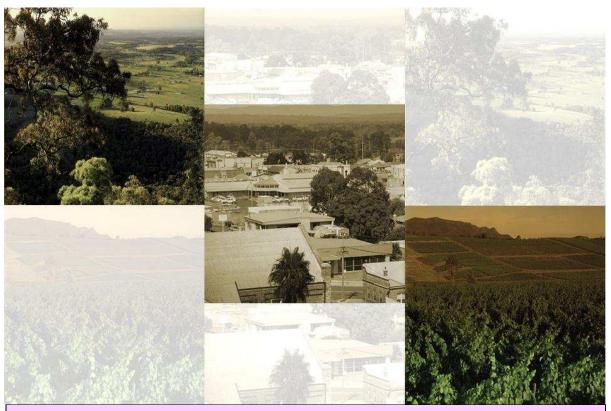


CESSNOCK DEVELOPMENT CONTROL PLAN

PART E SPECIFIC AREAS



E.3: VINEYARDS DISTRICT

Amendment History

Version No.	Nature of Amendment	Date in force
1	Initial adoption by Council on 2 December 1998 (DCP 28)	16 June 1999
2	Amended by Council	26 November 2001
3	Amended by Council	1 January 2003
4	Consequential Amendments to site-specific DCP's arising from the Cessnock DCP 2006	1 December 2006
5	Incorporation into Part E: Specific Areas	30 March 2007
6	Consequential amendments as a result of Cessnock Local Environmental Plan	23 December 2011

TABLE OF CONTENTS

E.3	VINEYARDS DISTRICT	
3.1	INTRODUCTION	
3.1.1 3.1.2 3.1.3 3.1.4	Application Purpose Objectives Definitions	1 1
3.2	DEVELOPMENT CONTROL PLAN CONSIDERATIONS AND DEVELOPMENT APPLICATION REQUIREMENTS	4
3.2.1	Consideration of Surrounding Land Uses	4
3.2.2	Soils Analysis	4
3.2.3	Building Siting and Design	6
3.2.4	Development Densities	8
3.2.5	Front and Side Setbacks	9
3.2.6	Requirements for the Establishment of New/Expanded Commercial Vineyards	10
3.2.7	Ground Spraying and Aerial Spraying Considerations	12
3.2.8	Noise Generation and Odour Considerations	21
3.2.9	Development alongside Main Road 220	22
3.2.10	Development in the Vicinity of Cessnock Airport	22
3.2.11	Singleton Military Area	22
3.3	THE NEED TO REVEGETATE COMPONENTS	
	OF THE VINEYARDS DISTRICT	23
3.3.1	Why is there Need to Plant more Trees/Shrubs in the Vineyards District?	23
3.3.2	Native Vegetation Corridors and Mass Plantings	25
3.3.3	Clearing of Vegetation	28
3.3.4	Flora and Fauna Considerations	29
3.3.5	Aboriginal Archaeology	29
3.3.6	European Heritage	30
3.3.7	Water Management Plan	31
3.3.8	Disposal of Waste	31
3.3.9	Servicing	32
3.3.10	Outdoor Lighting	32
3.3.11	Fencing	33
3.3.12	Car Parking	33
3.3.13	Section 94 Contributions	34

LIST OF FIGURES

- *Figure 1:* Vineyards District Locality Plan
- Figure 2: Building Siting
- *Figure 3:* Significant Areas
- Figure 4: New Public Place Developments and Dwelling-Houses
 (Vacant Adjoining / Adjacent Land with No Approvals for Vineyards)

Figure 5: New Public Place Developments and Dwelling-Houses

- (With Adjoining / Adjacent Existing or Approved Vineyards)
- Figure 6: New Public Place Developments and Dwelling-Houses
 (With Adjoining / Adjacent Existing or Approved Vineyards)
- *Figure 7:* New Vineyards (including Expansion to Existing Vineyards)
 - (Vacant Adjoining / Adjacent Land with No Approvals for Public Place Developments or Dwelling-Houses)

Figure 8: New Vineyards (including Expansion to Existing Vineyards)

- (With Adjoining / Adjacent Existing or Approved 'Public Place' Development or Dwelling-House)
- Figure 9: New Vineyards (including Expansion to Existing Vineyards)
 - (With Adjoining / Adjacent Existing or Approved 'Public Place' Development or Dwelling-House)
- *Figure 10:* New Vineyards (Including Expansion to Existing Vineyards) with Existing or Approved Adjoining or Adjacent Vineyards)
- Figure 11: Proposed Corridor Locations
- *Figure 12:* Typical Planting Layout Roadside Corridors
- *Figure 13:* Typical Planting Layout Creek Line Corridors

REFERENCES

34

- **APPENDIX 1**: Vineyards District Landscape and Design Guidelines
- **APPENDIX 2**: Vineyards District Native Vegetation Corridors and Mass Planting Guidelines/Nest box Design Guidelines
- **APPENDIX 3** Specifications for Vegetation Chemical Spray Drift Buffers:
- **APPENDIX 4**: Water Wise on the Farm
- **APPENDIX 5:** Signage Code for the Vineyards District

E.3 VINEYARDS DISTRICT

3.1 INTRODUCTION

3.1.1. Application

This Chapter applies to land in the Vineyards District as illustrated in Figure 1 and zoned RU4 Rural Small Holdings Zone under the Draft LEP. For further information on land uses in the zone, please refer to the Draft Local Environmental Plan.

The chapter consists of written statements, maps and appendices, to be referred to when preparing plans for submission in a development application to Council. The reader should ensure that preparation of a development application and associated plans will involve particular reference to the enclosed Appendices, including **Appendix 1 Vineyards District Landscape Design Guidelines**.

Applicants are particularly urged to refer to other chapters in the DCP that may require further information to be provided, including the provision of additional plans. For example, Part D Chapter C.4 Land Use Conflict and Buffer Zones provides information on measures required to be implemented in order to reduce conflict between adjoining land uses.

3.1.2 Purpose

This Chapter adds detail to those planning provisions contained in Cessnock Local Environmental Plan (CLEP). The Chapter provides detailed guidelines for the establishment of buildings and vineyards in the Vineyards District. The Chapter also provides a basis upon which to implement stated objectives for the Vineyards District.

3.1.3 Objectives

- (a) to maintain prime viticultural land and promote the economic and ecological sustainability of the Vineyards District;
- (b) to recognise and protect vineyards and wineries (dominant land uses) from inappropriate uses in the zone;
- (c) to encourage appropriate tourist development consistent with the rural and viticultural character of the Vineyards District;
- (d) to minimise conflict between viticultural and non-viticultural land uses by the sympathetic location and design of those uses, and the maintenance of the rural/viticultural character of the landscape;
- (e) to enable the continued rural use of land which is complimentary to the viticultural character of land within the Vineyards District;
- (f) to protect the water quality of receiving streams and to reduce land degradation;
- (g) to actively promote the need to conserve and enhance the biodiversity of the Vineyards District; and
- (h) to conserve the aboriginal archaeology and European heritage of the Vineyards District.

3.1.4 Definitions

'public place' includes any park or garden, playing field or any place to which the public have or are permitted to have access, but excludes roads and travelling stock reserves.

'separation distance' means a measure of land within which no public place, dwelling-house or vineyard (as relevant) is located.

'vegetation chemical spray drift buffer' means a specified area of vegetation planting, with the primary purpose of intercepting and collecting chemical spray drift (see Appendix 3 for specifications).

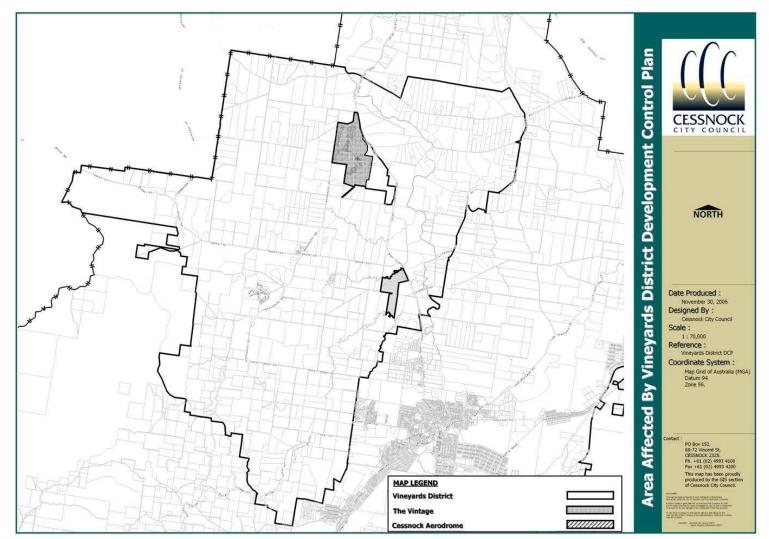


Figure 1: Vineyards District Locality Plan

3.2 DEVELOPMENT CONTROL PLAN CONSIDERATIONS AND DEVELOPMENT APPLICATION REQUIREMENTS

3.2.1 Consideration of Surrounding Land Uses

Objectives

- To reduce the potential for land use conflict between properties. Examples:
 - by ensuring that tourist accommodation units are not situated in close proximity to operating wineries and vineyards, potentially subjecting those persons residing in the units to impacts associated with noise and odour and placing undue burden on the winery or vineyard operator to modify operations;
 - by ensuring that vineyards are not planted too close to dwelling-houses or tourist or visitor accommodation and public places, creating a situation of potential spray drift impact and noise.

Requirements

- In preparing an application for development, consider the existence and location of surrounding land uses, including viticultural and agricultural activities, and site the development in a position which will not result in the potential for land use conflict between neighbouring land uses. Note, the onus is on the encroaching development to provide the required buffer on the subject land.
- For new vineyards, carefully consider the existence of surrounding built developments and activities such as golf courses, involving human habitation components. Aim to have minimal impact.
- All new developments shall consider the potential for impact on State Forest land uses and management activities, incorporating mechanisms to negate any impacts.
- The siting of a development is to be undertaken in accordance with the Vineyards District Landscape and Design Guidelines contained at Appendix 1.
- Refer to required 'separation distances' in Section 3.2.7 and Figures 4 to 10.

3.2.2 Soils Analysis

3.2.2.1 Viticultural Analysis

Objectives

- To ensure that land suitable for viticultural purposes is not alienated for that purpose by built development.
- To ensure that built development is only permitted to occur on soils which are not prime viticultural soils.

Requirements

• Development applications must be accompanied by a report from a suitably qualified professional outlining soil types and their suitability for viticultural purposes over the

proposed development site. An associated assessment of the impact of the proposed development on the viticultural capability of the site is to be made.

Note: This report is required with <u>all</u> development applications other than for vineyards and those of a minor nature, e.g. limited extensions to existing developments, bed and breakfast accommodation in an existing building, the erection of a sign, minor site works.

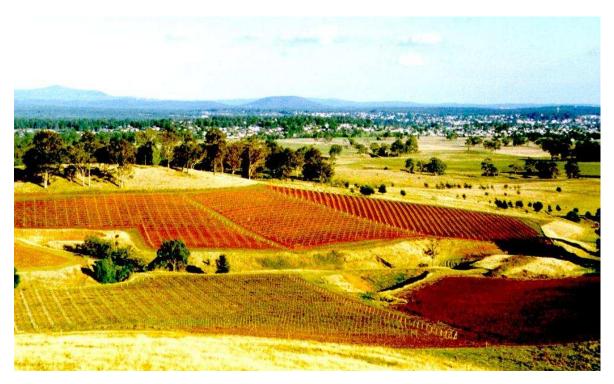
3.2.2.2 Potentially Contaminated Land

Objectives

• To ensure that built development is not sited or operated on contaminated land so that humans are not subject to potential impacts associated with such contamination.

Requirements

- Submission of details outlining the history of land uses on the land, to initially determine if the land is likely to be contaminated.
- In cases where the land is likely to be contaminated, Council may require submission of a report from a suitably qualified professional clearly specifying the extent of contamination from past viticultural, agricultural or other activities, and the measures proposed to decontaminate that land.
- Reference to Cessnock DCP, Part C: General Guidelines, Chapter 3: Contaminated Lands.



Tobey, 1998

3.2.3 Building Siting and Design

Objectives

- To ensure that development is appropriately sited and designed having regard to the opportunities and constraints of a site and its surrounds and the special qualities of the Vineyards District.
- To ensure that built developments proposed in visually significant areas (see Figure 3) are considered having regard to the significant landscape features and particular environmental qualities of the Vineyards District.

Requirements

- Developments are to be sited and designed in accordance with the Vineyards District Landscape and Design Guidelines (Appendix 1).
- Landscape plans should give consideration to the use of species which are of known ecological value and which will readily grow in the Vineyards District. Suitable species are contained in Appendix 2.
- Built developments proposed in visually significant areas identified in Figure 3 are to be accompanied by a visual analysis prepared by a suitably qualified professional, outlining the impact of the proposed development within its visual landscape. A photomontage showing the proposed development within the context of the site and its visual landscape is to be included.

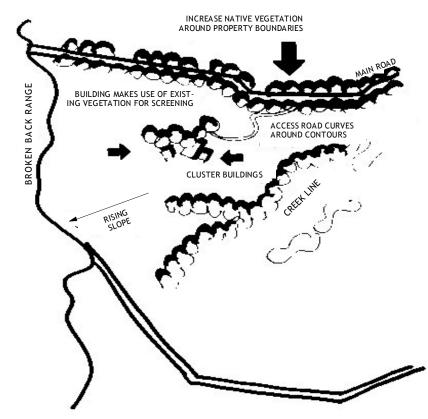


Figure 2: Building Siting and Design

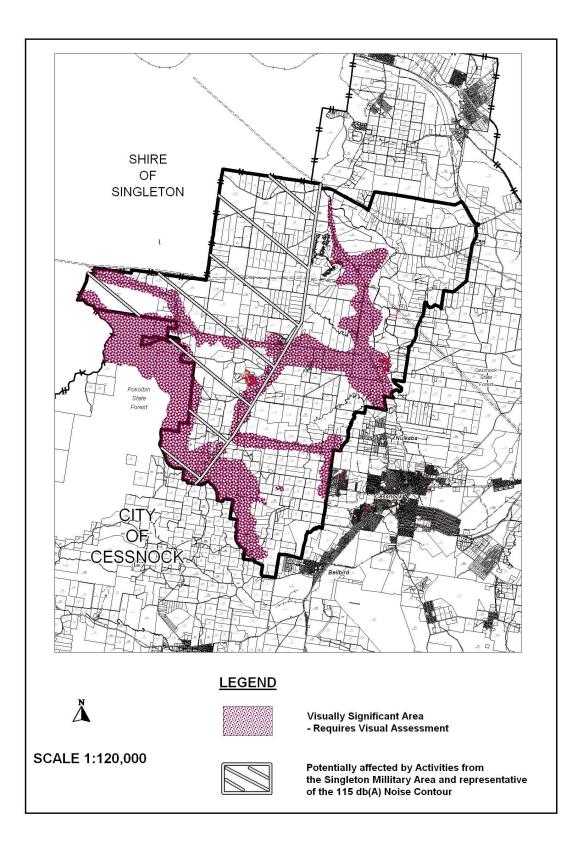


Figure 3: Significant Areas.

3.2.4 Development Densities

Objectives

- To protect and enhance the rural and viticultural character of the Vineyards District by ensuring that it does not become over-developed.
- To require development components to be clustered to reduce visual and total site impact and to reduce the potential for neighbouring land use conflict to occur.
- To promote the establishment and maintenance of native vegetation within the Vineyards District through the facilitation of increased development densities.

Requirements

 CLEP, Clause 6.2 – Rural tourist and visitor accommodation in zones RU2, RU4 and E2 (Bow Wow Creek Gorge Catchment and Habitat Corridors), sub-clause (1) states as follows:

Consent must not be granted to development for the purposes of tourist and visitor accommodation on land within Zone RU4 unless the lot on which the development is to be carried out has an area of not less than 10 hectares.

- Cessnock DCP, Part D: Specific Development, Chapter 4: Purpose-Built Rural Tourist Accommodation specifies maximum allowable densities as stated below:
 - (1) Council will not grant consent to tourist development within the RU4: Rural Small Holdings Zone which exceeds a density of one tourist accommodation unit per hectare of land.
 - (2) However, Council may consent to tourist & visitor accommodation development within the RU4 Zone to a maximum density of 1.5 tourist accommodation units per hectare, where a proposal seeks to fully comply with the requirements for the establishment and maintenance of native vegetation corridors for the full length of property boundaries or creek lines, as relevant, or where a proposal seeks to establish and maintain a minimum of 6,000m² of native vegetation on land not affected by native vegetation corridor locations, in accordance with the provisions of Cessnock DCP, Part E: Specific Areas, Chapter 3: Vineyards District.

Where corridors partially exist within a property, the density outlined above can be achieved through supplementation of native vegetation (determined on-merit due to species selection and associated sizes) and where such total areas are maintained in perpetuity as outlined below.

• Where an application seeks to develop at a maximum density of 1.5 tourist accommodation units per hectare, details of the proposed planting shall be clearly specified in the application (both in plans and in the text accompanying the application), including proposed ground preparation, species planting and maintenance and fencing details. Consents issued on this basis will include specific conditions relating to the continued maintenance of such corridors, remaining the responsibility of the land owner, (e.g. through instruments attached to the title of the property). A refundable bond will be required to the amount of 20% of the total cost of vegetation works (site preparation, plant costs, fencing, etc.). The total amount of the bond will be recoverable at a rate of 20% per year over 5 years where maintenance and survival rates are satisfactory to Council.

- (3) Council will not grant consent to development within the RU4: Rural Small Holdings Zone which exceeds a floor space ratio of 0.1:1.
- (4) Council will not grant consent to tourist development within the RU4: Rural Small Holdings Zone which exceeds the maximum number of permissible tourist accommodation buildings specified in the following table:

LOT SIZE (HECTARES)	MAXIMUM PERMISSIBLE NUMBER OF TOURIST ACCOMMODATION BUILDINGS AT 1 TOURIST ACCOMMODATION UNIT/HECTARE	MAXIMUM PERMISSIBLE NUMBER OF TOURIST ACCOMMODATION BUILDINGS AT 1.5 TOURIST ACCOMMODATION UNITS/ HECTARE
Up to 10	NOT APPLICABLE	NOT APPLICABLE
Exceeding 10 but not exceeding 20	6	8
Exceeding 20 but not exceeding 30	9	12
Exceeding 30 but not exceeding 40	12	16
Exceeding 40	15	20

Note: Bed and breakfast accommodation and dwelling-houses are not to be included in calculations of tourist accommodation unit / building densities.

3.2.5 Front and Side Development Setbacks

Note: These particular setback requirements do not apply to the establishment of vineyards, however, you should still refer to section 3.2.7 and Figures 4 to 10 of this chapter which provides requirements for chemical spray drift / noise separation distances and the like.

3.2.5.1 Front Setbacks

Objectives

• To promote a visually appealing landscape consistent with the rural and viticultural character of the Vineyards District, recognising the particular qualities of a site and its surrounds.

Requirements

 Council will usually require a minimum front setback of 75 metres. However, where it is felt that this requirement is inappropriate and that there are more appropriate locations within 75 metres of the front property boundary, Council may vary this figure having regard to the particular qualities of a site, e.g. existence of vineyards, existence of stands of vegetation, existence of prime/poorer viticultural soils, existing site development, topography and visual impact, servicing etc.

Applications for the siting of development within 75 metres of a property frontage must be clearly justified.

- Similarly, if in the assessment of the application Council officers believe that the development would be more appropriately sited within 75 metres of a property frontage, the applicant will be advised accordingly and requested to amend the application.
- **Note:** The need to provide a chemical spray drift / noise separation distance between a particular development and existing vineyards on neighbouring land will sometimes mean that the required minimum front setback will be in excess of 75 metres (see Section 3.2.7 and Figures 4 to 10).

3.2.5.2 Side Setbacks

Objectives

- To promote a visually appealing landscape consistent with the rural and viticultural character of the Vineyards District, recognising the particular qualities of a site and its surrounds.
- To minimise the impact on the viticultural potential of adjoining land.

Requirements

- Council requires a minimum side setback of 50 metres.
- Council requires a minimum side setback of 50 metres for all new dwelling-houses or 'public place' developments. However, for applications for extensions or alterations to existing development (not a change of land use) or for applications that do not include a habitable component or constitute a public place development then Council may vary this figure if it can be demonstrated that there are more appropriate locations within the 50 metre side boundary setback.
- Applications for the siting of development within 50 metres of the boundary must be clearly justified.
- Note: The need to provide a chemical spray drift/noise separation distance between a particular development and existing vineyards on neighbouring land will often mean that the required minimum side setback will be in excess of 50 metres (see Section 3.2.7 and Figures 4 to 10).

3.2.6 Requirements for the Establishment of New / Expanded Vineyards

Development consent is required for the establishment of new and expanded commercial vineyards. The only exception to this rule relates to the replanting of vines which have been grubbed (pulled out) where such replanting is carried out within 5 years of the date of removal. In circumstances where vines are grubbed and replanting is to occur within a 5 year time frame, the proponent must advise Council of his or her intentions so that a record can be taken. Council will then provide confirmation that consent for such replanting is not required within that timeframe.

Note: Applications for the establishment of new and expanded vineyards are required to be notified as per Cessnock DCP, Part B: General Information, Chapter 1: Public Notification and Advertising

Objectives

- To ensure that new or expanded vineyards are designed and developed in an environmentally sustainable manner.
- To ensure that new or expanded vineyards are sited having regard to surrounding development and the potential impacts of chemical spray drift and noise.

Requirements

- Siting of new or expanded vineyards must be considered in the context of the requirements of Section 3.2.7 and Figures 4 to 10 of this chapter (Ground Spraying and Aerial Spraying Considerations).
- Applications for new or expanded vineyards must supply the following information to enable assessment in the context of the requirements of the Council and NSW Industry and Investment:
 - (a) details, in diagrammatic form, of the proposed location of the new or expanded vineyard having regard to spraying requirements outlined in this Chapter, surrounding land uses (e.g. tourist developments, dwelling-houses, other forms of agriculture including cattle grazing) and natural features (e.g. watercourses, existing stands of vegetation).
 - (b) in the cases of proposals for new or expanded vineyards being sited in close proximity to watercourses / creeks, Council will require that they be located at least 40 metres from those watercourses / creeks in order to reduce adverse impacts on water quality;
 - (c) details of the location, type (species and estimated maturity) and number of trees and shrubs to be removed recognising the need to re-establish similar amounts of vegetation in accordance with the 'no net tree / shrub loss' requirements of Section 3.3.1 to 3.3.4 of this Chapter;
- Note: Council will not permit the removal of trees/shrubs in areas designated as native vegetation corridors illustrated in Appendix 2 of this chapter; and
 - (d) in the case of an application seeking to remove trees and shrubs, details of the proposed locations for replanting and other requirements as outlined in Section 3.3.1 to 3.3.4 of this Chapter;
 - (e) an analysis of the soil type of the area of land proposed to be developed for the vineyard to demonstrate its likely erosion characteristics;
 - (f) an analysis of the slope characteristics and topography of the land in order to establish the likelihood of significant issues associated with erosion and soil movement and the suitability of such slopes for establishing vineyards;
- Note: Council's Geographic Information System can provide you with the topographical and associated slope characteristics of your land, please consult with Council's Development Assessment Planners for further details;
 - (g) measures proposed to contain soil movement on the site including proposed soil treatment between vine rows;
 - (h) water harvesting and management details as outlined in Section 3.3.7;
 - (i) identification of sources of non-potable water to demonstrate the origin of water supply for vine irrigation purposes.



Source: CCC 1998

3.2.7 Ground Spraying and Aerial Spraying Considerations

It is important to recognise the potential impacts associated with chemical spray drift, whether those chemicals are applied from the air or from the ground.

Objectives

- To ensure that specified new development is appropriately sited having regard to the location of neighbouring vineyards, reducing the potential for impacts associated with chemical spray drift from both the ground and aerial application of chemicals.
- To ensure that new or expanded vineyards are appropriately sited having regard to the location of existing neighbouring specified developments, reducing the potential for impacts associated with chemical spray drift from both the ground and aerial application of chemicals.
- To incorporate the use of vegetation chemical spray drift buffers as a means to capture chemical spray drift and reduce the required separation distance between vineyards and specified developments.
- Note: By ensuring that these objectives are achieved, Council is seeking to reduce the incidence of land use conflict between properties with vineyards and those with developments having 'human habitation' components. It is important to ensure that vineyard operators are not forced to modify their practices due to complaints received from surrounding occupants. Similarly, it is equally important to ensure that surrounding occupants and their livelihood are not at risk from either the perceived or real impacts associated with chemical spray drift.
- To encourage both the physical separation of vineyards and specified developments within a property and the establishment of vegetation chemical spray drift buffers between vineyards and specified developments to reduce the potential for chemical spray drift and noise impacts within that property.

Requirements



Source: Nicholas et al, 1994

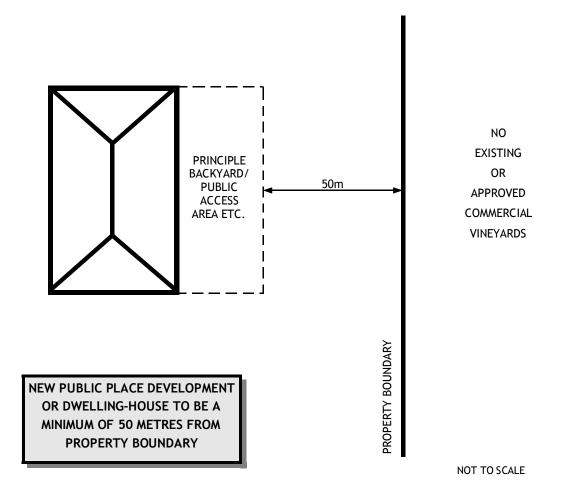
Source: CCC 1998

- In the case of development consents other than for the purposes of vineyards, Council will require the establishment of the required vegetation chemical spray drift buffer and any associated fencing to be constructed prior to occupation of the premises. In the case of development consents for new or expanded vineyards, Council will require the establishment of the required vegetation chemical spray drift buffer and any associated fencing to be constructed prior to occupation of the premises. In the case of development consents for new or expanded vineyards, Council will require the establishment of the required vegetation chemical spray drift buffer and any associated fencing to be constructed within 6 months of the date of development consent.
- Consents issued on this basis will include specific conditions relating to the continued maintenance of such buffers, remaining the responsibility of the land owner, e.g. through instruments attached to the title of the property. A refundable bond will be required to the amount of 20% of the total cost of vegetation works (site preparation, plant costs, fencing, etc.). The total amount of the bond will be recoverable at a rate of 20% per year over 5 years where maintenance and survival rates are satisfactory to the Council.
- Applications for development, where vegetation chemical spray drift buffers are proposed, shall include a detailed landscaping plan indicating the extent of the buffer area, the location and spacing of trees and shrubs and a list of tree and shrub species. The application shall also contain details showing means by which the buffer is to be maintained.

1. NEW PUBLIC PLACE DEVELOPMENTS AND DWELLING-HOUSES: SITING REQUIREMENTS RELATED TO THE POTENTIAL FOR CHEMICAL SPRAY DRIFT

(i) Vacant Adjoining / Adjacent Land with No Approvals for Vineyards

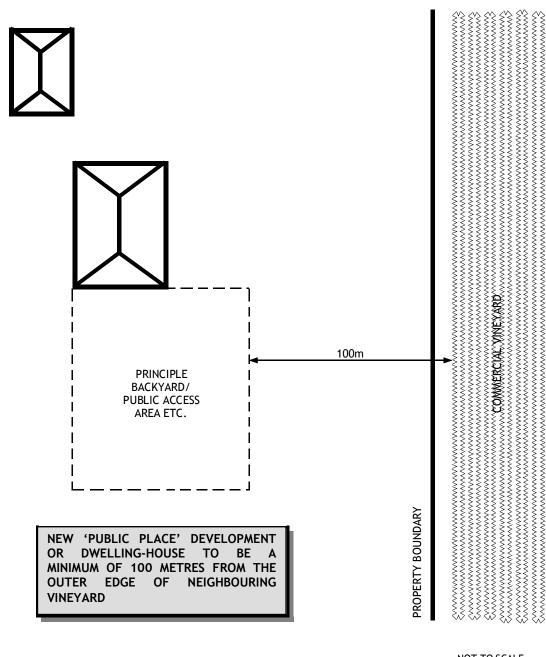
New 'public place' developments and dwelling-houses are to be set back a minimum of 50 metres from a *property boundary* where no existing or approved vineyards are adjoining or adjacent land. Refer to Figure 4.



(ii) With Adjoining/Adjacent Existing or Approved Vineyards

Two methods (a) and (b) are available to minimise the incidence of chemical spray drift impact on new 'public place' developments and dwelling-houses. The applicant is to select the most appropriate method.

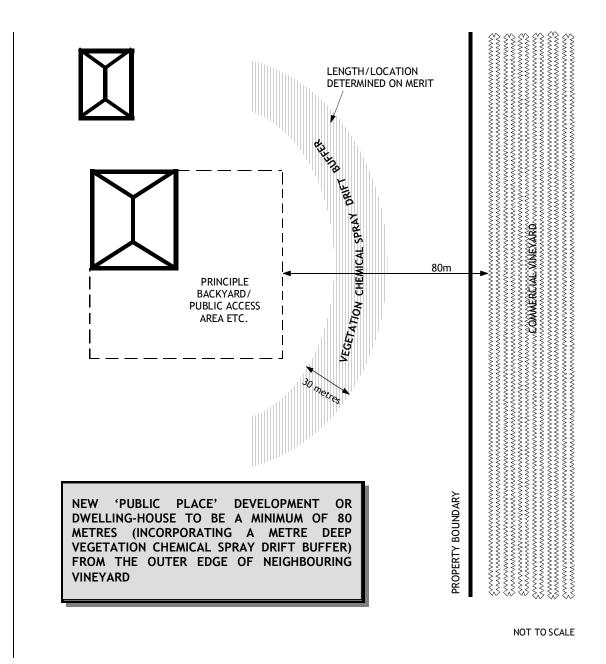
(a) New 'public place' developments and dwelling-houses are to have a minimum separation distance of 100 metres from an existing or approved vineyard on adjoining or adjacent land. Refer to Figure 5.



NOT TO SCALE

(b) New 'public place' developments and dwelling-houses are to have a minimum separation distance of 80 metres (which incorporates a vegetation chemical spray drift buffer of minimum 30 metre depth - length and location to be determined on merit) from an existing or approved commercial vineyard on adjoining or adjacent land. Refer to Figure 6.

There are specific requirements for the establishment of vegetation chemical spray drift buffers which are contained at Appendix 3.

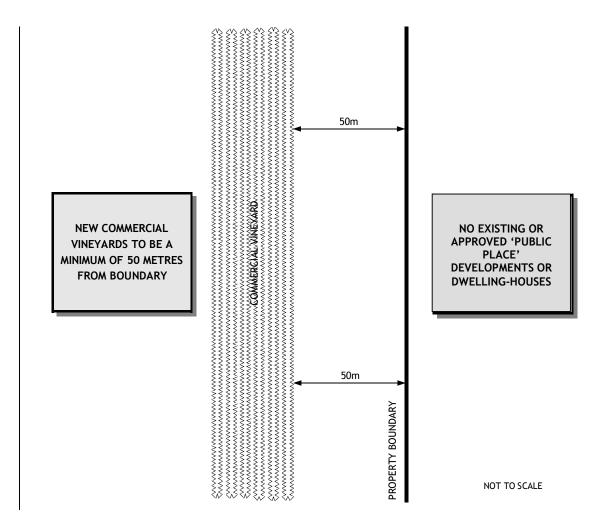


2. NEW VINEYARDS (INCLUDING EXPANSION TO EXISTING VINEYARDS): SITING REQUIREMENTS RELATED TO THE POTENTIAL FOR CHEMICAL SPRAY DRIFT

Note: Apart from the required separation distances highlighted here there are also other locational requirements relating to vineyards. These requirements are highlighted in Sections 3.2.8 to 3.2.11.

(i) Vacant Adjoining / Adjacent Land with No Approvals for 'Public Place' Developments or Dwelling-Houses

New vineyards are to be set back a minimum of 50 metres from a *property boundary* where no existing or approved 'public place' developments or dwelling-houses are located on adjoining /adjacent land. Refer to Figure 7.





(ii) With Adjoining / Adjacent Existing or Approved 'Public Place' Development or Dwelling-House

Two methods (a) and (b) are available to minimise the incidence of chemical spray drift impact on new 'public place' developments and dwelling-houses. The applicant is to select the most appropriate method.

(a) New vineyards are to have a minimum separation distance of 100 metres from an existing or approved 'public place' development or dwelling-house on adjoining or adjacent land. Refer to Figure 8.

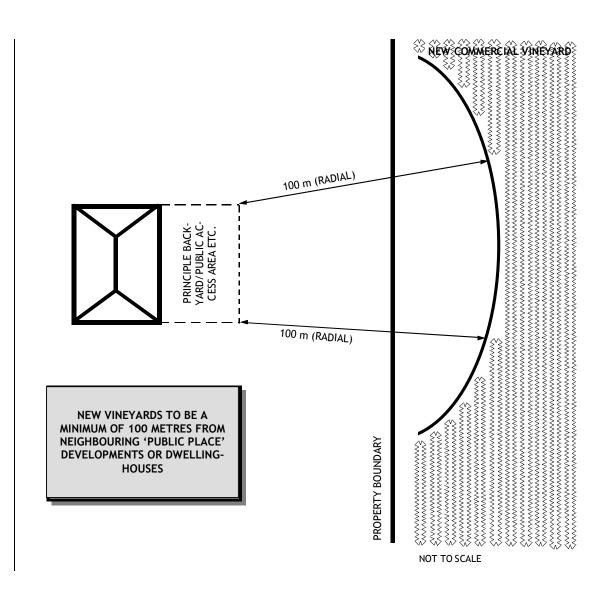
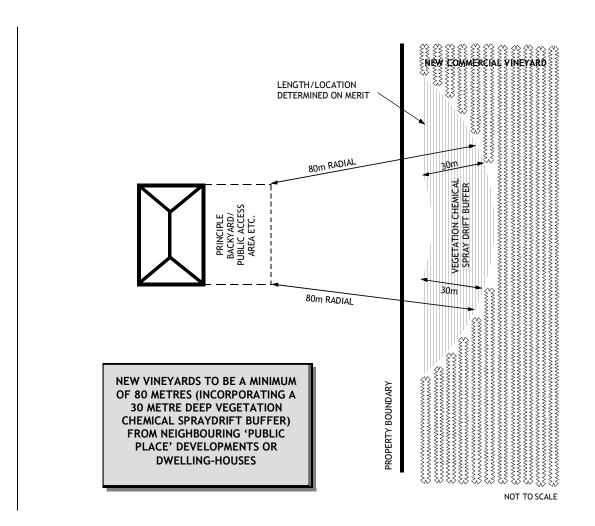


FIGURE 8

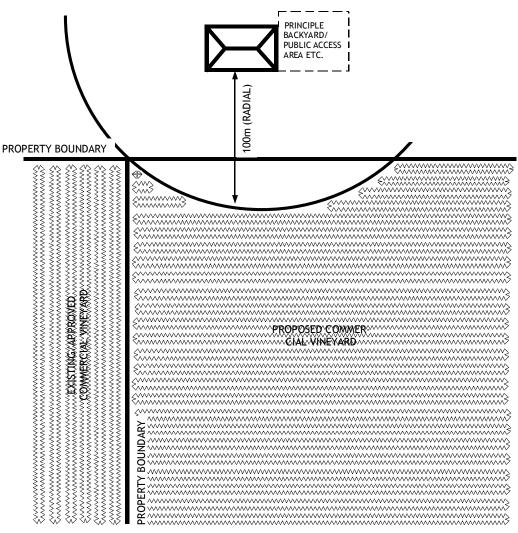
(b) New vineyards are to have a minimum separation distance of 80 metres (which incorporates a vegetation chemical spray drift buffer of minimum 30 metre depth - length and location to be determined on merit) from an existing or approved public place development or dwelling-house on adjoining or adjacent land. Refer to Figure 9.

There are specific requirements for the establishment of vegetation chemical spray drift buffers which are contained in Appendix 3.



3. NEW VINEYARDS (INCLUDING EXPANSION TO EXISTING VINEYARDS) WITH EXISTING OR APPROVED ADJOINING OR ADJACENT VINEYARDS

Where an application is received for a vineyard and where an existing vineyard exists or is approved on adjoining or adjacent properties (without 'public place' developments or dwelling-houses requiring a separation distance / vegetation chemical spray drift buffer outlined above) a separation distance / vegetation chemical spray drift buffer is not required between the neighbouring vineyards for the purposes of chemical spray drift impact. Refer to Figure 10.



NOT TO SCALE

OTHER REQUIREMENTS

- Whilst noting that this is not a mandatory requirement, in considering applications for development with 'human habitation' components on a property having an existing vineyard (or vice versa) Council will seek to encourage the use of separation distances and vegetation chemical spray drift buffers between elements in a development to reduce the potential impacts relating to chemical spray drift and noise within a property.
- The installation of any new water tanks within the Vineyards District will be equipped with a 'first flush' system to enable water to be diverted, reducing the probability of potential contamination of water supply.

3.2.8 Noise Generation and Odour Considerations

Objectives

- To reduce the potential for land use conflict by appropriately locating wineries and developments with 'human habitation' components.
- To reinforce the need to separate vineyards and developments with 'human habitation' components to reduce the potential for noise impact.
- To require the provision of noise attenuation measures in building design in certain circumstances.

Requirements

- Applications for development with human habitation components (tourist developments, dwelling-houses and the like) located adjoining, adjacent to or within properties containing existing wineries shall be required to provide a report from a qualified acoustic consultant detailing measures proposed to satisfy Council that noise levels within the development will be adequate for the purposes of the development. Odour impacts from existing wineries should also be considered with measures taken to ameliorate such effects.
- Applications for new wineries shall be required to give consideration to surrounding land uses and locate and design themselves in such a way so that they do not adversely impact on surrounding developments (having human habitation components) from a noise perspective, including those within the same property. Applications are to be accompanied by a report from a qualified acoustic consultant showing how this can be achieved. Odour impacts should also be considered and measures taken to minimise such impacts on the occupants of surrounding developments (including those within the same property).
- Quite apart from Council seeking the physical separation of vineyards and developments with 'human habitation' components for reasons of potential chemical spray drift impact, Council will also seek to separate such land uses because of the potential for noise generation from commercial vineyards (e.g. gas guns, night harvesting, tractor noise) and the impact which that may have on tourist stays, persons residing in dwellinghouses, etc. Quantities of complaints in such circumstances may result in the undesirable modification of vineyard practices. By default, chemical spray drift separation distances / vegetation chemical spray drift buffers also act to reduce noise.

3.2.9 Development alongside Main Road 220

Note: This section does not apply to vineyards.

Objectives

• To ensure that occupants of new development in the vicinity of Main Road 220 are not adversely affected by traffic noise.

Requirements

- Give consideration to siting a development at a sufficient distance from Main Road 220 to ensure that occupants within the development are not adversely affected by traffic noise from vehicles travelling along Main Road 220.
- In cases where a development is proposed close to Main Road 220, Council may require a report from a qualified acoustic consultant to determine the impact of noise from Main Road 220 on the occupants of the development. Council may require the development to be designed and landscaped in a fashion which will significantly reduce the impact on occupants of noise from Main Road 220.

3.2.10 Development in the Vicinity of Cessnock Airport

Note: This section does not apply to vineyards.

Objectives

• To ensure that development occurring in the vicinity of Cessnock Airport neither impacts on the operations of the airport nor is adversely impacted by the operations of the airport.

Requirements

- Council will not permit development and its associated infrastructure/landscaping where it impinges on the requirements imposed by 'obstacle height limitations' relative to the Cessnock Airport. Refer to Cessnock DCP, Part E: Specific Areas, Chapter 7: Cessnock Airport, for additional information and see Appendix 2 for indicative heights of vegetation known to grow in the Vineyards District.
- Ensure that a proposed development is located and designed in a way which will minimise noise impacts associated with activities of the Cessnock Airport.
- **Note:** CLEP, Clauses 6.3 & 6.4 provide specific requirements for developments in flight paths and in areas subject to airport noise.

3.2.11 Singleton Military Area

Note: This section does not apply to vineyards.

Objectives

• To ensure in assessing applications for development in the Vineyards District that consideration is given to the potential impact of activities from the Singleton Military Area.

Requirements

- When determining any application to carry out development on land within the RU4: Rural Small Holdings Zone that is shown by a diagonal broken black hatching in Figure 3 Significant Areas (being land that is potentially affected by the activities at the Singleton Military Area and representative of the 115db (A) noise contour), Council will have regard to the likely effect of those activities on the proposed development.
- Where the Council is of the opinion that there will be a significant impact on a development from activities at the Singleton Military Area, it may require the preparation and submission of a report outlining measures proposed to mitigate the impacts of noise and/or vibration on that development and its inhabitants.

3.3 THE NEED TO REVEGETATE COMPONENTS OF THE VINEYARDS DISTRICT

Other than the vegetation located within the Brokenback Range and within State Forests, it is estimated that the amount of remnant vegetation in the Vineyards District since settlement by Europeans has been reduced to around 10% of its original coverage (Andrews Neil, 1997). The majority of this remaining vegetation is located within road reserves and in patches along creek lines. There are also isolated patches existing in private properties.

The existing remnant patches of vegetation have significance for ecological and visual reasons. Recent community surveys noted the importance of these areas in maintaining the rural character of the Vineyards District (Andrews Neil, 1997).

3.3.1 Why is there a need to plant more trees/shrubs in the Vineyards District?

(a) From the long term perspective of aiming to retain and enhance the rural character of the Vineyards District it is important to realise the impact of cumulative tree removal on such character. Further, as more and more developments are approved in the Vineyards District there will be an inevitable need to upgrade and widen roads in some locations. This may involve the removal of significant tracts of remnant vegetation from within the road reserve. If the rural character of the Vineyards District is to be conveyed in the longer term we must start to consider and act on initiatives to provide additional vegetation alongside such road reserves. This will largely involve the planting of native vegetation corridors within private property alongside Council road reserves.

In recognition of this need, Council has investigated short, medium and long term locations for the creation, re-establishment and reinforcement of native vegetation corridors. Details of proposed corridor locations, specifications including depth, species type, fencing and maintenance requirements and the like are contained at Appendix 2. It is hoped that the Vineyards District Community will become actively involved in the creation of these corridors. A series of options, including development incentives (as detailed in Section 3.2.4), have been provided with the aim of seeing these corridors come to fruition. It is also hoped that those landowners interested in planting such corridors or other stands of native vegetation on a voluntary basis will contact the Council for advice on desired locations, ground preparation, beneficial species types, maintenance and the like. Financial assistance for fencing and the establishment of native vegetation is available from a number of sources (Refer to Appendix 2).

(b) The creation of native vegetation corridors outlined in (a) will assist in the reestablishment of wildlife habitat in the Vineyards District. It is not possible for native fauna to exist in isolation in the Vineyards District in the long term. Animals need to be able to move between areas to search for food, shelter and other requirements. This need to move is particularly critical to those species with large territories. Establishment of these corridors will also promote Council's desire to increase the biodiversity of the Vineyards District and improve the 'physical health' of the current environment.

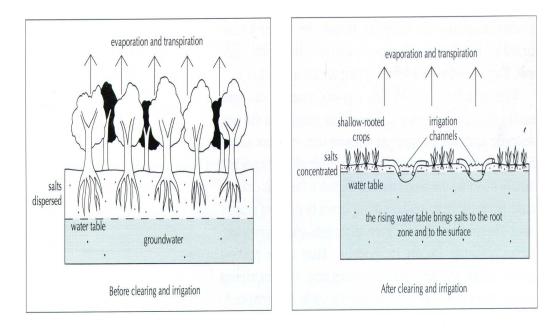
- (c) An increase in biodiversity may assist naturally in the reduction of vineyard pests. Corridors may also present alternative food sources for birds, removing their attention from grapes. Corridors may also prove to be suitable habitat for native birds reducing the dominance of species such as the Common Myna (*Acridotheres tristis*), known to be a pest to vineyard productivity.
- (d) Increased vegetation in the Vineyards District will act to capture chemical spray drift in certain locations.
- (e) Dryland salinity occurs when deep-rooted vegetation, such as trees, is removed and replaced with shallow rooted plants. These plants use less water and consequently, more water is left to percolate through the soil. The result is an elevated water table which carries dissolved salts. Concentrations of salt will kill vegetation, leaving the ground bare and susceptible to erosion (NSW Agriculture et al. 1989). The Vineyards District is well renowned for its soil salinity problems. Increases in tree planting may reduce problems associated with salinity which will directly benefit the viticultural and agricultural operations located within the District and its associated catchment.
- (f) Soil erosion occurs through the action of wind and water on soil. Wind erosion is mainly associated with the loss of the finer particles of soil. Water movement over and through the soil can result in sheet, rill, gully and tunnel erosion as well as landslip. Trees, together with understorey and groundcover layers, play a crucial role in intercepting rainfall and reducing the impact of raindrops on the soil surface. Trees help the water soak into the soil and reduce surface runoff. The root system and leaf litter provide structural stability within the soil (NSW Agriculture et al. 1989). The planting of trees will reduce the incidence of land degradation in the Vineyards District.



Source: Roach 1998

(g) Trees planted as windbreaks have significant benefits for livestock, crops and pastures by reducing stress from heat and cold. The area protected by a windbreak is related to the height of the trees. An effective windbreak can reduce wind speed for a distance of up to 30 times the tree height on the downwind side and 5 times the height on the upwind side. The greatest reduction of wind speed is in that part of a property from 5 to 15 times the tree height away from the windbreak. (NSW Agriculture et al. 1989) (h) Trees provide shade for animals in hot weather. Heat stress has a variety of effects on animals, including reduced fertility, decreased live weight gain and reduced milk production. (NSW Agriculture et al. 1989)

Direct economic benefits of trees result from increased yields of crops and increased survival and productivity of livestock. This can be translated into dollar terms for individual properties. More difficult to quantify are the indirect benefits such as improved living and working environment, improved aesthetics and the increased capital value of properties. (NSW Agriculture et al. 1989)



(Source: Australian Academy of Science, 1994, p. 248)

3.3.2 Native Vegetation Corridors and Mass Plantings

Council is seeking to promote the establishment and enhancement of native vegetation corridors in the Vineyards District generally in accordance with locations and details specified in Appendix 2. Refer to Figure 11 below for a visual guide to the location of the proposed vegetation corridors. Other mass plantings are also being encouraged in strategic locations.

Objectives

- To ensure that long term rural character and amenity is able to be maintained in conjunction with the need to upgrade roads in the Vineyards District.
- To enhance native fauna habitat and improve the biodiversity of the Vineyards District.
- To promote a more sustainable environment.

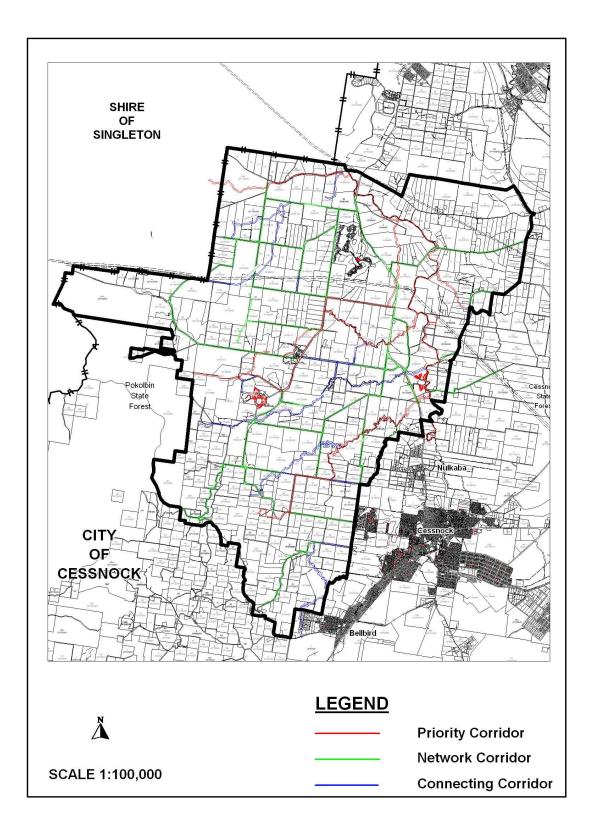


FIGURE 11: PROPOSED VEGETATION CORRIDOR



Source: Roach 1998

Requirements

Council may consent to tourist development within the RU4: Rural Small Holdings Zone to a maximum density of 1.5 tourist accommodation units per hectare where a proposal seeks to fully comply with the requirements for establishment and maintenance of native vegetation corridors for the full length of property boundaries or creek lines, as relevant (refer to Appendix 2), or where a proposal seeks to establish and maintain a minimum of 6000m² of native vegetation on land not affected by native vegetation corridor locations, in accordance with the provisions of this chapter.

Where corridors partially exist within a property, the density outlined above can be achieved through appropriate supplementation of native vegetation (determined on-merit due to species selection and associated sizes) and where such total areas are maintained in perpetuity as outlined below.

- Where an application seeks to develop at a maximum density of 1.5 tourist accommodation units per hectare, details of the proposed planting must be clearly specified in the application (both in plans and in the text accompanying the application), including proposed ground preparation, species planting and maintenance and fencing details. Consents issued on this basis will include specific conditions relating to the continued maintenance of such corridors, remaining the responsibility of the land owner, e.g. through instruments attached to the title of the property. A refundable bond will be required to the amount of 20% of the total cost of vegetation works (site preparation, plant costs, fencing, etc.). The total amount of the bond will be recoverable at a rate of 20% per year over 5 years where maintenance and survival rates are satisfactory to the Council.
- In the case where properties contain recommended corridor plantings both alongside road reserves <u>and</u> creeks, discussions will need to be held on the extent of planting required.
- The locations of native vegetation corridors and other mass plantings are to be modified around existing service lines including electricity, reticulated water, telephone and gas. Whilst the location of these services is generally available from Council's Geographic Information System at a strategic scale, applicants should consult with the relevant servicing authorities to ensure that appropriate locations have been selected.
- The locations of native vegetation corridors can be modified to remove the inclusion of existing developments situated alongside road reserves and creek lines.

- For applications which seek to establish a minimum of 6000m² of native vegetation, the location of the proposed native vegetation is to be considered on-merit with the aim of linking to existing stands of native vegetation and designated corridor locations.
- Clearing for commercial vineyards is prohibited in areas designated as native vegetation corridors in Appendix 2.

3.3.3 Clearing of Vegetation

Objectives

- In accordance with the objectives of minimising land degradation, enhancing the water quality characteristics of the Vineyards District and actively fostering the promotion of biodiversity and ecological sustainability, ensuring that only limited amounts of remaining vegetation are cleared in the Vineyards District.
- To actively foster the principle of 'no net loss of vegetation' within the Vineyards District.
- To draw to people's attention to the requirements for development consent for clearing of vegetation in the Vineyards District.

Requirements

- For any clearing, approval may be required from various government agencies such as: Department of Environment, Climate Change and Water (DECC&W) and NSW Industry and Investment. Applicants/owners are advised in the first instance to contact the Hunter – Central Rivers Catchment Management Authority (HCRCMA) at Tocal.
- Where consent is granted to remove vegetation, it will be required as part of this Chapter that equivalent amounts of vegetation be re-established within either the specified native vegetation corridors at Appendix 2, as relevant and as specified, or otherwise within other acceptable positions on a property as determined on merit. Wherever appropriate, consents for properties having specified locations for proposed corridors illustrated in Appendix 2 will require the re-establishment of equivalent vegetation loss in those corridors in preference to other locations on the site. Species should be selected from those contained within Appendix 2. Council will require the continued maintenance of this vegetation, e.g. through consent conditions, and where significant amounts of native vegetation are concerned, through instruments attached to the title of the property. A refundable bond may also be required over a specified time frame.
- In the case of development consents other than for the purposes of vineyards involving the re-establishment of equivalent amounts of native vegetation lost through clearing, the Council will require the establishment of the required native vegetation and any associated fencing to be constructed prior to occupation of the premises. In the case of development consents for new or expanded vineyards involving the re-establishment of equivalent amounts of native vegetation lost through clearing, the Council will require the establishment of required vegetation and any associated fencing to be constructed within 6 months of the date of development consent.
- The impact of proposed clearing on the habitat and biodiversity characteristics of a site and its wider locality must be detailed. Included in that assessment, the application must consider whether that vegetation houses threatened species (for details see Section 3.3.4 below).

3.3.4 Flora and Fauna Considerations

The *Environmental Planning and Assessment Act 1979*, and the *Threatened Species Conservation Act, 1995* require Council to give consideration to the likely impact of a development on the flora and fauna characteristics of a particular site and its locality.

Council is already aware of a number of sightings of threatened species in the Vineyards District and there is a well documented potential for the existence of many more.

Council will require the preparation of a flora/fauna assessment in accordance with the requirements of current legislation. A subsequent Species Impact Statement may also be required. Please check with Council's Development Assessment Planners to determine Council's requirements in this regard.

Objectives

• To foster and actively encourage the concepts of ecological sustainability and enhanced biodiversity through requirements for the continued existence of native flora and fauna in the Vineyards District, including threatened species.

Requirements

• Check with Council's Development Assessment Planners to determine requirements for preparation of a preliminary flora / fauna assessment and Species Impact Statements.



Source: Strahan, 1995

Source: Roach, 1998

3.3.5 Aboriginal Archaeology

Objectives

• To recognise and conserve the aboriginal archaeology of the Vineyards District.

Aboriginal Archaeology

An Aboriginal site is any place which has the remains of prehistoric and historic occupation, or is of contemporary significance to the Aboriginal community. The lack of field study work and investigations of Aboriginal occupation in the Vineyards District makes it difficult to identify areas which have more archaeological potential than others. However, certain common types of Aboriginal sites have been identified in the Central Lowlands Region (of which the Vineyards District forms part) (R. James and W. Brennan, 1997).

The most common sites known are **Open Stone Artefact Scatters**. Open sites usually consist of scatters of stone artefacts found in the open. They are places where people lived and contain evidence of Aboriginal activities such as the manufacture of stone tools. Rarer features such as earth ovens, stone hearths and heat treatment pits also reveal evidence of a range of activities such as the preparation and cooking of food.

Open sites can be found on riverbanks, plains, hillsides, crests, ridges and saddles. They are usually situated in a level position near fresh water. Some sites may be difficult to detect as they can be large and scattered and may also be buried by deposits which can reach a metre or so in depth. They may also be obscured by leaf litter or have vegetation growing over the site.

These sites are significant to Aboriginal people because they are evidence of past Aboriginal occupation of Australia, and are valued as a link with their traditional culture. They are also of scientific significance providing information about stone technology. Undisturbed open sites can be excavated to reveal hearths containing charcoal which can be used to date commencement of Aboriginal occupation of a site.

All Aboriginal relics are protected under the National Parks and Wildlife Act 1974, and as such may not be interfered with, defaced, damaged or destroyed without the written consent of the Director of the Department of Environment, Climate change and Water (DECC&W). If a site is discovered it must be reported immediately to the Director of the DECC&W.

Requirements

- Investigate the Aboriginal qualities of your site and the likely impact of your proposal on items of such heritage. A qualified archaeologist may be required to carry out investigations in areas of likely impact. Please discuss the need for such investigation with Council's Development Assessment Planners.
- **Note:** The DECC&W can be contacted for a list of qualified consultants regarding sites of Aboriginal Heritage significance.

3.3.6 European Heritage

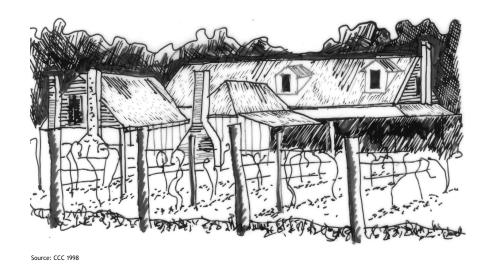
The Vineyards District is also significant for its evidence of early viticultural industry from which many of the present families and vignerons are related. It is important that the evidence of early settlement is retained. Heritage items identified in the 1994 City of Cessnock Heritage Study are contained in Section 7 of the accompanying Vineyards District Landscape and Design Guidelines (Appendix 1).

CLEP, Schedule 5: Environmental Heritage has adopted many of the items referred to above.

Requirements

 Investigate the European heritage qualities of your site and the likely impact of your proposal on items of heritage. A qualified heritage practitioner may be required to carry out investigations in areas of likely impact. Please discuss the need for such investigation with Council's Development Assessment Planners.

Note: The Heritage Branch (in the NSW Department of Planning) can provide details of consultants for European Heritage investigations.



3.3.7 Water Management Plan

Objectives

• To ensure that site water is managed in an environmentally acceptable manner and in a way which is not detrimental to neighbouring property.

Requirements

• Applications for development, including those for vineyards, shall illustrate water movement through the site, both from the view of its entry to the site (e.g. roof water collection into tanks, reticulated supply, collection in dams via overland flow, extraction from creeks, extraction from ground water supplies), uses within the site, their respective locations and the point and nature of discharge to the soil within the property (e.g. waste water disposal systems) and/or on to adjoining properties (e.g. dam overflow). This is best illustrated by way of flow diagrams and associated text. Details should include estimated quantities of water both in terms of inputs and outputs.

3.3.8 Disposal of Waste

3.3.8.1 Waste Water

Objectives

• To ensure that waste water is disposed of in an environmentally acceptable manner.

Requirements

- Waste water will be disposed of to Council's requirements and to the requirements of the Department of Environment, Climate Change and Water (DECC&W) in certain circumstances.
- Details of the methods proposed to dispose of waste water must be clearly outlined in applications for development.

3.3.8.2 Solid Waste

Objectives

• To ensure that solid waste is disposed of in an environmentally acceptable manner.

Requirements

- Solid waste will be disposed of to Council's requirements and to the requirements of the DECC&W in certain circumstances.
- Details of the methods proposed to dispose of solid waste must be outlined in applications for development.

3.3.9 Servicing

3.3.9.1 Water Supply

Objectives

• To ensure that developments provide a healthy and acceptable water supply.

Requirements

• Developments are required to comply with Hunter New England Area Health Service requirements for provision of a potable water supply.

3.3.9.2 Electricity and Telecommunications

Objectives

- To ensure that adequate electricity and telecommunications are made available to a development.
- **Note:** Some energy authorities are now able to provide 'green energy' options. Consult with your local electricity authority for further details. Alternative energy sources are acceptable in particular circumstances.

Requirements

• Developments will be required to be appropriately serviced, with details being provided from servicing authorities regarding availability.

3.3.10 Outdoor Lighting

Objectives

- To recognise that the night sky is an important part of the natural environment.
- To control outdoor lighting to minimise sky-glow in the Vineyards District.

Requirements

- Where outdoor lighting is proposed adjacent to major roads it is to be of a nature which does not adversely impact on traffic movements and traffic safety.
- Outdoor lighting details are to be provided with the development application.

3.3.11 Fencing

Objectives

- To inform landowners of the potential impacts of the use of barbed wire fencing on native animals whilst reinforcing the need to contain stock.
- To allow fencing consistent with the rural and viticultural character of the area.

Council wishes to inform landowners / occupiers of the potential impacts of using barbed wire in their fencing. Advice has been received from the Native Animal Trust Fund (pers. comm. 1998) illustrating that a significant number of animals, particularly bats and squirrel gliders, are being killed or seriously injured as a result of flying into and/or being entrapped in such wire. The squirrel glider (*Petaurus norfolcensis*) is a threatened species under the *Threatened Species Conservation Act 1995* and the *Commonwealth Endangered Species Protection Act 1992*. Wherever possible in the interests of trying to maintain and improve biodiversity and minimise the suffering of our native wildlife, it would be appreciated if landowners / occupiers would give strong consideration to the use of plain wire fencing.

Note: Those landowners / occupiers wishing to promote native animal habitat in the Vineyards District are invited to review the information on nesting boxes and tree and shrub species selection is contained in Appendix 2.

Requirements

• Details of the type of fencing to be used, if any, is to be provided with applications for development. Such fencing must be in keeping with the rural and viticultural character of the Vineyards District.

3.3.12 Car Parking

Objectives

- To ensure that off-street car parking is provided consistent with the amount of vehicular traffic generated by a particular development. (Refer to Cessnock DCP 2009, Part C: General Guidelines, Chapter 1: Parking and Access).
- To ensure that carparks are located and designed in a visually sensitive manner. Refer to the Vineyards District Landscape and Design Guidelines (Appendix 1).

Requirements

- Car parking is to be provided consistent with Cessnock DCP 2009, Part C: General Guidelines, Chapter 1: Parking and Access.
- Carparks are to be located and designed in a visually sensitive manner in accordance with the requirements of the Vineyards District Landscape and Design Guidelines (Appendix 1).

3.3.13 Section 94 Contributions

Objectives

• To ensure that Section 94 Contributions are collected commensurate with the nature and scale of the development and the increased demands placed on Council's infrastructure and the locality in general.

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Requirements

• Contributions are payable in accordance with Council's adopted Section 94 Contributions Plan.

REFERENCES

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Centre for Coastal Management, 1995, Banana Land Issues Coffs Harbour, unpublished.

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APPENDIX 1

VINEYARDS DISTRICT LANDSCAPE AND DESIGN GUIDELINES

TABLE OF CONTENTS

1. INTRODUCTION

- 1.1. Purpose of these guidelines
- 1.2. Where do the guidelines apply?
- 1.3. How to use the guidelines

2. VINEYARDS CHARACTER

2.1. Description

3. UNDERSTANDING THE SITE AND ITS SURROUNDS

- 3.1. Research information about your property
- 3.2. Getting the right advice
- 3.3. Property Details
- 3.4. Climatic Analysis
- 3.5. Topography
- 3.6. Flora and Fauna Considerations
- 3.7. Natural Drainage Patterns
- 3.8. Views
- 3.9. Archaeological Sites or Places of Historical Value
- 3.10. Surrounding Land Uses/Services

4. SITE PLANNING

- 4.1. Preserving the Scenic Landscape
 - 4.1.1. Cluster Development
 - 4.1.2. Development Patterns to be Avoided
 - 4.1.3. Views of the Development
 - 4.1.4. Landscaping

4.2. Environmental Considerations

- 4.2.1. Flora and Fauna
- 4.2.2. Site Works
- 4.2.3. Solar Access
- 4.2.4. Wind
- 4.3. Circulation and Access
- 4.4. Dams

5. **BUILDING SITE AND DESIGN**

- 5.1. Standard Principles
- 5.2. Standard Design Requirements
- 5.3. Sheds
 - 5.3.1. Siting
 - 5.3.2. Design

6. SIGNAGE

7. IDENTIFIED HERITAGE ITEMS IN THE ALLANDALE, ROTHBURY, NORTH ROTHBURY AND POKOLBIN AREAS.

1. INTRODUCTION

1.1 PURPOSE OF GUIDELINES

The primary purpose of these guidelines is to outline those landscape and design issues which need to be considered when planning any new development in the Vineyards District to ensure that the rural/viticultural character of the area is maintained.

1.2 WHERE DO THE GUIDELINES APPLY?

The guidelines apply to the *Vineyards District* as detailed in the Vineyard District chapter.

1.3 HOW TO USE THE GUIDELINES

These guidelines are set out according to principles generally accepted as 'best practice' in design. They should be used by property owners, applicants and designers proposing works in the Vineyards District.

The guidelines should be used in the early stages of the design process in consultation with Council's technical staff. Each topic area is followed by a brief summary entitled "**What To Do**" outlining how to relate the guideline recommendations to your property.



Existing historical buildings at Peppertree are integral to the appealing character of the Tourist Development

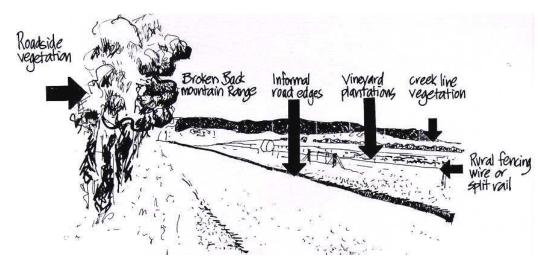
2. VINEYARDS CHARACTER

2.1 DESCRIPTION

The Vineyards District is characterised by the rising of the Brokenback Range from the valley floors of Black Creek. Remnant forest along the roadsides provides a reminder of woodland and grasslands which were once abundant across the district.

Similarly, some remaining species of rainforest trees which grow along the banks of Black Creek are reminders of the likely rainforest habitat which existed at the time of European Settlement. The Central Lowlands, of which the Vineyards District forms part, was inhabited by Aboriginal people from at least 20,000 years ago, and there is considerable evidence of occupation from 3,000 years ago. (R. James and W. Brennan, 1997, Preliminary Archaeological Investigations of the Proposed Rothbury Country Resort Development Area near Cessnock, N.S.W., unpublished).

The history of European land use in the Vineyards District has resulted in a layering of uses primarily centered on viticulture, agriculture, wine production and the scenic qualities of the region. The imprint of early occupation of the land can still be experienced in the ordered pattern of narrow carriageways, vines and pastures. It is also clearly demonstrated in undulating lands extensively cleared for agricultural and viticultural activities, resulting in significant loss of natural vegetation.



The distinctive contrast between patterned vineyard plantings and wooded slopes and ridge tops of the Brokenback Range are important scenic features of the District as viewed from public roads. The road edges are informal, and built development remains largely inconspicuous.

The built environment has also evolved over time. Early building forms of the early to mid 1800's in the Vineyards District were usually associated with mixed farming. Places which remain from this era are important reminders of early settlement and vineyards, and are likely to become of increasing interest to visitors and the community alike. Traditional sets of buildings designed for the manufacture of wine are also important landmark structures throughout the region.

The Vineyards District, however, has changed with contemporary architecture often inspired by European viticultural styles. Increased tourist visitation has attracted smaller scale development such as cellar door sales and boutique wineries, and also large scale accommodation and recreational developments. These changes, along with new land uses such as golf courses and large water treatment ponds have significantly modified the landscape.

3. UNDERSTANDING THE SITE AND ITS SURROUNDS

Every site in the Vineyards District is different, and so in assessing the unique characteristics of a particular place, the process of site analysis, site planning and design is essential.

This process, known as site analysis and begins with consideration of a number of climatic and site specific issues which assist in understanding exactly what is on and around the site. The best overall use of the site is more likely to be achieved where there is a clear understanding of its specific characteristics. The following guidelines should be followed to assist in this way.

3.1 RESEARCH INFORMATION ABOUT YOUR PROPERTY

It is important to find out as much as you can about your property before commencing planning and design work.

Check with Council to determine what approvals are required for your proposal.

3.2 GETTING THE RIGHT ADVICE

Make sure you are getting the right advice (i.e. specialist professional expertise is necessary for development within visually significant areas). Conservation specialists should be consulted for proposals affecting Items of Environmental Heritage (The Heritage Branch in the NSW Department of Planning). The Department of Environment, Climate Change and Water (DECC&W) can provide details of consultants specialising in Threatened Species Impact and Aboriginal Heritage.

3.3 PROPERTY DETAILS

Make sure that you have accurate details of the property. This should generally include a plan which illustrates the land and its services, i.e.:

- Contours;
- Dams;
- roads and buildings;
- Services information (water supply, effluent disposal, electricity, telephone, easements etc.)

3.4 CLIMATIC ANALYSIS

Climate is an important factor in determining the orientation of buildings. Climatic factors should have a major influence in the arrangement of spaces and land uses.

WHAT TO DO

Collect climatic data for the site and identify important elements such as:

- prevailing wind direction;
- morning and afternoon sun paths.
- 3.5 TOPOGRAPHY

Topography affects suitability for the location of buildings and needs to be considered in the context of erosion/landslip potential, vegetation cover and associated habitat, access, visibility of development, and landscaping.

Flat Land is easiest and least costly to develop. The main issues are retaining existing vegetation, landscaping, siting, building scale and design impact on scenic views, drainage, minimising site disturbance and environmental impact (on watercourses etc.).

Gentle slopes generally provide reasonable site access, low erosion potential, more visual privacy. They are generally well drained and are the most appropriate slope for development.

Steep slopes are mostly inappropriate for development due to difficult or environmentally intrusive site access, extensive cut and fill required, soil erosion hazards, fire hazards, high visibility and the costs involved. Slopes of up to 20% exist on the foot slopes of the vineyards mountain ranges.

WHAT TO DO

• Prepare a map of the site illustrating 2.0 metre contour intervals.

• Prepare a slope analysis to identify flat land (mainly 0 - 3% slope), gentle slopes (mainly 3% - 8% slopes) and steep slopes (mainly 8% - 20% slopes).

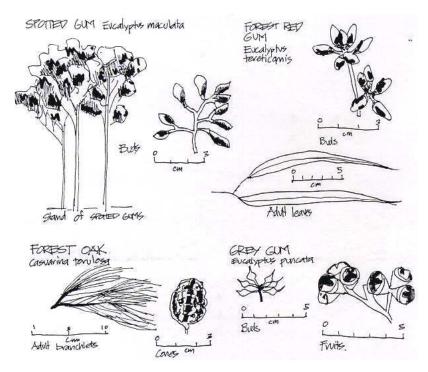
3.6 FLORA & FAUNA CONSIDERATIONS

The natural vegetation of the Vineyards District has been significantly altered as a result of agricultural/viticultural clearing, forestry activities, urban development and fire frequency. Areas of natural vegetation remaining are principally the foothills of the Brokenback and Mount View Ranges, within road reserves and along creek lines and in scattered stands on land with poorer agricultural/viticultural potential.

Remaining vegetation occurs in large stands in various locations often without interconnecting corridors. Remnant vegetation needs to be protected and further supplemented. Council is aiming to promote the establishment/reinforcement of native vegetation corridors in the Vineyards District.

WHAT TO DO

- Locate any stands of vegetation on a site plan.
- Identify any significant/ threatened flora and fauna on the site. An appropriately qualified consultant may be required to carry out such a survey. Contact Council's Development Assessment Planners to determine what is required.
- Identify any high risk bushfire areas.
- Examine the relationship of the site to the proposed Vineyards District Native Vegetation Corridors Plan. (Refer to Appendix 2).



Some plant species indigenous to Vineyards District

3.7 NATURAL DRAINAGE PATTERNS

The majority of the Vineyards valley drains into Black Creek. Issues relating to water quality and nutrient runoff from developments and viticultural/agricultural activities need careful consideration. Floodplains are found adjacent to Black Creek and its tributaries.

Flood prone areas are unsuitable areas for development.

WHAT TO DO

- Identify perennial and non-perennial watercourses and wetlands on a site plan.
- Identify existing land uses where runoff could occur.
- Identify where flooding could occur.

3.8 VIEWS

Views within the valley are characterised by visual contrasts of vineyards within the rural setting backed by the contrasting colours and textures of the Brokenback Range.

Visually Significant Areas along the Brokenback Range and the main traffic routes through the District are illustrated in Figure 2 of the Vineyards District chapter.

WHAT TO DO

- Identify significant views from the site on a site plan.
- Identify the visual catchment of the site as viewed from external points.
- Identify whether the site lies within a visually significant area (Refer to Figure 3 of the Vineyards District chapter)

3.9 ARCHAEOLOGICAL SITES AND PLACES OF HISTORICAL VALUE

The Central Lowlands was inhabited by Aboriginal People from at least 20 000 years ago. The most common types of Aboriginal archaeological sites in the Central Lowlands are open stone artefact scatters. Occasionally these sites also reveal evidence of other rarer cultural features such as heat treatment pits, ovens and stone hearths. Archaeological investigations will provide information on the distribution of archaeological evidence across the landscape, the arrangement of features and artefacts, the composition of artefacts and manufacturing processes used. (R. James and W. Brennan, 1997, op. cit.)

The Vineyards District is also significant for its evidence of early viticultural industry from which many of the present families and vignerons are related. It is important that the evidence of early settlement is retained.

Heritage items identified in the 1994 City of Cessnock Heritage Study are contained in section 7 of these guidelines.

WHAT TO DO

- Investigate the Aboriginal and / or European heritage qualities of your site and the likely impact of your proposal on items of heritage. A qualified archaeologist or heritage practitioner may be required to carry out investigations in areas of likely impact. Please discuss the need for such investigation with Council's Development Assessment Planners.
- The Department of Environment, Climate Change and Water (DECC&W) can be contacted for a list of qualified consultants regarding sites of Aboriginal Heritage significance. Similarly, the Heritage Branch (in the NSW Department of Planning) can provide details of consultants for European Heritage investigations.

3.10 SURROUNDING LAND USES/ SERVICES

The context of the site should be understood through an analysis of surrounding land uses including existing vineyards, agricultural land uses and services so as to identify potential conflicts or impacts. Council is aiming to reduce the potential for conflict between viticultural/ agricultural land uses and other types of development such as tourist developments and dwelling-houses.

WHAT TO DO

- Prepare a site plan showing land uses and development on surrounding land. Include viticultural/ agricultural activities.
- Locate any existing services.

An assessment should be made of any impact the proposed development will have on surrounding land uses. Consideration of surrounding viticultural and agricultural activities is vital so that operators are not forced to modify their practices.

Always consider to the potential impacts surrounding land uses may have on your proposal.

WHAT TO DO

Identify potential impacts relating to:

- spray drift;
- noise;
- odour;
- visual impact, etc.

As a result of analysing this information, land which is appropriate for development will begin to emerge. Depending on the findings, further site specific investigations may be required.

It can be useful at this stage to talk with Council officers to assist in determining design objectives as a result of the site analysis.

4. SITE PLANNING

Site planning is the next stage in the process of site development. It involves using the results of the site analysis to design site plans incorporating solutions to primary issues. Development planned as a result of environmental analysis of the site and considerations of the rural/viticultural character of the area are the most likely to be readily approved.

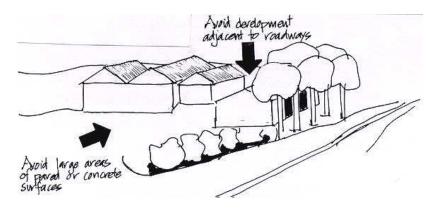
4.1 PRESERVING THE SCENIC LANDSCAPE

4.1.1 Cluster Development

In the environmentally sensitive and Visually Significant Areas of the Vineyards District, it is important to minimise impact on natural site features such as: streams; vegetation and its associated habitat; erosion prone areas; and significant views. In doing so, buildings should be grouped in clusters to minimise the site impact of the development. Refer to *Figure 3: in Chapter E.3 Vineyards District* for the location of visually significant areas in the Vineyards District.

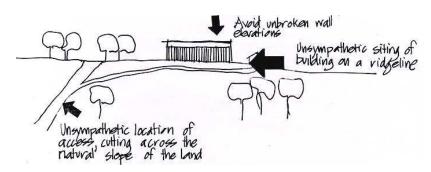
WHAT TO DO

• Prepare plans indicating the location of buildings on the site. Include identification of visually significant areas and areas of environmental, archaeological or historical significance.



AVOID prominent roadside development

- 4.1.2 Development Patterns to be Avoided
- Roadside development should be avoided.
- Scattered tourist cabin development should be avoided.



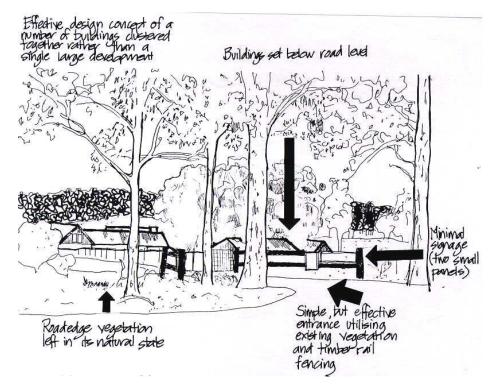
UNSYMPATHETIC siting of building on a ridgeline **UNSYMPATHETIC** location of roadway cutting across the natural slope of the land



AVOID scattered tourist development

- 4.1.3 Views of the Development
- The siting of any development should not be visually prominent when viewed from public areas and roads within the Vineyards District.
- Major ridges and high points should be free of development so as not to interrupt the natural skyline.
- Particular care needs to be taken in the proper integration of new development into the landscape in the Visually Significant Areas along the Brokenback Range and the main traffic routes through the District (Illustrated in Figure 3 in the Vineyards District chapter). Views to significant landmarks such as the Brokenback Range should remain unobscured.
- Developments proposed in Visually Significant Areas are to be accompanied by a visual analysis prepared by a suitably qualified professional, outlining the impact of the

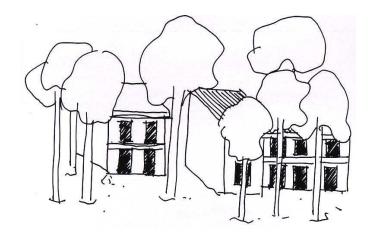
proposed development within its visual landscape. A photomontage showing the proposed development within the context of the site and its visual landscape is to be included.



Maintain natural features and surface treatments at the entrances to a property

- 4.1.4 Landscaping
- Landscaping should reinforce the identity of the landscape.
- Consider suitability of landscaping to soils and climate.
- Landscaping can be used to provide colour, define spaces, enhance positive aspects of the development and screen the bad.
- Planting around private development is encouraged. It should be clumped, not planted in rows and should avoid single species.
- Consider the establishment/ reinforcement of native vegetation corridors. (See Appendix 2.)

A list of suggested plant species which recognise the particular climate and ecological characteristics of the Vineyards District are contained in Appendix 2.



Set buildings amongst existing landscape features

4.2 ENVIRONMENTAL CONSIDERATIONS

4.2.1 Flora and Fauna

Consider the impact of development and activities on significant flora and fauna and areas of habitat. Aim to have no impact/minimal impact.

4.2.2 Site Works

Excavation and earthworks should be kept to a minimum to reduce visual impact and erosion. Means of reducing off-site impacts and site disturbance during construction should be identified.

4.2.3 Solar Access

Well considered building orientation will create naturally friendly and comfortable environments. The conceptual design of buildings to conserve solar access is appropriate at this stage.

4.2.4 Wind

Natural shelter belts are effective devices to control undesirable winds and utilise desirable winds.

WHAT TO DO

- Consider the impact of the development on the flora and fauna of the site. Aim to have no impact / minimal impact.
- Formulate an open space plan identifying environmentally sensitive areas (i.e. flora and fauna habitat etc.)
- Prepare a landscape master plan and stormwater management plan.
- Develop landscape treatment for public areas, road reserves, entrances, open spaces and any areas of environmental sensitivity.
- Prepare conceptual design of buildings to identify solar access.

4.3 CIRCULATION AND ACCESS

Consideration of transport routes should include usage, speed, verge treatments, surface materials, overall landscape themes, parking etc. Pedestrian circulation should consider non-vehicle areas, informal routes, and surface treatments. Gravel and/or coloured textured

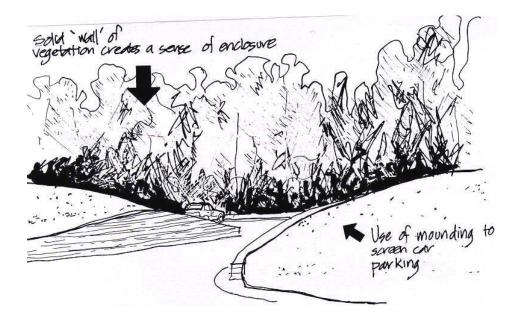
surfaces can be more appropriate than plain concrete/ bitumen for both vehicle and pedestrian routes

The visual and environmental impact of roads and car parking areas should ideally be kept to a minimum. Car parking should be located out of view and well screened from public thoroughfares.

Winding approaches to buildings (along land contours), not immediately visible from the roadside, are encouraged.

WHAT TO DO

- Route primary access road and minor roads, identify traffic management principles and road treatment widths etc.
- Route pedestrian circulation, traffic circulation, disabled access.
- Identify areas of low visual impact for car parking and services.



SYMPATHETIC car parking design



UNSYMPATHETIC car parking design

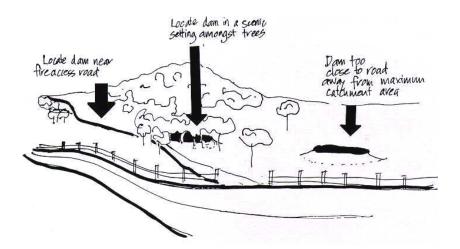
4.4 DAMS

The most appropriate location for a dam should be decided according to:

- whether the dam will have any detrimental effects on buildings, roads, drainage lines, or on the environmental qualities of a site;
- maintaining a minimum vertical and horizontal dimension of the dam faces so as to sit it into the landscape; and
- siting the dam so it can be used as a visual feature.

WHAT TO DO

- Determine size and type of dam construction.
- Determine size of dam catchment to ensure the dam will fill and consider the impact on other dams in the catchment.
- Check soil type for suitability of dam construction.
- Locate according to minimal environmental intrusion and attractive setting.

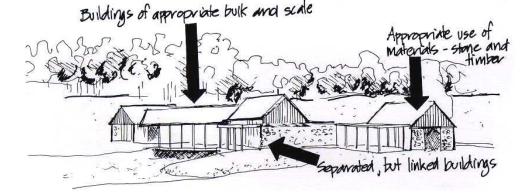


5. BUILDING SITING AND DESIGN

5.1 STANDARD PRINCIPLES

- The most appropriate language for new architecture in the Vineyards District is one that will sit unobtrusively and comfortably within the landscape.
- Building materials should blend as much as possible with the landscape, i.e. timber, sandstone, corrugated iron roofing, gravel ground surfaces. Materials of a recessive colour such as earthy browns and natural timber colours are appropriate.
- Design should be responsive to the rural environment and to the character of any significant existing buildings.
- Large expanses of glazing should be avoided.
- Landscaping should be incorporated as an integral part of new development using local native species.
- New work (alterations or additions) to a heritage item should respect the heritage significance of that item.

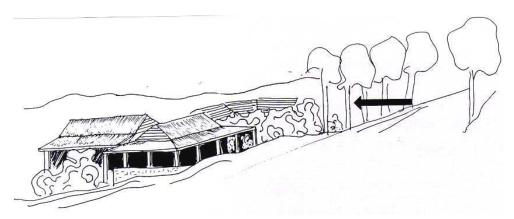
• Development in the vicinity of a heritage item should compliment the original item by its form, scale, proportions, materials and colours. This can be achieved by using modern design with a careful blend of traditional and modern materials.



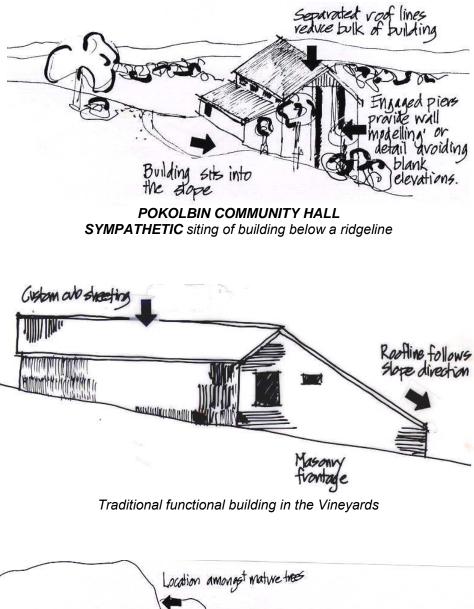
This property on Broke Road demonstrates effective siting of a group of buildings using appropriate materials and style

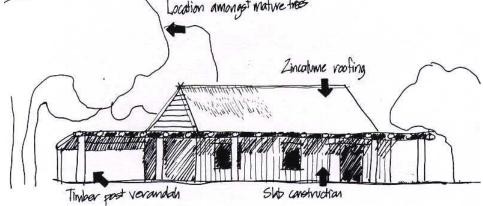
5.2 STANDARD DESIGN REQUIREMENTS

- FRONT SETBACK from the road boundary for all new built development is to be a minimum of 75 metres unless otherwise appropriate and approved by Council. (See 3.2.5 Front and Side Development Setbacks).
- SIDE SETBACK from adjoining property boundaries for all new built development is to be a minimum of 50 metres.
- **Note:** Chemical / noise spray drift separation distances will override setback requirements in some circumstances. (See Section 3.2.7 & 3.2.8).
- HEIGHT of buildings shall not exceed two storeys, with a wall height restriction of 7.2 metres, unless otherwise approved by Council. Variations to this height limit must be accompanied by a written justification.

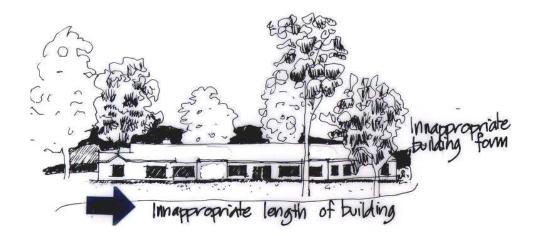


Set building below the road line to retain views across the landscape

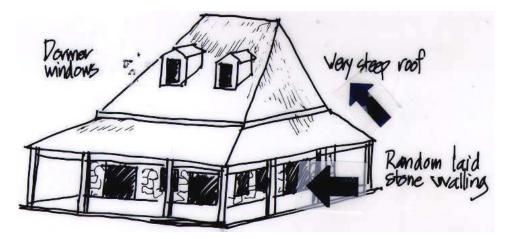




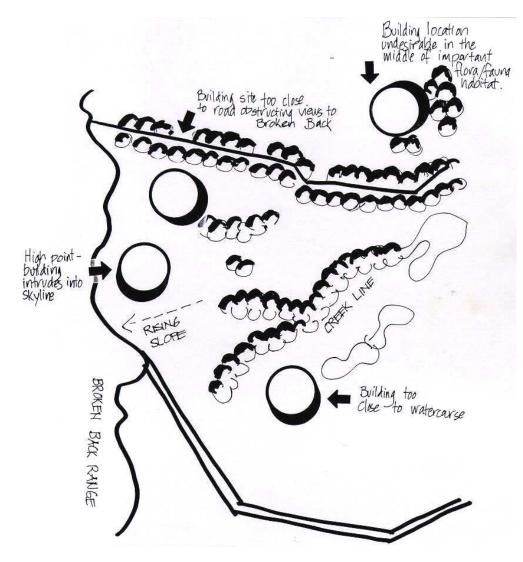
Australian 'bush style' building sits comfortably in the Vineyards landscape



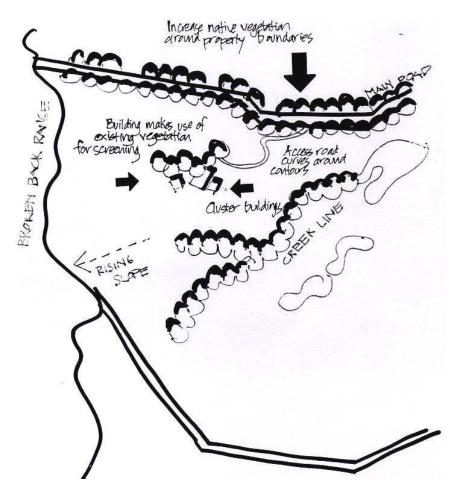
UNSYMPATHETIC building design



European 'Alpine' design can be incongruent with bush surrounds



Examples of UNSYMPATHETIC building locations



Examples of **SYMPATHETIC** building locations

SHEDS

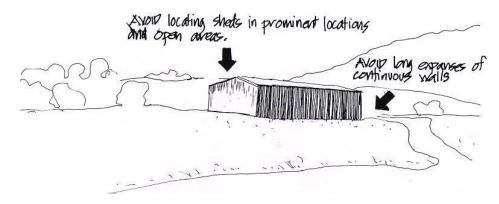
The use of sheds / farm buildings should generally be limited to storage and production of viticultural / agricultural products and machinery as permitted by the Council.

The large size of sheds / farm buildings and requirements for uninterrupted expanses of internal area can often mean that where little attention is given to design and siting the structures jar with the gentle undulating landscapes of the vineyards.

In order to avoid this, the following considerations should be incorporated into the siting and design of sheds.

5.3.1 Siting

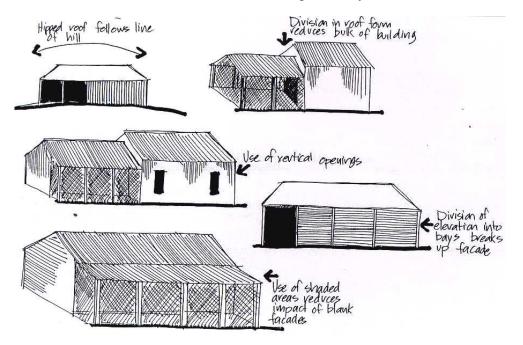
- Sheds / farm buildings should not be located in full view from public thoroughfares.
- Where buildings already exist on site, new sheds / farm buildings should be located to the rear of those buildings, screening the shed from public view.
- Existing vegetation or substantial vegetation screens planted in an advanced stage of growth should be used to screen sheds / farm buildings.
- A backdrop of mature vegetation can assist in setting a shed / farm buildings into the surrounding landscape.
- Sheds / farm buildings should not dominate existing buildings or block significant views.
- Sheds / farm buildings should not be sited on large expanses of open land.



UNSYMPATHETIC location of a shed

5.3.2 Design

- Large buildings should be divided into parts with a division of roof shapes, or building parts.
- Broken rooflines should be incorporated into the design.
- Materials and colours should blend into the surrounding landscape.
- Openings should be vertically proportioned.
- Buildings should incorporate eaves overhang and a roof pitch of at least 26 degrees.
- The colour of roofs should blend in with the predominant colours of the surrounding landscape i.e. olive greens, grey greens and dull greys. Brighter colours such as autumn reds and terracotta are not suited to areas of high visibility



6. SIGNAGE

• Reference to the Signage Code for the Vineyards District – Appendix 5 should be made to guide the design, materials and siting of advertising structures and signs.

7. IDENTIFIED HERITAGE ITEMS IN THE ALLANDALE, ROTHBURY, NORTH ROTHBURY AND POKOLBIN AREAS.

NAME	LOCALITY	<u>STREET</u>
Dunoon	Allandale	Lovedale & Harpers Hill Road
Glenmore	Allandale	Wills Hill Road
Wills Hill Road	Allandale	Wills Hill Road
Stone Drains	North Rothbury	Tuckers Lane
Rothbury Riot Memorial	North Rothbury	Branxton Road
Ayrfield No 3 Colliery	North Rothbury	Branxton Road
Rothbury Colliery	North Rothbury	Branxton Road, off
Entry No 3	North Rothbury	Branxton Road, off
Rothbury Colliery	North Rothbury	Branxton Road, off
Shaft No 1	North Rothbury	Branxton Road, off
Rothbury Colliery	North Rothbury	Branxton Road, off
Shaft No 2	North Rothbury	Branxton Road, off
Lindeman's Ben Ean Cellars	Pokolbin	McDonalds Lane
Former Pokolbin Church	Pokolbin	McDonalds Lane
Pokolbin Community Centre,	Pokolbin	Murrays Road
Pokolbin cultural landscape	Pokolbin	-
Slab Cottage	Pokolbin	Off Broke Road Former
Pokolbin State School		
Peppertree Vineyard, Ironbark	Pokolbin	Hall Road
Bellevue Vineyard and Winery	Pokolbin	Oakey Creek Road
Cote d'Or Vineyard and Winery	Pokolbin	De Beyers Road (west).
Archaeological site.		
Oakdale Winery and Vineyard Archaeological site	Pokolbin	Broke Road
Glen Elgin Winery and Vineyard	Pokolbin	De Beyers Road
Ashman's Vineyard and Winery	Pokolbin	Broke Road
Caerphilly Winery and Vineyard	Pokolbin	Branxton Road
Daisy Hill Winery and Vineyard	Pokolbin	Wilderness Road
The Wilderness Winery and Vineyard	Pokolbin	Wilderness Road
Hunter Valley Distillary	Pokolbin	Hermitage Road
Wilderness Cemetery	Rothbury	Wilderness Road
Blick graves at Belbourie Winery	Rothbury	Allandale Road
Old North Road remnants	Rothbury	various streets
Bridge	Rothbury	Wilderness Road
Weronga	Rothbury	Allandale Road
Peacock Hill/Glenmore Burial Ground	Rothbury	Branxton Road
	-	

Note: All the above items were identified in the City of Cessnock Heritage Study 1994. Those highlighted in bold are listed in the 1989 Hunter Regional Environmental Plan (Heritage).

APPENDIX 2

VINEYARDS DISTRICT NATIVE VEGETATION CORRIDORS AND MASS PLANTING GUIDELINES

NESTBOX DESIGN GUIDELINES

Council is seeking to promote the establishment and enhancement of native vegetation corridors in the Vineyards District generally in accordance with locations and details specified in this Appendix. Other mass plantings are also being encouraged in strategic locations.

Objectives

- To ensure that the long term rural character and amenity is able to be maintained in conjunction with the need to upgrade roads in the Vineyards District.
- To enhance native fauna habitat and improve the biodiversity of the Vineyards District.
- To promote a more sustainable environment.

Development Incentives and Maintenance

• As detailed in 3.2.4 Development Densities the Council may consent to tourist development within the RU4: Rural Small Holdings Zone to a maximum density of 1.5 tourist accommodation units per hectare where a proposal seeks to fully comply with the requirements for establishment and maintenance of native vegetation corridors for the full length of property boundaries or creek lines, as relevant (see figures 10 & 11), or where a proposal seeks to establish and maintain a minimum of 6000m² of native vegetation on land not affected by native vegetation corridor locations, in accordance with the provisions of the Vineyards District chapter.

Where corridors partially exist within a property, the density outlined above can be achieved through appropriate supplementation of native vegetation (determined on-merit due to species selection and associated sizes) and where such total areas are maintained in perpetuity as outlined below.

- Where an application seeks to develop at a maximum density of 1.5 tourist accommodation units per hectare, details of the proposed planting must be clearly specified in the application (both in plans and in the text accompanying the application), including proposed ground preparation, species planting and maintenance and fencing details. Consents issued on this basis will include specific conditions relating to the continued maintenance of such corridors, remaining the responsibility of the land owner, e.g. through instruments attached to the title of the property. A refundable bond will be required to the amount of 20% of the total cost of vegetation works (site preparation, plant costs, fencing, etc.). The total amount of the bond will be recoverable at a rate of 20% per year over 5 years where maintenance and survival rates are satisfactory to the Council.
- In the case where properties contain recommended corridor plantings <u>both</u> alongside road reserves and creeks, discussions will need to be held on the extent of planting required.
- The locations of native vegetation corridors and other mass plantings are to be modified around existing service lines including electricity, reticulated water, telephone and gas. Whilst the location of these services is generally available from Council's Geographic Information System at a strategic scale, applicants should consult with the relevant servicing authorities to ensure that appropriate locations have been selected.
- The locations of native vegetation corridors can be modified to remove the inclusion of existing developments situated alongside road reserves and creek lines.

- For applications which seek to establish a minimum of 6000m² of native vegetation the location of the proposed native vegetation is to be considered on-merit with the aim of linking to existing stands of native vegetation and designated corridor locations.
- The clearing of commercial vineyards is prohibited in areas designated as native vegetation corridors as per Figure 11 in the Vineyards District chapter.

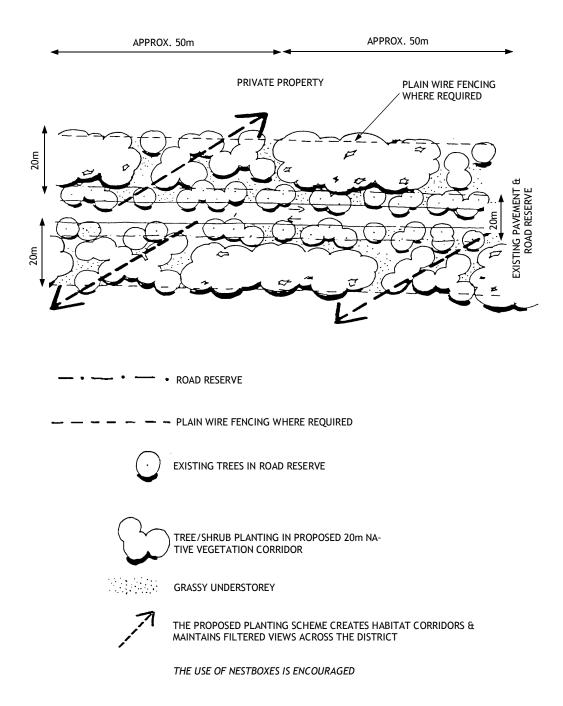
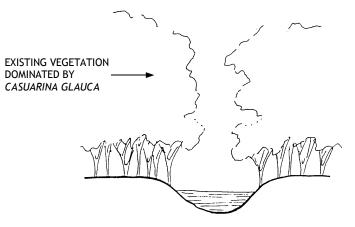
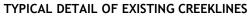


FIGURE 12: TYPICAL PLANTING LAYOUT - ROADSIDE CORRIDORS





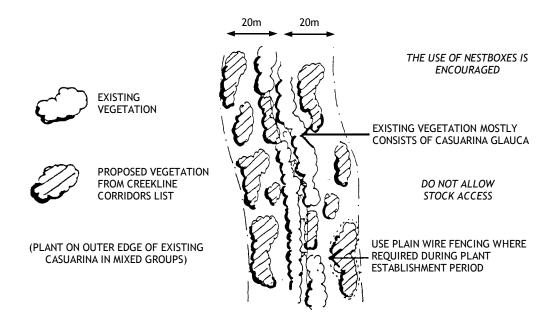


FIGURE 13: TYPICAL PLANTING LAYOUT - CREEKLINE CORRIDORS

SUGGESTED PLANTING LISTS

Tree and shrub species have been selected through consultation with various organisations (including Greening Australia, the Native Animal Trust Fund and the Society for Growing Native Plants) and through local knowledge of the Vineyards District. Several species have been selected due to their importance as food and habitat sources for various known local populations of insectivorous bats, possums, gliders and koalas, of which some species, such as the Squirrel Glider (Petaurus norfolcensis) and the Koala (Phascolarctos cinereus), are listed as 'vulnerable' in the NSW Threatened Species Conservation Act 1995 and the Commonwealth Endangered Species Protection Act 1992.

In general, tree and shrub species have been selected to enhance biodiversity and provide wildlife habitat. However, by following the planting layouts contained in this Appendix, views will be preserved and the rural character of the Vineyards District will be enhanced.

Scientific Name	Common Name	Flowering Time	<u>Height (m)</u>
Trees			
Allocasuarina torulosa	Forest Oak		20
Brachychiton populneum	Kurrajong	Summer	10-20
Casuarina glauca	Swamp Oak		15
Corymbia maculata	Spotted Gum	Late Summer - Autumn	36
Eucalyptus acmenoides	White Mahogany	Oct - Feb	36
Eucalyptus amplifolia	Cabbage Gum	Summer	30
Eucalyptus glaucina	Slatey Red Gum		30
Eucalyptus moluccana	Grey Box	Late Summer - Autumn	30
Eucalyptus paniculata	Grey Ironbark	Winter - Spring	30
Eucalyptus piperita	Sydney Peppermint	Early Summer	15
Eucalyptus punctata	Grey Gum	Summer - Autumn	30
Eucalyptus tereticornis	Forest Red Gum	June - Nov	40
<u>Shrubs</u>			
Acacia parramattensis	Parramatta Green Wattle	Late Nov - Early Feb	8
Acacia parvipinnula	Silver Stemmed Wattle	Sept - Early Dec	10
Acacia falciformis	Broadleaved Hickory	Oct - Jan	3-12
Acacia filicifolia	Fern Leaf Wattle		13
Acacia fimbriata	Fringed Wattle	July - Sept	5-7
Acacia longifolia	Sydney Golden Wattle	July - Nov	5
Bursaria spinosa	Blackthorn	Jan - April	10
Dodonaea triquetra	Hop Bush	Spring - Summer	2
Leptospermum parvifolium		Sept - Nov	15
Leptospermum trinervium	Paperbark Tea Tree	Spring	3
Olearia eliptica	Sticky Daisy Bush	Spring - Summer	0.50-1
Oxylobium ilicifolium	Native Holly	Spring	2
Persoonia linearis	Geebung	Dec - July	3

ROADSIDE CORRIDORS

CREEK LINE CORRIDORS

Scientific Name	Common Name	Flowering Time	<u>Height (m)</u>
Trees			
Casuarina glauca	Swamp Oak		20

To increase diversity, plant a mix of the following on the outer edge of existing Casuarina communities.

Angophora floribunda	Rough Barked Apple	Spring - Summer	20-35
Casuarina cunninghamina	River she-oak		36
Corymbia maculata	Spotted Gum	Late Summer - Autumn	25
Eucalyptus albens	White Box		30
Eucalyptus amplifolia	Cabbage Gum	Summer	30
Eucalyptus crebra	Narrow-Leaved Ironbark	May - Jan	30
Eucalyptus fibrosa	Broadleaved Ironbark	Nov - Jan	30
Eucalyptus punctata	Grey Gum	Summer - Autumn	30
Eucalyptus resinifera	Red Mahogany	Nov - Jan	25-30
Eucalyptus saligna	Sydney Blue Gum	Jan - Mar	30-50
Eucalyptus tereticornis	Forest Red Gum	June - Nov	30-40
Tristania laurina	Water Gum	Dec - Jan	4-10

<u>Shrubs</u>

Acacia parvipinnula	Silver Stemmed Wattle	Sept - Dec	4-10
Acacia pycnantha	Golden Wattle	Spring	8
Breynia oblongifolia	Breynia		2-3
Bursaria spinosa	Blackthorn	Jan - April	2-3
Callistemon citrinus	Red Bottlebrush	Spring	2
Callistemon linarifolius		Spring	2-5
Callistemon salignus	Weeping Bottlebrush		3-4
Dianella spp.	Flax Lily		1
Dodonaea triquetra	Hop Bush	Spring - Summer	2
Gahnia aspera	Sedge		0.40-0.60
Lomandra spp.	Rush		0.75-1.3
Melaleuca nodosa	Ball Honeymyrtle	October	6
Olearia eliptica	Sticky Daisy Bush	Spring - Summer	0.50-1

ELSEWHERE

Select from roadside and creek line corridor species lists as appropriate. However, creek line corridor species generally require more soil moisture than do the suggested roadside corridor species.

- **Note:** The following are particularly useful food and habitat species for possums, gliders, koala and insectivorous bat populations in the Vineyards District.
- Acacia pycnantha and A. parvipinnula are useful food trees for the Squirrel Glider (*Petaurus norfolcensis*).
- *Acacia spp.* (in particular *A.fimbriata*) are generally useful as insect attractants for possums, gliders and insectivorous bats. They also provide a source of sap and seeds for particular glider and possum species.
- Eucalypts are useful in providing habitat and food sources for insectivorous bats, possums and gliders. They are also effective in attracting insects which are an important component of the diet of numerous insectivorous bat, glider and possum species.
- *Eucalyptus tereticornis, E. punctata and E. albens* are important food trees for local Koala populations.
- *Eucalyptus paniculata* is a useful habitat tree as it readily forms hollows when mature.
- *Eucalyptus glaucina** is classified as 'vulnerable' under the NSW Threatened Species Conservation Act, 1995.

SPECIES SELECTION GUIDE

Creek line Corridors

A mix of 60% of total species should be selected from the *creek line corridor shrub list* with a further 40% of total species being selected from the *creek line corridor tree list*.

For example for every 100 trees, 60 should comprise a mix of species listed in the creek line corridor shrub list and 40 should comprise a mix from the creek line corridor tree list.

Roadside Corridors

A mix of 50% of total species should be selected from the *roadside corridor shrub list* with a further 50% of total species being selected from the *roadside corridor tree list*.

For example for every 100 trees, 50 should comprise a mix of species listed in the roadside corridor shrub list and 50 should comprise a mix from the roadside corridor tree list.

Species selection should aim to provide year round flowering.

Where planting is proposed in the vicinity of Cessnock Airport ensure that species selection does not impinge on airport obstacle height limitations. Please refer any enquiries to Council's Development Assessment Planners.

PLANTING PREPARATION

The following is a general prescription for establishing native roadside and creek line vegetation corridors as well as for plantings in general.

The details provided in this Appendix have been provided by Greening Australia (1998).

Calendar for planting

12 months before planting

Design a plan to establish the location of the planting, species selection from the lists within this Appendix, dimensions of site for planting and what alternatives are available.

9 months before planting

- Order your seedlings from your local nursery. If you have collected your own seed start propagating now.
- Deep rip the site in rows or a grid pattern. This is best on most soils, however black soils or cracking earths are best cultivated. Mounding of waterlogged or very damp sites on heavy soils will assist with growth. Soils which are considered moderate to highly erodable may not be suitable for deep ripping.
- To deep rip or cultivate within the riparian zone (approximately 40 metres either side of a creek) you may require permission from the Department of Water and Energy.
- Continue to allow grazing to reduce pasture.

6 months before planting

- Apply a knockdown herbicide along rip lines or cultivate several times to reduce weeds.
- Fallow to build up moisture. Continue to allow grazing to reduce pasture.
- Fence the site, leaving space between outside rows and the fence of about 3.0 metres to restrict stock from grazing your growing plants from over or through the fence. Also leave space for machinery to get in and out of the site.

2 to 3 weeks before planting

Apply a Glyphosate based herbicide or grade over the riplines to remove weeds and weed seeds. Grading should be a scalping process at least 1.0 metre wide. Residual herbicides give long term protection from weeds, however care must be taken. Herbicides should only be used in accordance with legislation and safety handling data. Consult with your local Weed Control Officer at the Council.

When to establish native plants

Generally, plant establishment is carried out mid March to late April throughout the Hunter. This is usually the period of greatest rainfall and soil temperatures provide conditions for optimum germination and growth. Planting times will vary dependent on local climatic conditions. *Only plant seedlings when the soil is moist.*

Location

- Plant species in mixed groups of 3 to 5.
- Randomly locate groups with a maximum of 15 metres between each group.
- Infill planting around existing vegetation. Do not plant within the drip line of existing trees.
- All areas subject to detailed site analysis prior to commencement.

Planting

- Only plant as many seedlings in a day that can be watered in that same day. When planting, dig a hole about twice the size of the seedling pot, fill some loose soil back in, place the seedling in the hole (you do not have to 'tease' the roots of native plants) and gently fill the remaining soil back around the plant.
- Tube stock should be planted between 1.5 and 8.0 metres apart depending on the species selected.
- With a foot on either side of the seedling, press down firmly. This will help hold the seedling in place and remove air pockets.
- Watering after planting should be the only time the plants are hand watered. A 10 litre bucket of water for each seedling should be sufficient. Planting after or during rain is often easier.
- Mulch around stem to 500mm diameter avoid direct contact of mulch with stem to avoid trunk rot.
- Guard seedlings to protect against rabbits, hares, wallabies, frosts and to help with moisture retention. Tree guards should be installed at the time of planting. Use milk cartons with two stakes, or mesh or plastic with three stakes. Plastic tree guards can usually be removed after twelve months (and can be reused!).
- Seedling establishment can be carried out with tree planting machinery, dependent on the size of the site and the suitability of the machinery to the site.

Follow - up

- Follow up watering should not be necessary with good ground preparation and soil moisture at the time of planting.
- Weed control will usually be needed as a follow up to planting. Good weed control prior to planting can avoid this. Any weed control chemical application should be done using equipment which ensures no contact of the chemical with seedlings. Hand weeding is a safer option.

Direct Seeding

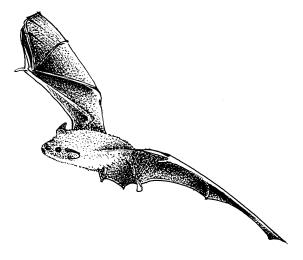
- Direct seeding is a cost-effective and efficient method of establishing large numbers of native plants. Direct seeding is simply the direct sowing of native plant seed to the soil where you wish to establish trees and shrubs. Advantages of direct seeding include: lower costs as seed is usually cheaper to purchase or collect than tube stock; a more natural look or mix of trees and shrubs; and that mature plants are usually more stable as their root systems have not been restricted or disturbed.
- Successful direct seeding is usually achieved by good site preparation, effective seed preparation, sowing at the correct time (when soil is moist and the soil temperature is warm).
- Site preparation is a critical component of tree and shrub establishment by direct seeding. Any direct seeding site should have minimal weed infestation and competition. Methods of site preparation include grading or scraping the soil surface to remove weeds, chemical application using a residual pre-emergent herbicide and a knockdown herbicide prior to direct seeding and cultivation of the site prior to direct seeding.
- Seed may need pre-treatment depending on the species being used. To combat the ants taking seed for their 'lunch', seed is usually treated with a low toxicity insecticide.
- On slopes steeper than 1:3, a bituminous binder should be added to the seed slurry.
- There are many methods of direct seeding. Row seeding, spot seeding and belt seeding are the most common.
- Row seeding is usually carried out using a single row seeding machine. This method is efficient for lengthy rows on windbreaks or shelterbelts and ensures the seeding application rate is sufficient. Row seeding can also be a done in figure eights or cross over lines to give a more natural and random effect. Weed control and maintenance is also easy along the sides of the rows.
- Spot seeding is usually carried out by hand and can be very effective at appropriate sites. Spot seeding may be used for sites where machinery will not be effective such as rocky sites or inaccessible sites. Other times to use spot seeding is when machinery may cause serious erosion problems, such as near creeks or if the site is too small to warrant using machinery. A hoe is often the best tool for carrying out spot seeding.
- Belt seeding is simply the term used for wide belts or areas of direct seeding. Often belt seeding is carried out by converted agricultural machinery or using a fertiliser spreader.

FUNDING SOURCES - VOLUNTARY PLANTING

Financial assistance related to the planting of native vegetation is available from a number of sources including the Department of Environment, Climate Change and Water (DECC&W) and the Hunter – Central Rivers Catchment Management Authority.

Why are Nestboxes Needed?

Land development and clearing has resulted in a serious loss of habitat for hollow dwelling wildlife such as possums and gliders, birds and bats. Although nestboxes cannot replace the millions of tree hollows that have been lost, they are extremely beneficial for wildlife in areas of human habitation.



The Benefits of Nestboxes

Installing and maintaining nestboxes gives native wildlife a chance to breed that they otherwise wouldn't have.

Nestboxes attract wildlife such as rosellas, squirrel gliders and insectivorous bats into your area.

Further Information

The nestboxes featuring in this brochure have been adopted from Pastorelli, J(ed)(1990) <u>Urban Wildlife of New South</u> <u>Wales</u>, Angus & Robertson and Grant, J.(1997) <u>The Nestbox</u> <u>Book</u>, Gould League.

For further nestbox designs refer to *The Nestbox Book* published by Gould League.

Fauna illustrations by John Single, 1999.

Written and Designed by Natasha Shearer & Donna Ladmore



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CESSNOCK CITY COUNCIL

SQUIRREL GLIDER & BAT NESTBOX DESIGNS



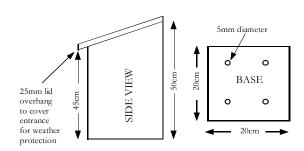
Cessnock City Council Strategic Services Department

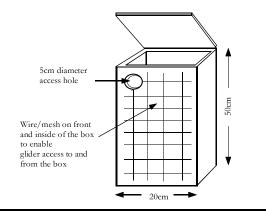
May 1999

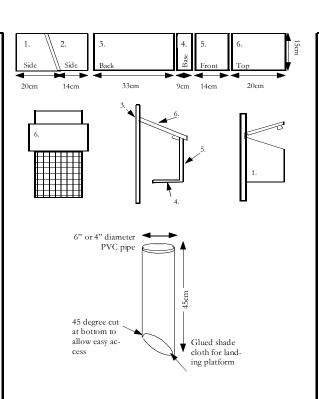
SQUIRREL GLIDER NESTBOX

Boxes should be made from timber of 16-25mm in thickness. This provides good insulation. Metal boxes may cause animals to overheat or become too cold according to weather conditions. A 20mm deep layer of wood shavings should cover the floor of the box.

Boxes should be placed 4-8m off the ground.







Box Types:

1. Timber approximately 30mm thick to ensure a 15-10mm entrance gap is left underneath the base of the box. Boxes should be rough sawn on all surfaces so bats can land on the box. Boxes can be fitted together with waterproof glue, screws or nails. The lid should be hinged to allow the box to be cleaned.

2. 6" or 4" PVC pipe with screw top lid. Shade cloth should be glued (with waterproof glue) inside for a landing platform and grip.

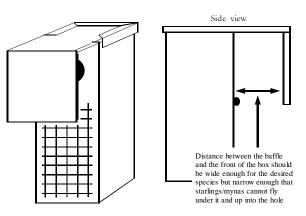
Boxes should be placed at least 4m up a smooth barked tree with a clear flight path.

INSECTIVOROUS BAT NESTBOXES

MYNA & STARLING PROOF NESTBOXES

This design has been suggested by experts and trials have indicated that it is successful. This design is based on the concept that starlings and mynas like to see a hollow and fly directly into it, but native birds, like rosellas, are used to climbing to get access to natural tree hollows.

The design shown below is for rosellas, however it may be adapted to most nestboxes for birds and mammals.



General Tips

Boxes should be wind and rain proof with drainage holes drilled in the base. They should be positioned away from prevailing winds and be shaded during the hottest parts of the day.

Boxes *should be checked periodically* to remove feral birds and bees as well for general maintenance purposes.

DO NOT use treated timber, paint the box or leave any sharp objects protruding from the box.

CESSNOCK DEVELOPMENT CONTROL PLAN

APPENDIX 3

VINEYARDS DISTRICT SPECIFICATIONS FOR VEGETATION CHEMICAL SPRAY DRIFT BUFFERS

VEGETATION CHEMICAL SPRAY DRIFT BUFFERS

- Research into the behaviour of chemical spray drift has shown that vegetation chemical spray drift buffers can prove effective barriers to spray drift where they meet the following criteria:
 - 1. are of minimum width of 30 metres;
 - 2. contain random plantings of a variety of tree and shrub species of differing growth habits, at spacings of 4.0 to 5.0 metres;
 - 3. include species which have long, thin and rough foliage which facilitates the more efficient capture of spray droplets (see accompanying species list); and
 - 4. provide a permeable barrier which allows air to pass through the buffer (at least 50% of the buffer should be open space).

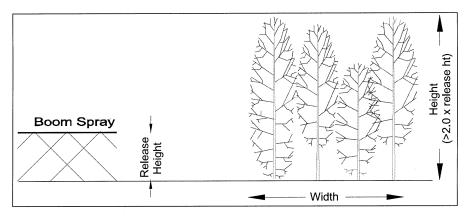
(Lismore City Council, 1994, p. 3)

- The vegetation chemical spray drift buffer shall have a minimum width of 30 metres and shall be designed in accordance with the following diagrammatic details incorporating species from the accompanying species list.
- Locations are to be determined individually through merit-based assessment.
- In the case of development consents other than for the purposes of commercial vineyards, Council will require the establishment of the required vegetation chemical spray drift buffer and any associated fencing to be constructed prior to occupation of the premises. In the case of development consents for new or expanded commercial vineyards, Council will require the establishment of the required vegetation chemical spray drift buffer and any associated fencing to be constructed within 6 months of the date of development consent.
- Consents issued on this basis will include specific conditions relating to the continued maintenance of such buffers, remaining the responsibility of the land owner, eg. through instruments attached to the title of the property. A refundable bond will be required to the amount of 20% of the total cost of vegetation works (site preparation, plant costs, fencing, etc.). The total amount of the bond will be recoverable at a rate of 20% per year over 5 years where maintenance and survival rates are satisfactory to the Council.
- Applications for development, where vegetation chemical spray drift buffers are proposed, shall include a detailed landscaping plan indicating the extent of the buffer area, the location and spacing of trees and shrubs and a list of tree and shrub species. The application shall also contain details showing means by which the buffer is to be maintained.

The *Draft National Guidelines for Spray Drift Reduction of Agricultural Chemicals* prepared by the Centre for Pesticide Application and Safety indicate that:

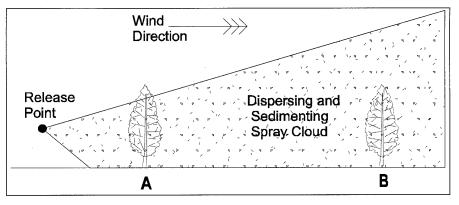
Plant surfaces which present a small frontal area to the moving chemical droplets are the most successful at catching these droplets. Trees in the casuarina species are particularly useful. Large leaves that are covered in small hairs can also be efficient at removing droplets. Aim to provide foliage which extends from the base to the crown. Mixed plantings of trees and shrubs may be required to ensure that there are no gaps in the lower canopy.

- 2. A porous buffer (which has sufficient air movement through the vegetation) will remove a greater number of spray droplets than a solid barrier. A porosity of about 50% should be sought (approximately 50% of the buffer should be air space).
- 3. As a general guide, the minimum height of the buffer should be double the release height of the chemical. For example, if chemicals are released at a height of 2 metres, then the buffer height should be at least 4 metres in height.



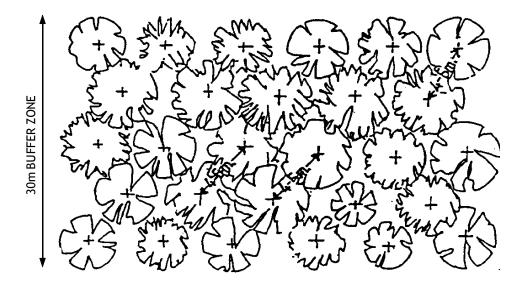
Optimum vegetative buffer dimensions

- 4. The wider the buffer the greater the effectiveness of the buffer in reducing spray drift.
- 5. The closer the buffer to the release point, the greater the proportion of spray which will be intercepted. The vegetation buffer should, therefore, be as close as practical to the spray zone. (This can obviously create difficulties in instances where the onus is on the built development to provide the vegetation buffer. Each of those circumstances should continue to be considered on merit as currently required by this chapter).

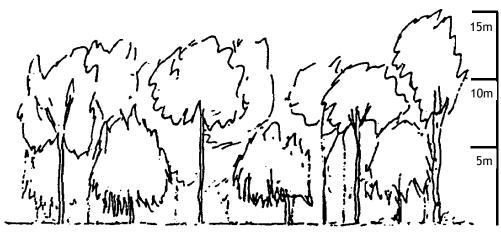


Effect of distance from release point

Source: Centre for Pesticide Application & Safety, 2000, <u>Draft National Guidelines for Spray</u> <u>Drift Reduction of Agricultural Chemicals</u>, University of Queensland.



PLAN VIEW



SECTION VIEW

Source: Centre for Coastal Management, 1995, P. 74.

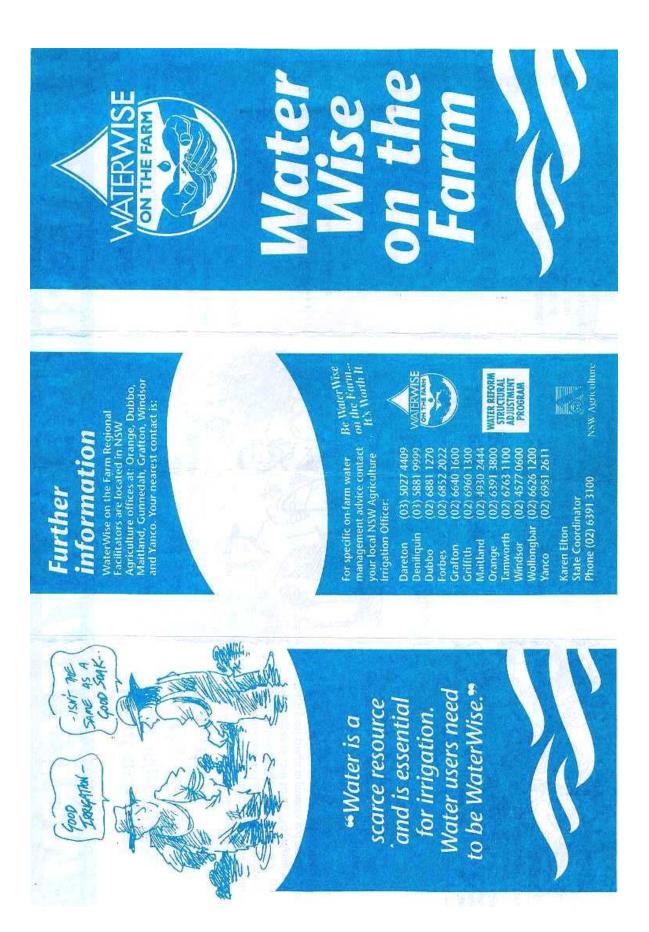
RECOMMENDED VEGETATION SPECIES FOR VEGETATION CHEMICAL SPRAY DRIFT BUFFERS

Tree/Shrub	Height	Growth Rate	Soil
Broadleaved Hickory			Sandstone and rocky soils
Acacia falciformis	5 to 12 metres	Fast	,
Fern Leaf Wattle			Grows best in clay loam, silt
Acacia filicifolia	6 to 10 metres	Fast	2
Fringed Wattle			Grows best on deep moist acid
Acacia fimbriata	10 to 15 metres	Fast	soil
Sydney Golden Wattle			Prefers moist, acid soils, although
Acacia longifolia	5 to 6 metres	Fast	grows in other conditions
Blackwood			Grows best on deep moist acid soil
Acacia melanoxylon	10 to 20 metres	Fast	-
Parramatta Green Wattle			Dry, shallow sandy or clay soils
Acacia parramattensis	To 8 metres	Fast	
Silver Stemmed Wattle			Sandy soils, especially along creek
Acacia parvipinnula	To 10 metres	Fast	lines
Black Oak			Grows well on both poor and well
Allocasuarina littoralis	8 to 10 metres	Moderate	drained acid soils
Forest Oak			Will grow on light soils but more
Allocasuarina torulosa	15 to 20 metres	Moderate	suited to the better types
Honeysuckle			Poor, low phosphorous soil (don't
Banksia integrifolia	12 to 18 metres	Fast	fertilise), well or poorly drained
			soil
White Bottlebrush			Light to heavy soil.
Callistemon salignus	5 to 7 metres	Fast	Frost tolerant.
White Cyprus			Frost resistant, prefers sandy
Callitris columellaris	10 to 20 metres	Moderate	loamy soil.
River Oak			Good, well drained loam, needs
Casuarina	10 to 20 metres	Fast	plenty of moisture, responds to
cunninghamiana			irrigation.
Swamp Oak			Moisty, will grow on marshy or
Casuarina glauca	10 to 12 metres	Fast	saline soil or poorly drained pug.
Tuckeroo			Good to medium heavy clay and
Cupaniopsis	5 to 10 metres	Fast (if fertilised)	loamy soils
anarcardioides			
Hop Bush			Grows best in heavy soil
Dodonaea triquetra	To 2 metres	Moderate - fast	
Red Bloodwood	404 00 4		Hardy, grown on a wide range of
Eucalyptus gummifera	18 to 30 metres	Fast	soils
Willow Leaf Hakea		- ·	Grows well on acid soils with good
Hakea salicifolia	5 to 7 metres	Fast	drainage
Lemon Scented Tea Tree	0.4. 40	East	Light to heavy soil but not
Leptospermum	6 to 10 metres	Fast	waterlogged, responds to hedging.
petersonii Deperbark Teo Tree			Crowe well in meet soils
Paperbark Tea Tree	10 to 12 metres	Moderate	Grows well in most soils
Leptospermum petersonii	10 to 12 metres	Moderate	
Broad Leaved Paperbark			Light to medium clay, low frost
Melaleuca quinquenervia	15 to 20 metres	Fast	tolerant, can withstand heavy and
Michaleuca quiliquellei Via		1 431	long term flooding.
Prickly Leaved Paperbark			Grows well on damp, brackish soils
Melaleuca styphelioides	5 to 8 metres	Moderate	and heavy clays.
Sticky Daisy Bush	5 10 0 11101105	וווטעכומנכ	Grows well in sandy/light loam soil
Olearia eliptica	To 1 metre	Moderate	Grows weir in Sanuy/light Ioani Soll
	I Management 1005 C		

Sources: Centre for Coastal Management, 1995. Cessnock City Council, 1998.

APPENDIX 4

WATER WISE ON THE FARM





What is WaterWise on the Farm?

WaterWise on the Farm is an education/awareness program that assists irrigators to optimise on-farm water use efficiency and maximise yield of irrigated crops and pastures. It is about promoting best irrigation management practices to enhance the economic viability of irrigated enterprises and protect our natural resources.

WaterWise farmers...

- operate according to an irrigation and drainage management plan;
- manage water availability to optimise security for production;
- select the best irrigation system and design for their soil, crop and landscape;
- optimise on-farm water use efficiency; and
 - protect their water resource.

Why do we need to be WaterWise?

Water is a scarce resource and, with competing demands for water, irrigators need to be WaterWise. The cost of water is increasing, so the challenge for irrigators is to maximise production and minimise water use. Recycling and increased water use efficiency means less impact of irrigation on groundwater, salinity and river health.



Who delivers WaterWise on the Farm?

The NSW Agriculture WaterWise on the Farm program is seeking to develop partnerships with local and regional water user associations and irrigator groups. Regional facilitators will assist in developing localised education/awareness programs to promote the adoption of best irrigation practices and technologies.

What activities does WaterWise on the Farm organise?

WaterWise on the Farm aims to provide irrigators with better information which is timely and relevant and will assist them to implement best irrigation management practices and technologies on their farms. The program will assist local groups to promote and organise guest speakers, field days and discussion groups, and will also identify model farm sites for practical demonstrations at these events. The program will assist interested groups of irrigators in the promotion and delivery of irrigation management workshops.



2

APPENDIX 5

SIGNAGE CODE FOR THE VINEYARDS DISTRICT

Sign Types

Signs are divided into the three (3) following types:

"Merits"

A development application must be lodged for these signs. These applications will be assessed with regard to the impact of the sign on the area and whether the sign complies with the aims and objectives of this Code.



Exempt

It may be necessary to obtain a 'construction certificate' prior to erection of the sign(s).

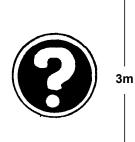
These signs are permitted without Council approval.



Prohibited These signs are not permissible under any circumstances.



Post supported signs shall have signage area not exceeding $3.0m^2$. These signs shall be of either square or rectangular configuration. Properties with a number of businesses shall be allowed to increase the advertising area of the sign/s to $4.0m^2$.







Fascia signs must be fully contained within the fascia area.

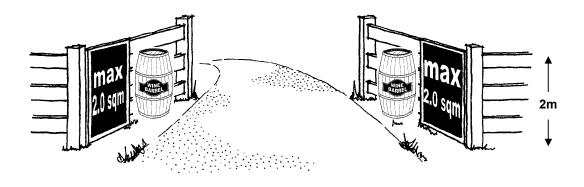
Flush wall signs must not extend beyond the area of the wall on which the sign is to be located. The sign shall occupy an area no greater than 25% of the wall area on which the sign is to be located.

Pole or **pylon signs** are not a suitable form of signage for the Vineyards District and are prohibited.





Window signs must be wholly contained within the window frame. Signs must not occupy an area greater than 25% of the total area of the window.

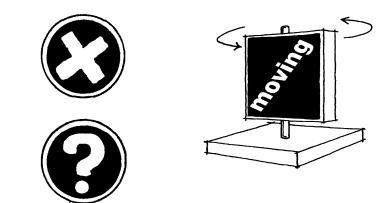


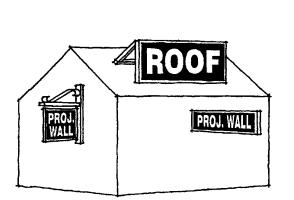


Gateway signage shall be designed as an integral part of the principle visitor entrance point to the facility. Two (2) signs are permitted with a maximum area not exceeding 2.0m². The signs must be located on either side of the driveway entrance or in a central landscaped position. Two (2) wine barrels may also be incorporated into the entrance and shall be located wholly within the property boundary within a recessed gateway. Wine barrels shall be positioned so as not to obstruct vehicular or pedestrian sight lines or access.

Moving signs are not characteristic of the Vineyards District and are prohibited.

Flag pole structures will be assessed on their merits. The size, location and number of flags will be considered.





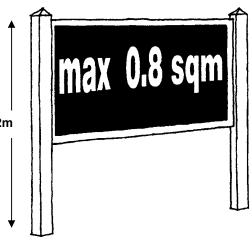


Roof mounted signs are not considered appropriate for the Vineyards District and are prohibited.

Projecting wall signs must be of either square or horizontally proportioned rectangular configuration with the bottom edge of the sign being no less than 2.6m above ground level. The sign shall not project beyond the top of the wall on which the sign is fixed, or beyond the footpath (where applicable).

Vineyard Identification signs can be erected where the vineyard name has been used on a wine bottle label. These signs are to comprise a square or rectangular format with an area not exceeding 0.8m². They shall contain only the company and vineyard name. The maximum height of the structure is not to exceed 1.2 metres and/or the height of the surrounding vines.









Wine barrel signs must be complete and intact rather than halved or sculpted and must be safelv and mounted attractively to prevent it being pushed over or rolled away. Painting of the barrels must be subdued colour tones. The visitor information must be professionally sign-written onto the barrel.

Sandwich board signs shall have a height not exceeding 1.3 metres and a width not exceeding 900mm. The sign should be securely weighted so that it can not blow over. Chalkboard areas are permitted provided that a professionally presented header exists displaying the business name. Signs are not to be orientated to or visible from a road, public place or adjoining property.



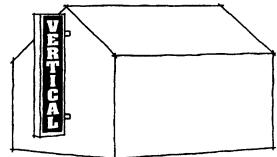




Signs with the image extending beyond a regular format or signs of either odd shape or other novelty attention getters are not considered appropriate for the Vineyards District and are prohibited.

Vertically proportioned projecting wall signs are not considered appropriate for the Vineyards District and are prohibited.

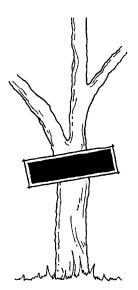




Real Estate Signs are temporary signs only and shall have a maximum area of 5.0m². Signs shall be removed within 7 days of the property settlement. The sign must be located on the actual land being offered for sale.





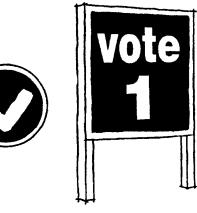


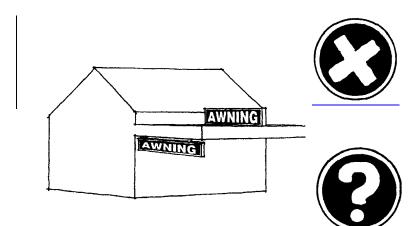


Advertising signs fixed to trees, telegraph poles and the like do not make a positive contribution to the visual character of the Vineyards District and are prohibited.

Political Advertising Signs are temporary signs only and shall be carried out in accordance with:

- Commonwealth Electoral Act 1918
- The Parliamentary Electorates & Elections Act 1912
- The NSW Local Government Act 1993



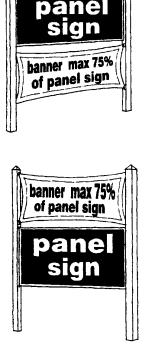


Above awning signs are not considered appropriate for the Vineyards District and are prohibited.

Below awning signs must not project beyond the edge of the awning and shall have a maximum depth of 0.5 metres. The bottom edge of the sign shall be no less than 2.6 metres above ground level.

Banners are only permitted as a temporary sign used in the promotion of a special event and where they are erected as an integral part of a permanent post supported sign. The area of the banner shall not exceed 75 percent of the area of the permanent sign fixed to the structure.

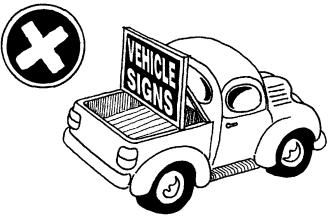






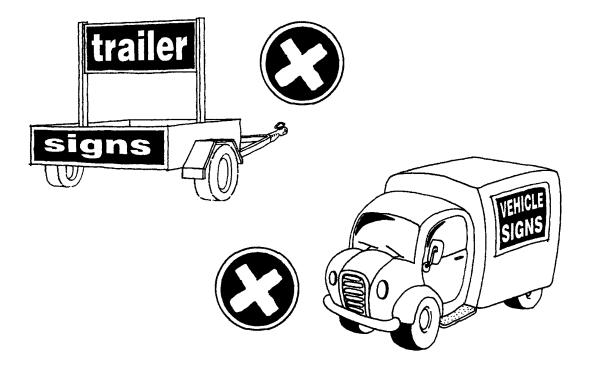


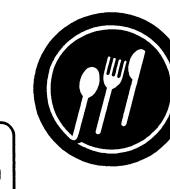
Internally illuminated, backlit, neon, reflective or scintillating signs are not considered appropriate for the Vineyards District and are prohibited.





Trailers, vehicles or equipment bearing advertising material do not make a positive contribution to the character of the Vineyards District and should not be parked for the express purpose of advertising or providing direction to businesses in the Vineyards District.







Internal directional signs such as signs designating vehicle entry and exit points and signs directing visitors to parking areas, toilet facilities or other facilities on a site do not generally require development consent. These types of signs however, should be kept to the minimum necessary to effectively communicate the location of the available facilities. The signs should be positioned to ensure that the safety of pedestrians and drivers is not compromised.











Sign Categories

Signs on private land must relate to businesses contained on the land itself and are divided into the following categories:

- **Frontage Signs** Signs positioned at the frontage of a site for the express purpose of presenting the facility or business to the travelling public. Signs within this category are post-supported signs or wall structures (with or without the provision for banner advertising). Post-supported structures shall not exceed a height of 3.0 metres above natural ground level or an advertising area of more than $3.0m^2$. Frontage signs are only allowed on properties where an approved business operates. Signage may be provided on either side of the structure. Where the advertising structure is supported by three posts and has an advertisement on either side of the structure, the internal angle shall not exceed 65 degrees.
- **Internal Directory Signs** Signs internal to a site and which direct visitors to various facilities on the site eg. signs which identify vehicular entry and exit points or provide direction to amenities or other areas of the site with a specific function such as: a car park; wine sales area; restaurant; accommodation; golf course; or the like. Wine barrel signs may be used as on-site directional signs.

InternalSigns designed and located so as to promote various functions,
businesses or uses within a site and which cannot be read from a public
road, other public place or adjoining property. Wine barrel signs and/or
sandwich board signs may be used for promotional purposes within a site.

Gateway Signs Gateway signage is described in of this Code and may include wine barrels, provided they are integrated into the overall design.

Vineyard - These signs shall not be greater than 0.8m² in area or have a height greater than 1.2 metres above the natural ground level or the height of the surrounding vines.

- Large Scale Large Scale Tourist Developments shall be permitted broader designs that whilst not meeting dimensional and numeric requirements of the Signage Code, still meet the objectives. Large-scale developments shall lodge a development application that details a signage theme for the property as part of the overall landscape design. The development application will have a merits based assessment. Issues taken into consideration include but are not limited to:
 - surrounding landscape;
 - this Code;
 - impact on the rural character of the area;
 - integration of the signage with buildings and other landscape elements.

How many signs may I have on my property?

- a) Each property shall be allowed a maximum of **two (2) frontage signs** visible from the property frontage or public place.
- b) Properties that have frontage to more than one road may have a total of three (3) frontage signs provided that:
 - i) two (2) of the signs are located either side of the nominated principal entrance;
 - ii) only one (1) sign is located on the road not used as the principal entrance;
 - iii) the road that is not used as the main access point has a frontage of more than 250 metres.
- c) Properties with a number of businesses operating from the one site may be allowed to increase the advertising area of the frontage sign(s) to 4.0m².
- d) Existing post supported signs may be modified to accommodate banner advertising as identified within the Code only where the existing post supported sign has been previously approved by the Council.
- e) There is no maximum limit to the number of **internal directory signs** or **internal promotion signs** able to be placed on a property so long as they are not visible or directed towards public places or adjoining roadways. A development application accompanied by a 'site signage plan' will be required to be lodged for all 'merits' type signs. The plan should demonstrate the need for the signs based on the range and distribution of facilities and uses on the property with regard to the objectives of this Code. Council will require that the signs erected on the site comply with the approved site signage plan.
- f) One **vineyard identification sign** is permitted for each separate vineyard.
- g) Not more than two **gateway signs** shall be permitted at the entrance to a property.

Where should the signs be placed?

- a) Signs should be located on and within the boundaries of the land/property to which they relate and the onus is on the operator to position these to achieve the best effect consistent with other objectives of this code.
- b) Where signs are introduced to a bushland setting consideration should be given to the age of the surrounding trees and whether the trees will grow to obscure the sign from view. Similarly, where signs form part of a new landscape treatment care should be taken in the selection of plant species to ensure long term visibility of the signs.
- c) Signs should have adequate clearance around power poles and electricity wires.
- d) Signs should not be placed where they may cause obstruction to visibility for motorists and/or pedestrians. Signs considered by the Council to be a potential risk to traffic in what is largely a 80 kph speed zone shall be referred to the NSW Roads and Traffic Authority or to the Cessnock Local Traffic Committee for advice.
- e) All signs, regardless of their type, should form an integral part of the landscape treatment of the development.

Are there any exceptions to the general locational requirements for private business identification signs?

Council may in exceptional circumstances consider the erection or placement of a private business identification sign(s) on the public road reserve or on an adjoining property. In this regard Council will take into account the following:

- a) the business or facility is located on land which does not have sufficient road frontage (eg. a battleaxe drive access or right-of-way) to enable the erection of a sign. If more than one property gains access from such access arrangements, only one common advertising structure shall be used so as to avoid a clutter of advertising signs;
- b) the configuration of the road reserve in front of the land means that there is a substantial distance from the vehicle carriageway to the property boundary which would make visibility of the sign difficult;
- c) the property boundary is screened by existing vegetation which has conservation significance and which would obstruct views to the sign.
- d) the property or business has some other unique or unusual circumstance which does not allow the property direct visual access from a public road, or has been disadvantaged in someway by an action outside the control of the owner.

Where private signs are located outside the boundaries of the land the consent of the road authority or the private landowner (whichever is relevant in the case) must be obtained.

Where private signs are located outside the boundaries of the land they should not physically obstruct a vehicle carriageway or road shoulder and should, where appropriate, enable pedestrian access along a footpath area.

Are there any exceptions to the size requirements for private signs?

Council may consider the erection of a sign(s) which has a sign face area greater than the maximum area prescribed under this Code only where:

- a) the configuration of the road reserve in front of the land means that there is a substantial distance from the vehicle carriageway to the property boundary which would make visibility of the sign difficult; or
- b) where the sign is a wall structure incorporated into a feature landscaping treatment of high visual quality. In such circumstances Council must be satisfied that the wall and landscape treatment are in scale with the size of the development and the property on which it is located; or
- c) where there is only one frontage sign proposed and/or the site has a narrow frontage, larger signs will be considered on their merits provided they are in scale with the built and natural environment. Such signs must have an area not exceeding 4.0m². In this respect no other signage is allowed to be erected that is directed towards a public place (ie frontage signs, gateway signs etc).

What colours can be used on private signs?

The use of colour should reflect the character of the Vineyards District as a place of early settlement and a rural, viticultural landscape with heritage places. While there is no limitation to the range of colours that may be used for private signage, the colour tones should be subdued. For example, bright or fluorescent colours will be prohibited.

What form of sign illumination is permitted within the Vineyards District?

- a) Internally illuminated, backlit, highly reflective, scintillating or neon signs are prohibited within the Vineyards District. Moderate intensity external lighting of frontage signs and gateway signs only will be permitted.
- b) Lighting details must be submitted to Council in conjunction with the development application for the sign.
- c) Lighting of signage internal to a site is discouraged. Where however, lighting is essential, it shall be of low intensity. Lighting details are to be provided with the development application.

Vineyard Identification Signs

Vineyard identification signs must comply with the design and size criteria specified in this Code.

- a) One vineyard identification sign is permitted for each individual vineyard on a property.
- b) The design of the sign face should reflect the design of the relevant wine bottle label(s).

Off-Site Directional Signage

Private signs that identify or promote businesses or activities within the vineyards district **must** be located on the actual land/property which contains the business or activity identified or promoted on the sign itself.

Off-site directional or promotional signs are strictly prohibited under this Code.

Real Estate Signs

- a) **Signs that don't require approval -** Real estate signs shall comply with the size requirements specified in this Code and shall be removed within seven (7) days of the settlement of the property sale. The signs must be located on the land that is being offered for sale, and provided they have an area not exceeding 5.0m², they can be erected without approval from Council.
- b) Real Estate signs that require approval Real Estate signs with an area greater than 5.0m² require Council approval. However, such advertising signs should not exceed 10m² in area.

Political Advertising

Political advertising must be carried out in accordance with the provisions of:

- a) Commonwealth Electoral Act 1918 (Federal);
- b) The Parliamentary Electorates and Elections Act 1912 (State); and
- c) The New South Wales Local Government Act 1993 (Local).

Sandwich Board Signs

a) Sandwich board signs must comply with the size criteria specified within this Code and must be securely weighted or anchored to prevent them being blown over.

- b) Not more than two sandwich board signs are permitted for each business operating from a site.
- c) The sandwich board signs are not to be located in close proximity to, or orientated towards any public road or public place external to the property for the purposes of advertising to the general public.
- d) Sandwich board signs must be wholly contained within the property boundary and shall be located to ensure that internal roadways are not obstructed and that visibility is maintained for pedestrians and drivers.
- e) Chalkboard areas are permitted provided they are professionally presented.
- f) Sandwich boards are only to be displayed during the normal trading hours of the business.
- g) Provided that the sandwich board signs comply with all of the above requirements, they can be erected *without Council approval*.

Signs which Affect Heritage Items or Conservation Areas

A person(s) proposing to erect a private business identification/promotion sign which is visible from a heritage item or conservation area shall obtain appropriate heritage advice from Council prior to design work commencing. Applications for such advertising will be assessed with regard to the impact of the proposal on the significance of the heritage item or place.

Quality and Maintenance

A person(s) intending to erect a sign is strongly advised to obtain professional design advice in relation to sign form, colour and size. Poor quality signs give an undesirable impression to clients, customers and tourists.

Council will not condone poorly maintained and amateurish signs. Signs which in the opinion of Council have become unsafe or unsightly will be required to be repaired, renovated, removed or replaced as appropriate in the circumstances. Signs should be designed for low maintenance (eg. use of treated timber) to minimum the chance of vandalism.

Unauthorised Private Signs.

Landowners who have erected private advertising signs on private land which do not have development approval will be requested in writing to remove the relevant signs. Following the expiration of a reasonable period for compliance, formal legal action will be instituted where requests have not been complied with.

Where unauthorised signs are erected on a public road or on public land they will be impounded by the Council without notice and an administration fee levied for their release. After a reasonable period materials will be sold to offset Council's costs.

Temporary Advertising Structures

Post-supported structures (with the provision for banner advertising) that have been approved by Council, do not require consent to attach a temporary banner. However, the banner must be removed within two (2) months or a period as determined by Council.

How do I obtain approval for a sign?

A development application form can be obtained from the Council and should be completed and returned to Council with the required fee. (Contact Cessnock Council's Customer Services Department for current fees).

The Code outlines the information that you must provide to Council in conjunction with your development application. The Code also lists the range of issues that are taken into consideration by Council in the assessment of a development application to erect a sign(s).

Advertising and Notification

Development Applications that do not comply with this chapter will be notified to adjoining landowners, advertised and notified to community groups at the discretion of the Development Services Manager.

What makes up the "roadside directional signage system"?

Roadside directional signage within the Vineyards District is administered by Council. The aim of this system is not to advertise local businesses, but to ensure that visitors are able to find their way around the vineyards with the least amount of difficulty. The various components of the roadside directional signage system comprise the same materials and design character to ensure consistent communication to the public and a strong affinity with the character of the rural landscape. The roadside directional signage system is divided into the following components:

- a) **Visitor Information Maps** these have been provided at key decision points both within and at the perimeter of the Vineyards District. These maps are located in information bays, which provide opportunity for drivers to pull off the road to read them and therefore avoid becoming a hazard to moving traffic.
- b) **Vineyards district entry signs** identify and direct visitors to various precincts within the Vineyards District eg. Pokolbin, Mount View, Lovedale, Rothbury and the Brokenback Ranges.
- c) **Fingerboard Signs** these have been provided by Council at intersections of lesser importance than those provided with information maps. The fingerboard signs show the road name, the business name, an arrow specifying the direction of the business and a distance measurement from the sign to the business.
- d) A **Visitor Information Guide** containing a **foldout map** can be obtained from the Cessnock Visitor Information Centre or most wineries, businesses or tourist facilities operating within the Vineyards District.

How do I place my business onto the roadside directional signage system?

System users shall complete a registration form and pay a one-off fee for inclusion of a business on the system. This fee covers inclusion on all roadside maps as well as permitting placement on the fingerboard signs as permitted under this Code.

On how many fingerboard signs will my business feature?

A business is permitted to feature on those roadside fingerboards located at the intersections to the road to which the business has its frontage. For example, a winery located on a road which intersects with two other roads will be permitted to display two fingerboard signs - one at each of the intersections.

Are there limitations to the information I can have included on the fingerboard signs?

Past experience has shown that fingerboard signs work more effectively if there is minimal clutter on each fingerboard. The signs are intended to be easily read by moving vehicles as they pass through an intersection and therefore it is important that the minimum number of letters are used to provide maximum clarity. Good fingerboard content will use only one or two key words to identify a facility. For example:

"SMITHTON ESTATE WINERY" is undesirable.

SMITHTON ESTATE WINERY

A preferable option is "SMITHTON ESTATE"

SMITHTON ESTATE

An even better option is "SMITHTON"

SMITHTON

The fingerboards do not display individual corporate fonts or logos. The standard font used is Times Roman with the font size being determined by the number of letters on the fingerboard panel.