earthy Sand	Yellow Earthy Sand to grey sand
Texture	Loamy sand all horizons	Loamy sand all horizons
Colour	Light brown top 10cm (A horizon) then yellow	Grey to grey- yellow
pH	5 topsoil, 5 subsoil	5 topsoil, 5 subsoil
Depth	>40cm , but many boulders/ nodules	Hit bedrock at 30- 40cm
Structure	Apedal sand	Apedal sand
Drainage/ mottling	Topsoil drainage excellent, subsoil reasonable/poor dependant on presence/absence of sandstone.	Topsoil drainage excellent, subsoil poor due to presence of sandstone.
Other comments	Laterite nodules and boulders present, and some sandstone rock shelves/beds present. Presently growing avocados well.	Sandstone bedrock at shallow depth impeding avocado development. Avocados doing poorly.

Soil test site locations, and other soil features as assessed by the consultant are shown in **Figure 6**.



Figure 6: Soils of the property as mapped by PEAK LAND MANAGEMENT

It was noted that topsoil was disturbed in the area of the chicken sheds and machinery sheds where topsoil has minimal depth. Therefore, these areas have diminished agricultural value (and have limited potential for viable uses) (see **Figure 6**).

It should be noted that there are a number of bedrock areas below very shallow top-soil (as observed in the nearby Hanson Quarry walls). As a result, much of the topsoil is unavailable to plant roots due to these rock shelves, and therefore only surface soils above this rock are considered in this report.

Soils are generally classified as Yellow Earthy sands over the subject site and are rated as very low in terms of fertility by *Murphy, 1993*. They are very sandy, with minimal organic matter or clay/silt to enhance their fertility and water holding capacity (despite extensive application of chicken litter). They have high potential aluminium toxicity, and are highly erodible. In some areas the soil appears as pure sand. Soils vary in depth from approximately 20cm to over 2 metres over the site.

Where deeper soils occur in combination with their highly permeable properties, they are suited to pastures and permanent horticulture (such as citrus/avocadoes/flowers), but only where water and nutrients can be applied frequently. The economics of this are dependent on fertilizer prices, adequate irrigation water supply, and returns from the crop to ensure economic viability.

Other forms of **land degradation** were evident including extensive sheet erosion (topsoil was missing in many areas), soil was naturally very acidic, and some rill and minor gully erosion was evident. Crop disease also occurred (Phytophthora).

4.2 Topography And Aspect

The subject land is gently to moderately undulating with slopes ranging from 2 degrees to 6 degrees downslope towards the southeast (see **Figures 1** and **3**). Slopes tended to be a little more inclined towards the middle of the property to the south of the existing large chicken shed. The property has a southerly aspect.

4.3 Native Vegetation and Water

Approximately 5% of the subject land was naturally vegetated along its western boundary with the existing quarry with a mix of sparse native vegetation and introduced species. The property boundaries has a mix of pine trees (radiate pine) and weeds, which act as a partial windbreak for the orchard.

Water was supplied from a large dam on the neighbouring land (proposed Lot 34). It is approximately 20-25 megalitres in capacity and is fed from a man-made drainage channel which was flowing at the time of inspection. There are no other dams used for the agricultural activities.

4.4 Climate

The climate of this area is warm temperate with a maritime influence. Rainfall is generally summer dominated, resulting in good ground cover conditions and a low climatic erosion risk (*Murphy, 1993*). Average annual rainfall is around 1300mm, with temperatures hottest in January averaging 27°C on the coast, to 21.5°C in June at Kulnura.

5.0 AGRICULTURAL LAND CLASSIFICATION

Agricultural Land Classification is a system developed by NSW Agriculture which aims to allow rapid assessment for planning and helps to identify land worth retaining for agriculture. The following classes are used (from NSW Agriculture AGFACT 211/532, 1996):

Class 1: Arable land suitable for intensive cultivation where constraints to sustained high levels of agricultural production are minor to absent.

Class 2: Arable land suitable for regular cultivation for crops but not suited to continuous cultivation. It has moderate to high suitability for agriculture, but edaphic (soil factors) or environmental constraints reduce the overall level of production and may limit the cropping phase to a rotation with sown pastures.

Class 3: Grazing land or land well suited to pasture improvement. It may be cultivated or cropped in rotation with pasture. The overall production level is moderate because of edaphic or environmental constraints. Erosion hazard, soil structural breakdown and other factors including climate may limit the capacity for cultivation and soil conservation or drainage work may be required.

Class 4: Land suitable for grazing but not for cultivation. Agriculture is based on native pastures or improved pastures established using minimum tillage techniques. Production may be seasonally high but the overall production level is low as a result of major environmental constraints.

Class 5: Land unsuitable for agriculture or at best suited only to light grazing. Agricultural production is very low to zero as a result of severe constraints, including economic factors, which preclude land improvement. An additional class may be used occasionally where land has some special features which allows a specialist crop to be grown.

In this case, the NSW Department of Agriculture has used a modified system of agricultural land classification with different

classes based primarily on soil depth (and slope). The map is shown in **Figure 7**. It was compiled in 1984, and appears to be a precursor to the standard land classification system outlined above.

It has mapped the subject land as comprising a mix of Classes 1, 2, and 4.

The mapping appears to be fairly rudimentary and does not appear consistent with site conditions. As a result of the quality and scale of the map, it is difficult to decipher land classes across the entire site.

The mapping fails to take into account site soil characteristics, basing land class assessment on predominantly soil depth (and perhaps slope). This methodology makes no allowance for the fertility of the soil, its structure and texture attributes, and hence potential agricultural capacity. It seems to assume that all land can be improved by fertilizer application and irrigation, whereas it is now known that soil and water (both surface and groundwater) degradation can occur through inappropriate fertilizer application and inappropriate agricultural landuses. It can also be costly and not always financially viable to 'improve' land which has many constraints to its sustainable production.

This modified system is also ambiguous and hard to define with some areas marked as a variety of classes (eg 3-4). Further, Sydney *SREP No 8* defines Prime Agricultural Land as areas on the map marked as 2, 3, 3-4, and 4 - only land classed as 5 is not Prime.

By this methodology, nearly all the central coast plateaux is marked as prime under Sydney *SREP No. 8*. This is different to the current Department Primary Industries system which classes Prime Land as Classes 1-3 inclusive, including, generally, the better quality more arable land capable of sustaining long term agricultural production..

Under the provisions of SREP 8, the whole site is mapped as Prime Land – although the methodology and accuracy of this mapping is questionable.

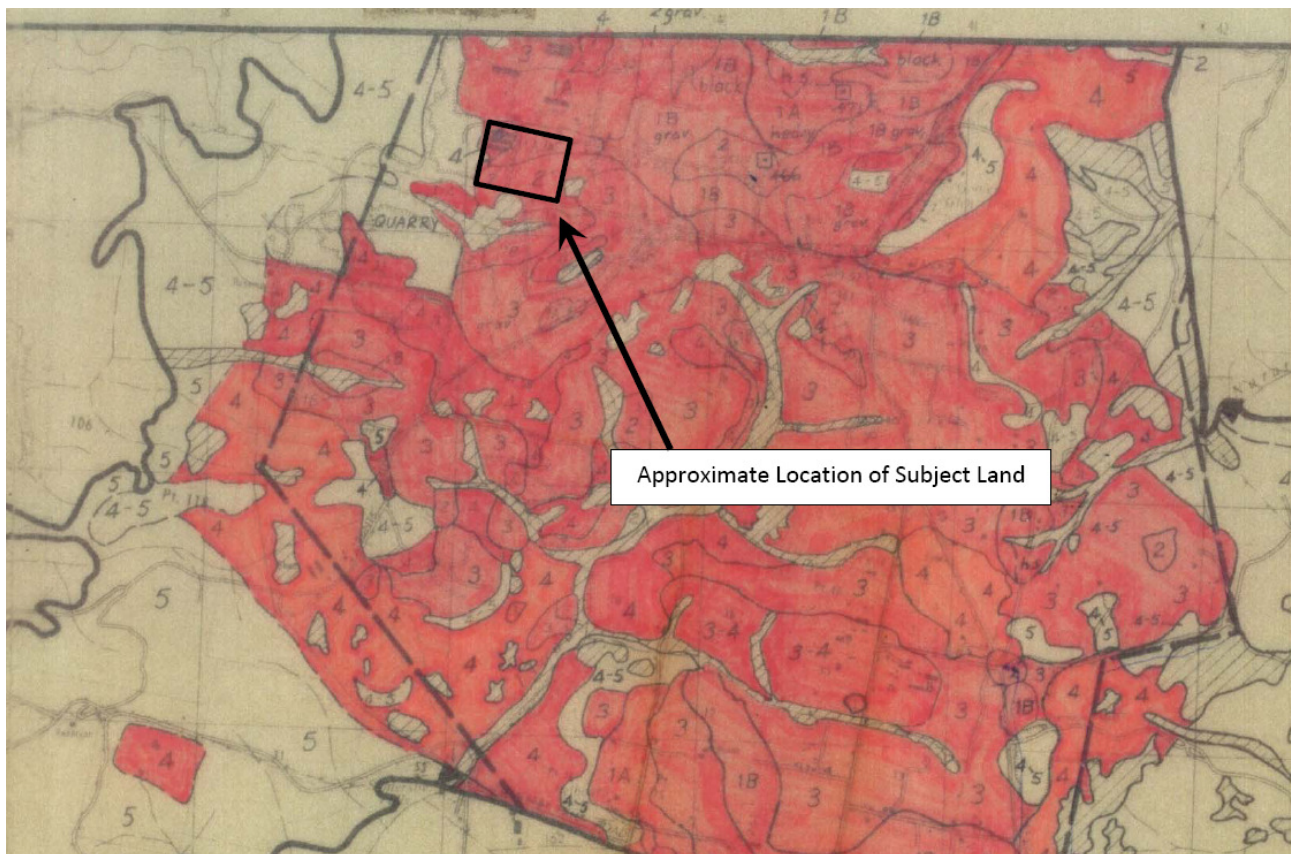


Figure 7a: Agricultural land classification map prepared by Department of Primary Industries for this area under REP No 8 Extract from the 'Classes of Agricultural Land on the Plateau of the New South Wales Central Coast' Map 3 prepared by the NSW Department of Agriculture and dated 1981. Land shown in pink is defined as prime agricultural land in accordance with SREP 8.



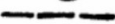


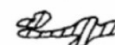



 Department of Agriculture New South Wales		
CLASSES OF AGRICULTURAL LAND ON THE HUNTER PLATEAU NEW SOUTH WALES		
MAP 3		
<div><div>SYMBOLS</div><div> boundary of area surveyed  boundary of areas surveyed in detail  boundary of land class  tentative boundary of land class  drainage line, water course, stream, wetland, swamp, dam—not available for cropping or grazing  stream with rapids  soil analysis sampling site  moisture determination sampling site</div></div>	<div><div>SYMBOLS</div><div><div>b.i</div><div>basalt influence</div><div>black</div><div>soil has a black organic surface layer</div><div>shale influence</div><div>colluvium from Wianamatta Shale has produced a more clayey soil</div><div>h.s</div><div>hydromorphic soil</div><div>heavy</div><div>clayey subsoil</div><div>stony</div><div>soil markedly stony at the surface and through the surface layer</div></div></div>	
LAND CLASS	DEFINITION	EQUIVALENT CLASS OF THE RURAL LAND EVALUATION MANUAL*
1	Total depth of soil to solid rock greater than 2 metres	
1A	Yellow soil (upper profile) 2 metres deep or longer	
1A lat	Yellow soil has layer of large ironstone boulders up to 50 cm thick usually within 80 cm of the surface	
1A grav. gra. gr.	Yellow soil has heavy ironstone gravel and sometimes small boulders from 60-75 cm depth	
1B	Yellow earth (upper profile) less than 2 metres thick	
1B grav. gra. gr.	Yellow soil has heavy ironstone gravel from 30-50 cm depth	
1B Fe stone	Yellow soil has heavy ironstone gravel from 40-50 cm depth and ironstone boulders in deep sub soil	
1H	Clayey soil on colluvium from Wianamatta Shale	
1U	Uniformly sandy soil without gravel or stones	
2	Total depth of soil to solid rock greater than 1.5 metres and up to 2 metres	2
2 grav. gra. gr.	Yellow soil has heavy ironstone gravel from 30 cm depth	
3	Total depth of soil to solid rock greater than 1.0 metre and up to 1.5 metre	2
3 grav. gra. gr.	Yellow soil has very heavy gravel from 30 cm depth	
3H	Clayey, Podzolic soil on Wianamatta Shale	
3U	Uniformly sandy soil without gravel or stones	
3-4	A complex of classes 3 and 4	3
4	Total depth of soil to solid rock 0.5-1.0 metre	3-4
4H	Clayey Podzolic soil on Wianamatta Shale	2
4U	Uniformly sandy soil without gravel or stones	2
4-5	A complex of classes 4 and 5	3-4.5
5	Total depth of soil to solid rock less than 0.5 metre	5
CROP SUITABILITY OF HUNTER PLATEAU CLASSES		
CLASS	CROP SUITABILITY	
1	}	Fruit, vegetables, crops, pastures
2		
3		
4		
4U		Vegetable crops and pastures
3-4	}	Crops and pastures
4		
4-5 (better)		Pastures only
4-5 (poor)	}	Unsuited to pastures
5		
NOTE TO MAP USERS		
This map forms part of an overall assessment of agricultural lands in the subject area and should be read in conjunction with the written report on that area. It was prepared using base maps, aerial photography and field traversing where possible. Outside of the detailed areas land class boundaries are tentative except for those between Class 3 or higher classes and Class 4. There may be anomalies with specific detail and land class boundaries. The map is not reliable at scales larger than that at which it is reported.		
base map—Central Mapping Authority of New South Wales 1:25 000 topographic maps, field survey: C. A. Hawkins and N. Haddad, drafting: C. Wright and D. Holland, January 1984 * Woodward, R. and Neilson, J. (1981)		

Figure 7b: Key from the agricultural land classification map prepared by Department of Primary Industries for this area under SREP No 8.

5.1 Review of Agricultural Land Classification

From site inspection, soil testing, discussions with land-owners, a review of literature and mapping sources, it is clear that the site is better classed as 3 and 4 (under the current NSW DPI Agricultural Land Assessment) as shown in **Figure 8**.

This determination has been made for the site as:

- ☞ Soils are predominantly earthy sands, and almost pure sand in some cases, with very low fertility, high potential aluminium toxicity and high soil acidity;
- ☞ Much topsoil has been lost over lower southern parts of the site and around the chicken sheds;
- ☞ Soils are shallow in some areas, with laterite boulders, and sandstone rock beds/shelves within 20-30cm of the ground surface in some areas;
- ☞ Soils are prone to waterlogging in parts due to this shallow rock which prevents downward movement of water through the soil profile;
- ☞ Slopes are moderately undulating in some areas;
- ☞ Erosion potential is high, and soil structure very poor, therefore cultivation should not occur; and
- ☞ Fertilizer costs are increasing and the financial viability of maintaining good soil nutrient levels over these highly leached and impoverished sands and earths is questionable.

Thus approximately 35% of the site is mapped as prime where soils are deeper and have been improved by chicken litter application. The majority of land is not considered Prime Agricultural Land.



Figure 8: Agricultural land classification map (prepared by PEAK LAND MANAGEMENT).

6.0 LAND CAPABILITY

The property consists of a variety of land capability types dictated by soil type, aspect and slope. A description of these land classes are outlined below.

The Land Capability Classification System was developed by the Soil Conservation Service in the 1950's. This system classifies land according to its potential to be degraded by agricultural activity with particular reference to soil erosion. **Table 3** shows that classes range from *Class I - prime land suitable for intensive cropping* to *Class VIII - land unsuitable for agriculture*. Within each land class there are differences such as soil type, slope, nutrient levels, soil structure, stoniness, depth, drainage, acidity, salinity, aspect and climate.

Table 3 : Land Capability System

Class	Usage	Description
I	Suitable for regular cultivation	Prime agricultural land which can be cultivated regularly for crop productions without the need for any special erosion control measures
II	Suitable for regular cultivation	Usually gently sloping land suitable for regular cultivation but requiring some conservation farming practices to prevent erosion.
III	Suitable for regular cultivation	Land requiring structural conservation works such as contour banks and adequate crop/pasture rotation to prevent erosion after cultivation
IV	Suitable for occasional cultivation	Land not suitable for cultivation on a regular basis due to slope soil type, stoniness or other factors. Soil conservation practices such as pasture improvement, stock control and minimal cultivation during preparation and seeding of pastures are required.
V	Suitable for occasional cultivation	Similar to class 4 but erosion risk is more severe due to slope and soil type.
VI	Not to be cultivated	Very fragile grazing land. Land which should not be cultivated under any circumstances. Generally less productive grazing land with poorer shallower soils.
VII	Not suitable for agriculture	Land best protected by green timber. Limited grazing possible in favourable seasons only.
VIII	Not suitable for agriculture	Lakes cliffs and swamps and other unusable land.

6.1 Land Capability Results

Land Capability mapping was not available for this site, so the mapping has been undertaken accordingly (**Figure 9**). It is characterised by land classes which are predominately of average to poor capability (V, and VI). The land is not suitable for regular cultivation due to the poor soils (poor structure and stoniness) and resultant erosion risk.

Sustainable management of class V and VI land should be aimed at keeping maximum groundcover (70% as a minimum), grazing/permanent horticulture enterprises only, appropriate fertilizer application and pasture improvement. These lands are generally suited to grazing (entire area of subject land), or permanent horticulture crops only over those areas marked Class V. Of course enterprises such as chickens and fire wood splitting can be carried out on any soil/land type, with land capability not being relevant, except for the only prerequisite being low slope/flat land.

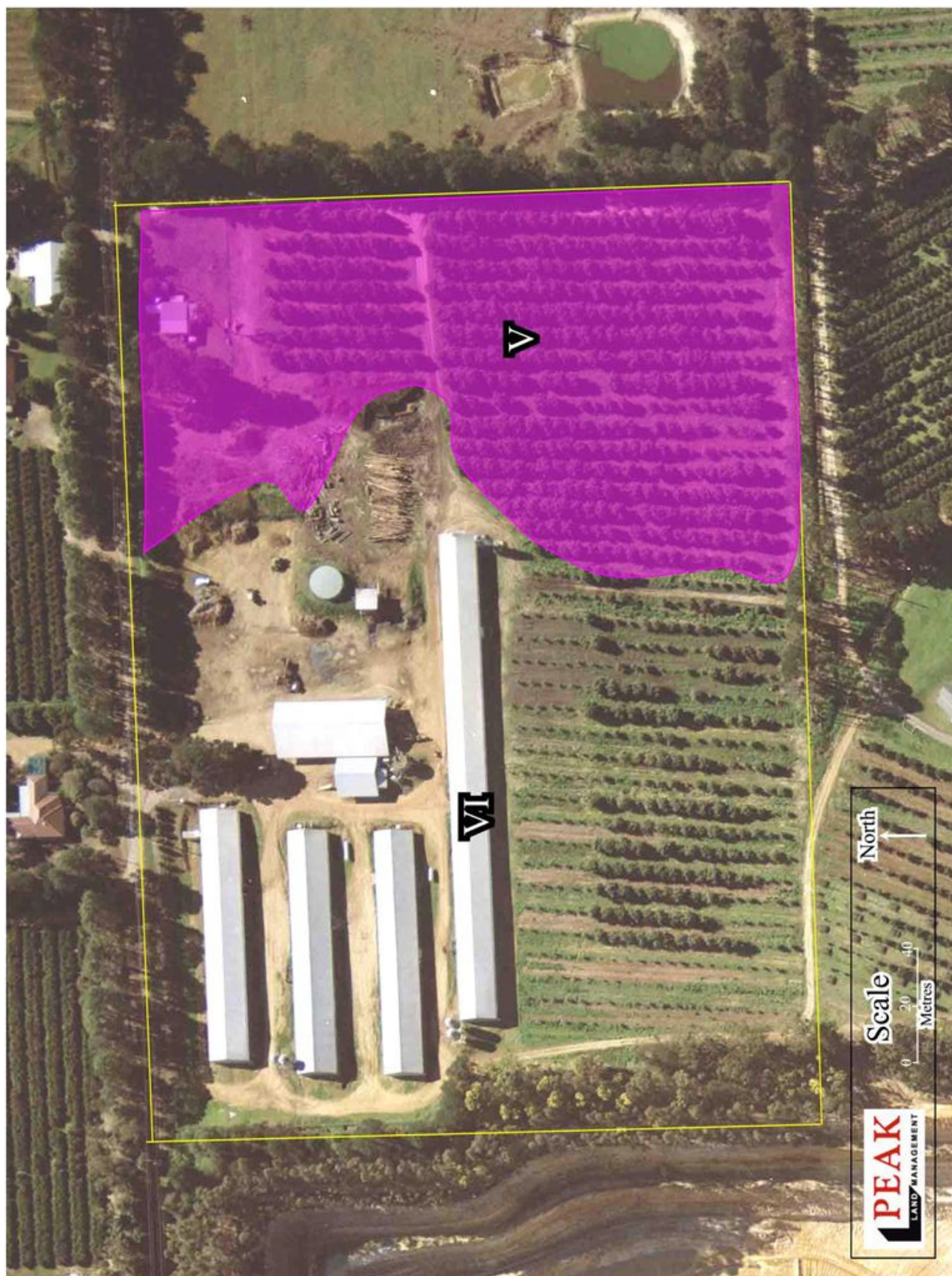


Figure 9: Land Capability

7.0 RECOMMENDATIONS CONCERNING LAND PLANNING INSTRUMENTS

7.1 NSW Agriculture policy on the protection of agricultural land (2004)

This policy (as shown in **Appendix 1**) has the aim of protecting the alienation of agricultural land from urbanisation, erosion, salinity and other forms of land degradation (NSW Agriculture Policy 2004). Department of Primary Industries policy is to support the retention of prime agricultural land. They recognise that some alienation of prime crop and pasture land is inevitable as a consequence of population growth and economic development. To aid planners, maps have been produced showing agricultural land classes. In this case mapping has been carried out using old Sydney REP No 8 maps which show the land as Prime (Classes 1A, 2 & 4). The consultant does not fully agree with the mapping, having mapped the land as a mix of Class 3 & 4 under the current policy.

This report has shown that:

- Over 65% of the total land area is not prime agricultural land.
- All of the land has infertile soil (which has been improved by addition of fertilizer over the avocado orchard), is erosion prone with flat to undulating slopes and has rock and boulders present over most it, in some parts at shallow depth.
- Class 3 Land (gently undulating slopes, soils generally deeper) are capable of growing pastures and some specific perennial crops (such as avocados) on an ongoing basis as long as inputs are regularly supplied (ie: lime/fertilizer/organic matter/water).
- Class 4 (land due to its constraints from shallow rock, moderate slopes, poor soil properties, waterlogging, & erosion risk) is better used as pasture or non soil dependant agricultural enterprises such as the existing poultry or fire wood splitting.
- Any agriculture undertaken should be carefully managed, including the Class

3 country (which was subject to active sheet erosion during the inspection) and acid soils.

- The proposed development will alienate some land agriculturally, but should be considered as an important economic development with the potential to generate far more return from the land.

7.2 Sydney Regional Environment Plan No. 8 (Central Coast Plateau Areas)

The general aims of SREP No 8 are listed below.

“The general aims of this plan are:

- (a) to provide for the environmental protection of the Central Coast plateau areas and to provide a basis for evaluating competing land uses,*
- (b) to encourage the use of land having a high agricultural capability for that purpose and, as much as possible, to direct development for non-agricultural purposes to land of lesser agricultural capability,*
- (c) (Repealed)*
- (d) to protect regionally significant mining resources and extractive materials from sterilization,*
- (e) to enable development for the purposes of extractive industries in specified locations,*
- (f) (Repealed)*
- (g) to protect the natural ecosystems of the region, and*
- (h) to maintain opportunities for wildlife movement across the region, and*
- (i) to discourage the preparation of draft local environmental plans designed to permit rural residential development, and*
- (j) to encourage the preparation of draft local environmental plans based on merits”.*

The pertinent aims to this assessment relate to (b) *agricultural land use*, and (d) *protect significant mining resources*. This report has shown that although there is a working farm utilizing this land, it is not of high agricultural capability. The farm is making a small profit, and can not afford to outlay \$1 million to upgrade poultry sheds, which will mean it may lose its contract with Ingham's.

Avocado production will be expanded on the adjacent land owned by Mr Britten, meaning there will be an increase in net avocado production, as most of the existing avocado orchard is not growing adequately on the subject property. Chicken farming can occur anywhere zoned rural subject to council consent, and would most likely be phased out anyway on this property due to upgrade costs.

It is noted under Section 6 (Prime Agricultural Land) that consent cannot be granted on land mapped as prime agricultural land unless the consent authority is satisfied that:

'2(b)carrying out of this development would not adversely affect the present or future use of other prime agricultural land for the purposes of agriculture.'

5unless it is satisfied that no other land to which this policy applies , not being prime agricultural land, could provide a viable or workable alternative site for the carrying out of the development.

It is clear that only a very small portion of the land can be classed as 'prime agricultural land (less than 2.5 hectares).

As such, the proposed quarry extension does not result in the loss of a significant amount of prime agricultural land and complies with objective 2(b). Further, once quarrying of the land is completed, the parcel would again have potential for agricultural purposes.

The expansion of an existing quarry into known sand reserves, over land that is of low to moderate agricultural potential, where there are few other options for the mine to expand (National Park to the west), and with alternative agricultural land adjacent to this property being available for expanded avocado production, would seem to be a viable proposition which meets the objectives of part 5 above.

8.0 CONCLUSION

The subject site is a small property which is not considered of high agricultural capability. Although around 2.5 hectares of land is considered prime it is limited by its soils and other issues as stated. Land mapped as non prime can still be used for grazing purposes, but this is a low return enterprise not suited to small areas of land. It would not be a viable proposition in this case.

This property does make a profit, albeit small, and employs 3 people plus some contractors from time to time. The owner cannot, however, afford to update chicken sheds to gain a new contract with Inghams without an upfront \$1 million capital injection of funds. Therefore the increased burden on loaning this money would make the farm unviable.

The current owner will continue to farm the adjoining land (proposed Lot 34 – **Figure 4**) for avocados only, where soils are deeper and the orchard more viable. His overheads will be reduced by selling this land, and exiting the chicken industry. This will mean less staff, equipment, lower mortgage (or none) and perhaps a better profit margin.

This report therefore concludes that the land, if given over to extractive uses, would generally meet the requirements of both the NSW Agriculture policy on the protection of agricultural land (2004) and the agricultural objective of the *Sydney Regional Environment Plan No. 8 (Central Coast Plateau Areas)*.

9.0 REFERENCES

Agfacts. *Agricultural suitability maps – uses and limitations*. 1996, Department of Primary Industries.

Auld, B.A. and Medd, R.W. 1992. *Weeds*. Inkata Press.

Brooker M.I.H. and Kleineg D.A. 1999. *Field Guide to Eucalypts – South Eastern Australia*, Volume 1. Blooming Books.

Central Mapping Authority of NSW. 2001. Gosford 1:25 000 topographic map.

Charman, P.E.V. and Murphy, B.W. 1991. *Soils- Their Properties and Management: A Soil Conservation Handbook for NSW*, Soil Conservation Commission of NSW. Sydney University Press

Department of Primary Industries. Agricultural Land Classification map. (Courtesy of Andrews Neil and David Kettle)

Department of Primary Industries. 2004. *Policy for Sustainable Agriculture in New South Wales*.

Department of Primary Industries 2006. *Beef stocking rates and farm size- Hunter Region*.

Fairley, A and Moore, P. 2000. *Native Plants of the Sydney District*. Kangaroo Press

Harden, G. 2002. Volumes 1-4. *Flora of NSW*. UNSW Press.

Murphy, C.L. (1993). *Soil Landscapes of the Gosford 1:100 000 sheet*. Department of Conservation and Land Management, NSW.

Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas). 17th May, 2002.

Wheeler, D.J.B., Jacobs, S.W.L. and Whalley, R.D.B. 2002. *Grasses of NSW*. University of New England Printery.

10.0 ABOUT THE AUTHOR

Ted Smith is an experienced, multidisciplinary environmental and agricultural consultant with an interest in sustainable land management. He has an Honours Science degree majoring in Physical Geography, and over 18 years experience commercially consulting in his business – PEAK LAND MANAGEMENT PTY LTD and formerly with the NSW Department of Land and Water Conservation – Former Senior Landcare Specialist and Senior Farming for the Future Facilitator for the Hunter Region. He is an accredited Property Planner with the Federal Government, and a Certified Practising Agriculturist and consultant member with the Australian Institute of Agricultural Science and Technology. Ted has completed a Graduate Diploma in Design for Bushfire Prone Areas from the University of Western Sydney and is a member of the Fire Protection Association (FPA), being a BPAD-A Certified Bushfire Practitioner (17671). PEAK LAND MANAGEMENT PTY LTD is licenced (S11395) with the Department of Conservation to collect threatened plants and conduct flora surveys, is a member of the NSW Ecological Consultants Association, and an accredited Biobanking Assessor (0043) with Department of Environment and Climate Change. Ted is also a Qualified Workplace Trainer.

PEAK LAND MANAGEMENT PTY LTD has completed numerous Environmental Management Plans, Statements of Environmental Effects, Bushland Management Plans, Property Management Plans, Land Capability Analysis, Agricultural Land Suitability & Classification Assessments, Flora & Fauna Surveys, 7 Part Tests and Bushfire Threat Assessment Reports for landholders, business and government clientele.

APPENDIX 1

Department of Primary Industries Policy for Protection of Agricultural Land, 2004



APPENDIX 1: Department of Primary Industries Policy for Protection of Agricultural Land, 2004

Policy for Protection of Agricultural Land, 2004

31 May 2004

This policy document is an update of the *Policy for Protection of Agricultural Land, 1993*

Purpose

This policy document guides officers of NSW Agriculture in their input to development and implementation of environmental planning instruments under the *Environmental Planning and Assessment Act, 1979*. Strategies in the *Policy for Sustainable Agriculture in New South Wales 1998* provide the context for this policy.

Protecting agricultural land includes maintaining the availability of land for agriculture, avoiding unnecessary limitations on the use of that land, and promoting agricultural enterprises that are consistent with the principles of ecologically sustainable development (ESD) as elucidated in *National Strategy for Ecologically Sustainable Development, 1992*.

The *Environmental Planning and Assessment Act* provides for the development and implementation of environmental planning instruments, viz State Environmental Planning Policies, Regional Environmental Plans, Local Environmental Plans and Development Control Plans. These instruments determine the areas of land that are available for commercial agriculture and the restrictions under which agriculture, and especially intensive agriculture, will operate.

Context

Agriculture is a diverse sector of the State's economy that includes the production, processing and marketing of food, fibre and ornamental products. The sector has played a key role in the development of New South Wales and contributed to the character, culture and heritage value of our rural landscape.

Sustainable development is the basis for agricultural land policy. Agricultural policies directed at conserving natural resources to maintain their long term productive potential for the community as a whole are a fundamental component of sustainable agriculture. Some agricultural industries rely on soil, in which case matching land use to land capability is essential to their sustainability. There are other agricultural industries that are not dependant on the soil resource, such as hydroponics, protected horticulture and intensive livestock production. For all agricultural enterprises, appropriate access to water, labour, markets, processing facilities and infrastructure is necessary.

The slow freeing up of world trade and internationalisation of agricultural markets is changing the opportunities for agricultural enterprises. It is desirable that environmental planning instruments and planning decisions maintain the capacity for farmers to respond to this changing market and policy environment.

The threats to sustainable agricultural production include degradation of the natural resources on which agriculture relies and alienation of agricultural land. Agricultural land may be alienated directly through lands being used for non-agricultural purposes and indirectly by incompatible developments on adjacent land restricting routine agricultural practices. Non-agricultural development of land currently used for agriculture contributes to this and may force future agricultural production onto more marginal lands.

New South Wales, as Australia's most important agricultural producing State, has a direct economic and social interest in maintaining and improving agricultural production not only for the nation's present and future generations, but also for exports. In many rural regions, agriculture or value adding industries based on agriculture, provide the only opportunity for economic development.

NSW Agriculture recognises that land with the best combination of soil, climate and topography for agricultural production (termed prime agricultural land) is a limited resource in New South Wales and its preservation should be encouraged. In addition agricultural enterprises that are not based on the soil resource should also be protected, especially where the location or other features of the region give those enterprises a competitive advantage or where there has been significant investment in facilities or infrastructure to support those enterprises.

The planning system should provide certainty and security for agricultural enterprises and enable agricultural enterprises to maintain efficiency by responding to future market, policy, technology and environmental changes. Any restrictions on agricultural enterprises should be fully justified by scientific evidence to quantify potential impacts and alternatives.

NSW Agriculture Corporate Goals

The mission of NSW Agriculture is to *Benefit the general community by leading agriculture in NSW to a profitable, environmentally sustainable future*. Corporate goals under this mission include *Innovative and internationally competitive agricultural industries* and *Sustainable management of natural resources for agriculture and community*.

The planning and development control systems under the *Environmental Planning and Assessment Act, 1979* (EP&A Act) determine the areas of land that are available for commercial agriculture and the restrictions under which agriculture, and especially intensive agriculture, will operate. These decisions are relevant to the competitiveness of agricultural industries, now and in the future, and the sustainable management of natural resources for agriculture and the community.

The NSW Government released a Policy for Sustainable Agriculture in 1998. The goal of that policy is *Agricultural industries that contribute positively to the State's productivity and economy, protect the State's biological and physical resource base, and support the State's rural people and communities*.

One of the activities by NSW Agriculture in pursuit of these goals is to provide advice to assist in developing and implementing environmental planning instruments (EPI) under the *Environmental Planning and Assessment Act, 1979* (EP&A Act).

NSW Agriculture has no statutory role under the Act or its instruments, but acts as an advocate for sustainable agriculture and provides technical advice to assist the appropriate authorities make informed decisions in the best interests of their communities. It is the responsibility of the appropriate authorities to balance this advocacy for sustainable agriculture against the other needs and aspirations of their communities.

This policy document provides direction to NSW Agriculture staff in their role of assisting planning authorities and communities to develop and implement environmental planning instruments relevant to agriculture or rural communities. These instruments include State Environmental Planning Policies, Regional Environmental Plans, Local Environmental Plans and Development Control Plans developed under the *Environmental Planning and Assessment Act, 1979*.

NSW Policy for Sustainable Agriculture

The Policy for Sustainable Agriculture identified the following requirements for agriculture to be sustainable:

- respond to consumer needs for food and fibre products that are healthy and of high quality
- take full account of the costs of production, including environmental costs, and ensure its pricing reflects these costs
- protect and restore the natural resource base on which agriculture depends
- prevent adverse on-site and off-site impacts on the environment and any other sector of the community
- be flexible in order to accommodate regional differences and changing economic, environmental and social circumstances such as drought or terms of trade
- be financially viable.

In relation to land use planning the Policy for Sustainable Agriculture includes the following strategies:

- Ensure collaboration in the development, implementation and review of plans, policies and legislation relating to agriculture.
- Ensure the equitable and efficient allocation of land and other natural resources between agriculture and other sectors of the community.
- Ensure land use planning is undertaken, where appropriate, in association with agriculture to avoid conflict that may jeopardise agriculture's sustainability.
- Ensure enactment of environmental impact assessment procedures that result in the sustainable development of agriculture.
- Develop and adopt agricultural activities and planning strategies that minimise impacts on community amenity from noise, dust and odour.
- Identify lands and farming methods best suited to specific agricultural industries and retain production options for those lands in the future.

Principles for implementation of this Policy

- NSW Agriculture is not a consent authority. Advice should be provided to appropriate authorities to assist them to make informed decisions in the best interests of their communities.
- NSW Agriculture input should be to strategic decisions rather than operational decisions, except for development applications which because of novelty, complexity or significance justify independent technical input from NSW Agriculture.
- NSW Agriculture should promote the consistent and transparent implementation of environmental planning instruments to avoid the intent of instruments being undermined by cumulative impacts from variations to standards and to ensure equity between regions.
- Communities should not be disenfranchised by *ad hoc* decisions that are contrary to the intent of environmental planning instruments. If environmental planning instruments no longer meet the needs and aspirations of communities, they should be revised through an open consultative process that is informed by an assessment of all the values that agriculture contributes.

NSW Agriculture should continue to develop best management practices to promote whole farm management and to implement the other strategies identified in the Policy for Sustainable Agriculture.

Policies to Protect Agricultural Land

1 Environmental planning instruments

Environmental planning instruments should be structured to:

- promote the continued use of agricultural land, particularly prime crop and pasture land, for commercial agricultural purposes, where that form of land use is sustainable in the long term;
- avoid land use conflicts;
- protect natural resources used by agriculture;
- protect other values associated with agricultural land that are of importance to local communities, such as heritage and visual amenity;
- provide diversity of agriculture opportunities, including specialised agricultural developments, at appropriate locations to provide scope for development in rural areas; and
- allow for value adding and integration of agricultural industries into regional economies.

Explanation: The development of appropriate planning instruments is the first step in supporting the capacity of agricultural industries to contribute positively to the State's productivity and economy, while protecting the State's biological and physical resource base, and supporting the State's rural people and communities.

2 Conversion of land

The conversion of land used by agricultural enterprises to other uses should only take place where fully justified against the criteria set out in relevant environmental planning instruments and after consideration of alternative sites and options. Any decisions to convert agricultural land to non agricultural uses should consider the optimal agricultural use of the land and alternative ways to structure the agricultural business.

Explanation: It is recognised that changing community needs and aspirations may sometimes require a change in the use of areas of land. However, once land is converted to other uses, especially to residential or industrial uses, it is most unlikely to ever return to agricultural production. Since these decisions cannot be practically reversed the long term costs and benefits, from a triple bottom line perspective, need to be evaluated before a decision is made.

The objective is not to prevent or discourage other land uses, but rather through planning to ensure that competing landuses are located so as to maximise total benefit to the community. To achieve this goal, planning authorities should develop a strategy for development of agricultural industries at the same time as they develop strategies for other landuses. This approach requires the determination of the economic, environmental and social contributions from agricultural land uses, preferably through a regional rural land study.

Where a change in land use appears to be desirable, any changes to environmental planning instruments should only be made after open and informed consultation with the community. Spot rezonings and other *ad hoc* approaches to planning are undesirable. Changes should be implemented in a way that minimises the impact on existing agricultural enterprises, such as by phasing in the change and providing short term buffers between agricultural and non-agricultural properties.

Evaluation of the economic returns from an area of land should be based on good agricultural practice, not on potentially sub-optimal practices that may currently be utilized.

3 Minimum size of holdings for dwelling entitlement

Criteria in environmental planning instruments to determine the minimum size of holdings necessary for a dwelling entitlement should be developed to suit local needs and conditions.

Explanation: Setting the minimum area necessary for a building entitlement is a commonly used tool to influence residential land uses in agricultural zones. The objective is to reduce opportunities for conflict with commercial agricultural enterprises by minimising residential uses that are not directly associated with commercial farms. Setting a large minimum is a disincentive to life style purchasers but the size also needs to allow for entry by young farmers and the criteria should also allow for more intensive forms of agriculture where appropriate.

While specifying a minimum area for a dwelling entitlement has been an effective strategy that is easily understood and is efficiently implemented, Councils should also consider other approaches to achieving the goal of minimising conflict in agricultural production zones so that farms can operate without unnecessary restrictions.

The minimum area for a dwelling entitlement and other provisions in Environmental Planning Instruments to regulate subdivisions should take account of:

- the agricultural productivity and suitability of the land in question;
- the nature and requirements of agricultural industries in the area being considered;
- the risk of creating land use conflict;
- the current distribution of property sizes; and
- cumulative impacts.

Document details

Created/Updated: 31 May 2004

Feedback

We welcome your [comments/suggestions/feedback](#) on this item

The information contained in this web page is based on knowledge and understanding at the time of writing - 31 May 2004 . However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.

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APPENDIX 2

Sydney REP No. 8 (Central Coast Plateau)



Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas)

[1986-016]

Status Information

Currency of version

This is the latest version of this legislation.

Legislation on this site is usually updated within 3 working days after a change to the legislation.

This version was last updated on 17 May 2002.

This version relates to the period commencing on 17 May 2002 to date.

Act under which legislation made

This legislation was made under the Environmental Planning and Assessment Act 1979

Date made

22 August 1986

Provisions in force

The provisions displayed in this version of the legislation have all commenced. See Historical notes

Contents

- 1 Name of plan
- 2 Aims, objectives etc
- 3 Land to which plan applies
- 4 Definitions
- 5 Relationship to other environmental planning instruments
- 6 Prime agricultural land
- 7 Extractive industries
- 8 Clearing of land
- 9 (Repealed)
- 10 Rural residential development
- 11 Special provisions—draft local environmental plan applications

Historical notes



New South Wales

1 Name of plan

This plan may be cited as *Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas)*.

2 Aims, objectives etc

The general aims of this plan are:

- (a) to provide for the environmental protection of the Central Coast plateau areas and to provide a basis for evaluating competing land uses,
- (b) to encourage the use of land having a high agricultural capability for that purpose and, as much as possible, to direct development for non-agricultural purposes to land of lesser agricultural capability,
- (c) (Repealed)
- (d) to protect regionally significant mining resources and extractive materials from sterilization,
- (e) to enable development for the purposes of extractive industries in specified locations,
- (f) (Repealed)
- (g) to protect the natural ecosystems of the region, and
- (h) to maintain opportunities for wildlife movement across the region, and
- (i) to discourage the preparation of draft local environmental plans designed to permit rural residential development, and
- (j) to encourage the preparation of draft local environmental plans based on merits.

3 Land to which plan applies

This plan applies to the land shown by heavy black edging on the map marked “Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas)” deposited in the office of the Department.

4 Definitions

In this plan:

agriculture:

- (a) in relation to the carrying out of development within the Gosford local government area—means “agriculture” or “intensive agriculture” within the meaning of *Interim Development Order No 122—Gosford*, and
- (b) in relation to the carrying out of development within the Wyong local government area—means “agriculture” or “intensive agriculture” within the meaning of *Wyong Local Environmental Plan 1991*.

council, in relation to the carrying out of development, means the council of the area in

which the development is or is to be carried out.

extractive industry:

- (a) in relation to the carrying out of development within the Gosford local government area—has the same meaning as in *Interim Development Order No 122—Gosford*, and
- (b) in relation to the carrying out of development within the Wyong local government area—has the same meaning as in *Wyong Local Environmental Plan 1991*.

prime agricultural land means land:

- (a) which is land to which this plan applies, and
- (b) which is identified by a class number 1, 1A, 1B, 1H, 1U, 2, 3, 3H, 3U, 3–4, 4, 4H or 4U and shown coloured pink on the map marked “Classes of Agricultural Land on the Plateaux of New South Wales Central Coast” prepared by the Department of Agriculture, copies of which are deposited in the office of the Department of Environment and Planning and of the Councils of the City of Gosford and Shire of Wyong.

sedgeland means land with impeded drainage and moist organic soils on which vegetation comprising sedges and shrubs occurs and identified as “drainage line, watercourse, stream, wetland, swamp, dam—not available for cropping or grazing” on the map marked “Classes of Agricultural land on the Plateau of New South Wales Central Coast” deposited in the Newcastle office of the Department, copies of which are held in the offices of the councils of Gosford City and of Wyong.

the map means the map marked “Gosford/Wyong Local Environmental Plan 2001—Central Coast Plateau Areas” deposited in the Newcastle office of the Department, copies of which are held in the offices of the councils of Gosford City and of Wyong.

5 Relationship to other environmental planning instruments

Subject to section 74 (1) of the *Environmental Planning and Assessment Act 1979*, in the event of an inconsistency between this plan and another environmental planning instrument (other than a State environmental planning policy) whether made before, on or after the commencement of this plan, this plan shall prevail to the extent of the inconsistency.

6 Prime agricultural land

- (1) A person shall not:
 - (a) erect a building on prime agricultural land,
 - (b) construct a dam on prime agricultural land, or
 - (c) subdivide prime agricultural land,except with the consent of the council.
- (2) A council shall not consent to an application to carry out development on or with respect to prime agricultural land unless:

- (a) (Repealed)
- (b) the council is satisfied that the carrying out of the development would not adversely affect the present or future use of other prime agricultural land for the purposes of agriculture.
- (3), (4) (Repealed)
- (5) A council shall not consent to the carrying out of development on prime agricultural land for a purpose other than a purpose of agriculture unless it is satisfied that no other land to which this plan applies, not being prime agricultural land, could provide a viable or workable alternative site for the carrying out of the development.
- (6) Development may be carried out, but only with the consent of a council, on prime agricultural land for the purposes of extractive industries and rural tourist facilities within the locations respectively specified for them on the map. Subclause (5) does not apply to the grant of such a consent.

7 Extractive industries

- (1) Development for the purposes of an extractive industry may be carried out, with the consent of a council, on land within an area identified as a preferred location for extractive industries as shown on the map.
- (2) A council shall not consent to the carrying out of development on land to which this plan applies for the purposes of an extractive industry unless it is satisfied:
 - (a) that appropriate arrangements have been made for buffer zones to surround the place at which the material is to be extracted or is proposed to be extracted, except where the council is satisfied they are not necessary, and
 - (b) that the land will be satisfactorily restored or rehabilitated on cessation of the use of the land for an extractive industry so as to enable its subsequent development for agricultural purposes or for another purpose that the council considers suitable for that land.
- (3) A person shall not remove ridge gravel (nodular ferricrete) from any land to which this plan applies unless the removal of the gravel is ancillary to the use of the land in accordance with a development consent which permits the land to be used otherwise than exclusively or predominantly for the extraction of ridge gravel.

8 Clearing of land

- (1) In this clause, *clear* has the same meaning as in the *Native Vegetation Conservation Act 1997*.
- (2) A person shall not clear land to which this plan applies for any purpose (including agriculture) except with the consent of a council.
- (3) A council shall not consent to development on land to which this plan applies where, in its opinion, the carrying out of the development shall result in the destruction of sedgeland.
- (4) Nothing in this clause requires consent for, or prevents, prohibits or restricts,

activities that are allowed to be carried out without consent by, and are undertaken in accordance with, any regional vegetation management plan made under the *Native Vegetation Conservation Act 1997* that applies to any land to which this plan applies.

9 (Repealed)

10 Rural residential development

A draft local environmental plan that applies to land to which this plan applies should not contain provisions that have the effect of permitting subdivision to create a lot that is smaller than any minimum lot size prescribed for the land in *Interim Development Order No 122—Gosford* or *Wyong Local Environmental Plan 1991* at the commencement of *Gosford/Wyong Local Environmental Plan 2001—Central Coast Plateau Areas*.

11 Special provisions—draft local environmental plan applications

In preparing any draft local environmental plan applying to land to which this plan applies, the council should have regard to the objective that any development allowed by the plan should:

- (a) not impact upon the current or future use of adjoining land for existing or future agricultural uses, and
- (b) not result in an increased settlement pattern (by way of urban development, rural residential development, residential accommodation of a permanent or semi-permanent nature, community titles subdivisions or any other features that would facilitate increased settlement), and
- (c) have a significant positive economic contribution to the area and result in employment generation, and
- (d) not result in any adverse environmental effect on or off the site, and
- (e) be consistent with the strategic direction for water quality standards and river flow objectives developed through the State Government's water reform process, and
- (f) be consistent with rural amenity (including rural industries) and not detract significantly from scenic quality, and
- (g) not encourage urban (residential, commercial or industrial) land uses, and
- (h) not require augmentation of the existing public infrastructure (except public infrastructure that is satisfactory to the council concerned and is provided without cost to public authorities), and
- (i) result in building works being directed to lesser class soils.

Historical notes

The following abbreviations are used in the Historical notes:

Am	amended	No	number	Schs	Schedules
Cl	clause	p	page	Sec	section

Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas)

Page 6 of 6

Cll	clauses	pp	pages	Secs	sections
Div	Division	Reg	Regulation	Subdiv	Subdivision
Divs	Divisions	Regs	Regulations	Subdivs	Subdivisions
GG	Government Gazette	Rep	repealed	Subst	substituted
Ins	inserted	Sch	Schedule		

Table of amending instruments

Sydney Regional Environmental Plan No 8 (Central Coast Plateau Areas) published in Gazette No 134 of 22.8.1986, p 4117 (see also GG No 142 of 12.9.1986, p 4515) and amended as follows:
Gosford/Wyong Local Environmental Plan 2001—Central Coast Plateau Areas (GG No 87 of 17.5.2002, p 3096)

Table of amendments

Cll 2, 4, 6, 7	Am 17.5.2002.
Cl 8	Am 12.9.1986. Subst 17.5.2002.
Cl 9	Rep 17.5.2002.
Cl 10	Subst 17.5.2002.
Cl 11	Ins 17.5.2002.

APPENDIX 3

Photos of site



Existing 40 year old chicken sheds.



Farm machinery and logs for firewood splitting



Split firewood.



Existing farm machinery bay and equipment



Avocado plantation (near Soil test hole 1, upper eastern part of property)



Avocados fruiting well in this location



Disturbed soil stockpile



Laterite boulders found throughout soil profile.



Soil profile (auger hole 1). Improved sandy earth topsoil, yellow earthy sand subsoil.



Soil profile in man made drainage channel. Note yellow earthy sand at top, then grey almost pure sand underneath. Soil fertility very low.



Soil test hole 2. Same soil type as hole 1.



Stunted avocado orchard over lower reaches of property with bare areas open to sheet erosion.



Avocado tree , stunted and doing poorly



Hanson's Quarry adjoining subject land to the west

