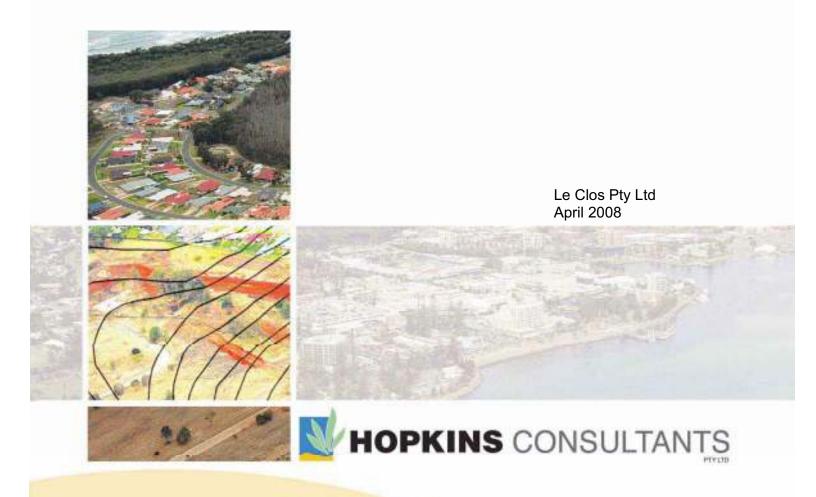
Major Project Application Rural Residential Subdivision Major Project No. MP-06-0212

Le Clos Verdun Estate – Sancrox Road, Sancrox

ENVIRONMENTAL ASSESSMENT



STATEMENT OF VALIDITY

Submission of Environmental Assessment

Prepared under Part 3A of the Environmental Planning and Assessment Act 1979

Environmental Assessment prepared by

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Major Project No. MP 06 0212

Subject Land: Lot 51 DP775871, Lots 1-13, 15-66, 68, 70-72, 74-80, 83-

84, 86-88 DP791199 and Lots 90-95 DP805549, Sancrox

Road, Sancrox.

Environmental Assessment

This Environmental Assessment relating to the proposed re-subdivision of the aforementioned land has been prepared in accordance with the Director-General's Environmental Assessment Requirements and related provisions of the Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2000.

The Environmental Assessment includes information provided by Hopkins Consultants, specialist sub-consultants and relevant government agencies. To the author's knowledge, the information provided by Hopkins Consultants, by any of the third parties and/or otherwise reported within the Environmental Assessment is correct and is neither false nor misleading.

Andrew Lister 11th April 2008

EXECUTIVE SUMMARY

Hopkins Consultants have been engaged to project manage the re-subdivision of the Le Clos Verdun rural residential estate. The development proposal has been determined by the Department of Planning to be a Major Project under the provisions of Part 3A of the Environmental Planning and Assessment Act 1979. The resubdivision thus requires the lodgement of an Environmental Assessment pursuant to State Environmental Planning Policy (Major Projects).

This report contains a description of the subject site, a background to its subdivision history and specific details of the proposed development. It addresses the relevant provisions of all applicable environmental planning instruments and development controls. The report considers the likely impacts of the development on the environment, and the suitability of the site. Specifically, the report responds to the Director General's Requirements issued in relation to the project.

PRECIS

The site is known as 'Le Clos Verdun' and is a rural residential estate located on Sancrox Road, Sancrox. Sancrox is a rural locality approximately 15km west of Port Macquarie on the Mid North Coast of New South Wales, and is located within the Port Macquarie-Hastings Council Local Government Area.

Le Clos Verdun was created in the late 1980's, and was registered in 1989 as a shared lot viticulture/residential farming enterprise. The development failed as an agricultural venture and now fails to meet current health and building standards for the residential occupation of the land. Some 80 land-owners invested in this enterprise, but have not seen any return on this investment. They are now burdened with the ongoing costs associated with the unusable land in its current state.

The project comprises the re-subdivision of the subject site into 144 rural residential lots under community title. The land lies within the Investigation Area of Port Macquarie-Hastings Council's Rural Residential Strategy document, and has been recently rezoned to enable this re-subdivision accordingly.

The majority of lots are approximately 8000m² or larger, with the average lot size across the proposed plan of subdivision achieving 1.2 hectares. The re-subdivision thereby serves to rationalise the existing subdivision pattern and multiple ownerships, and to satisfy Council's objectives for the establishment of additional rural residential lots in the significantly under-supplied local market.

The subdivision is to be undertaken as a Community Titled development due to the existing subdivision pattern and multiple-land ownership within the estate. Both the existing, and the proposed future infrastructure and essential services to the estate are to be privately owned and maintained. Community-title subdivision, and the registration of a Development Contract between the community association and PMHC will allow for the creation of this subdivision in a single linen release, and enable the appropriate management of the provision and ongoing maintenance of the private infrastructure and access roads.

LEGISLATIVE CONTEXT

The proponent seeks the Minister's approval pursuant to Section 75P of the Environmental Planning and Assessment Act 1979 for the concept plan which comprises the following:

- Boundary adjustment between Lot 51 in DP 775871, and the neighbouring parcels (Lots 22, 28, 52, 53, 56 and 86 in DP 791199 and Lot 92 DP 805549), under Torrens Title. Proposed Lot 144 (the present Lot 51) in the proposed subdivision layout is not to form part of the Community Title subdivision, nor does it form part of the Community Association;
- 2. Re-subdivision of the remaining Le Clos Verdun estate into a total of 143 rural residential lots under Community Title;
- 3. Retention of existing residences within the estate;
- 4. Retention and augmentation of existing roads, water mains, telecommunication lines and electricity cables which currently service the estate, and construction of new infrastructure as necessary;
- Establishment of a future vehicular access link to the adjacent rural land to the east identified under Council's Rural Residential Strategy for future investigation;
- 6. Minor filling for Lots 108-110, and Lots 140-142 in the community title subdivision;
- Landscaping works which include the management of existing landscaping within the estate and re-planting within access and drainage routes, ridgelines, gullies and the revegetation and rehabilitation of disturbed sections within the Haydons Creek Riparian Zone;
- 8. An Integrated Surface and Stormwater Management strategy incorporating existing inter-allotment drainage, proposed bio-retention systems, culvert crossings for Haydons Creek road access, sediment control/detention dams to be located within community land, and a new dam structure to the northeast of the proposed cluster lots;
- 9. A 'Cluster System' for the treatment of effluent from proposed Lots 45-49 via a shared effluent disposal site located approximately 75m to the south-east (proposed Lot 1C);
- 10. An integrated system of fire-trails within the rear of bushfire prone sites, acting as linkages within the proposed internal road system for emergency vehicle access:
- 11. Establishment of future nature walkways along the Hastings River and Haydons Creek Crown Reserves on the perimeter of the development site;
- 12. The establishment of Community Amenities including future tennis courts, a community building, amenities block, children's playground and associated passive and active recreation areas within the Community Open Space lot.

The proponent also seeks the Minister's declaration under Section 75P(1)(c) of the Act that no further application, report, studies or assessment is necessary for the Items numbered 1 – 10 in the project summary above. This is to enable those components of the project to proceed directly to construction certificate and/or subdivision certificate without further approvals being required under Parts 3A, 4, or 5 of the Environmental Planning and Assessment Act 1979.

The proponent also seeks the Minister's determination as to the environmental assessment requirements for approval to carry out Items numbered 11 - 12 in the aforementioned project summary pursuant to Section 75P(1)(a) of the Act.

KEY ISSUES

In examining the in-principle merits of the rural residential re-subdivision, the Department of Planning consulted with a range of Government Authorities to determine those "Key Issues" of relevance to the site's development. These Key Issues form the basis of the Director General's Requirements for this site's resubdivision, and can be summarised as:

- Subdivision layout, desired Future Character and Sustainability;
- Water Cycle Management;
- Flooding;
- Flora and Fauna;
- Aboriginal and Cultural Heritage;
- Contamination and Remediation:
- Wastewater Management;
- Bushfire Hazard;
- Agricultural Potential;
- Mineral Resources:
- Traffic and Access:
- Riparian Corridor and Foreshore Access;
- Provision of Public Service and Infrastructure; &
- Planning Agreements and/or Developer Contributions

To appropriately investigate these issues, a range of sub-consultants formed a Project Team, the recommendations of which have then formed and guided this Environmental Assessment report. Copies of each specialist report are contained within this project application, as are further comments as necessary to address these Key Issues.

The examination of the Key Issues has guided the design process by which the proposed subdivision layout has been derived. These investigations have also resulted in recommendations to undertake a range of management, monitoring and mitigation measures necessary to ensure that potential impacts to the environment are appropriately managed. These measures are reflected in a draft Statement of Commitments to which the land-owners are offering to satisfy.

After considering a range of alternative options to the rationalisation and development of this land, the subdivision project outlined in this report ha been determined to be the most appropriate design response to the Director General's Requirements, to the opportunities and constraints of the site, and to the resolution of the problems associated with the existing subdivision pattern and multiple ownerships.

The development responds directly to the objectives of the Port Macquarie-Hastings Council Rural Residential Strategy. The proposed re-subdivision of the rural residential estate is consistent with all applicable planning provisions and is considered to be appropriate for the locality and the subject site.

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Appendix B - Site Analysis Plans

Appendix C - Photographic Plates (Plates 1-20)

Appendix D - Proposed Plans of Subdivision (Sheets 1-10)

Appendix E - Landscape Principles Plan (Sheets 1-2)

Appendix F Draft Community Management Statement

Appendix G - Draft Development Contract

Appendix H - Ecological Assessment (including Addendum Reports)

Appendix I - Phase I and Phase II Environmental Sites Investigation

Appendix J - Effluent Disposal Assessment

Appendix K - Bushfire Hazard Assessment

Appendix L - Agricultural Suitability Assessment

Appendix M - Archaeological Sites Investigation

Appendix N - Copies of Director General's Requirements and

Correspondence with Relevant Government

Authorities



1 Scope of the Project

1.1 INTRODUCTION

The development site comprises an existing rural residential estate established in the 1980's known as Le Clos Verdun. The estate is located in Sancrox Road and is over 188ha in area comprising 84 residential lots, each attached to a corresponding viticulture plot. All but 4 of these properties are currently vacant.

The residential lots range in area upwards from 1520m², with farming plots generally around 1.3 – 1.8 hectares. Some farming plots directly adjoin their residential lot, while others are detached from their corresponding house plot. This was a failed initiative to replicate the "Le Clos" farming style of shared viticulture plots from Europe. The viticulture enterprise was not successful due to a number of operational problems, and current legislation and on-site effluent disposal regulations no longer permit blocks of this size to be built upon for residential purposes.

The land is thus sterilised from any meaningful rural land usage, and is presently unsuitable for housing. This problem has been recognised previously by PMHC, and a moratorium preventing any further development has been placed over the estate until a co-ordinated re-development strategy is put in place.

Accordingly, the current proposal is for a 144 lot re-subdivision of the entire estate, thereby creating lot sizes of suitable area to meet current rural residential standards. The average lot size created by the proposed re-subdivision is 1.2 hectares, with most blocks achieving a minimum of 8000m² in area.

To enable this re-subdivision to occur, the support of Port Macquarie-Hastings Council and the Department of Planning was sought to rezone the estate to 1(r1) Rural Residential. This occurred in late 2006, with gazettal of the LEP amendment taking effect on 12 January 2007. The proposed re-subdivision is permissible with consent under this zoning.

The 1(r1) zoned, developable portions of the site do not contain significant native vegetation, however the estate lies on the fringe of riparian vegetation adjacent Haydons Creek. This vegetation, and a small stand of trees in the central west of the estate, have been rezoned 7(h) Environment Protection – Habitat to ensure their preservation.

Potential impacts associated with the proposed development, with specific regard to the Key Issues raised in the Director General's Requirements, have been addressed within this environmental assessment. This includes the undertaking of investigations by specialist consultants where necessary, the findings of which are annexed to this report.

These issues have been identified via a thorough investigation of the environmental parameters of the site and its surrounding area, recognition of the Director General Requirements, and consultation with Port Macquarie Hastings Council and relevant Government Authorities.

1.2 FORMAT OF THIS ENVIRONMENTAL ASSESSMENT

This Environmental Assessment is set out as follows:



Section 2: Subject Land

Analysis of the subject land in context with the existing environment.

Section 3: Project Application

Description of the proposed development, including background information regarding previous land use activity, nature of the community title subdivision proposal, and the phased construction of private infrastructure.

Section 4: Director General's Requirements

A summary of the requirements for this Environmental Assessment as outlined in correspondence from the Director General's Office, and in consultation with Government Departments and Port Macquarie-Hastings Council. A table summarising the Key Issues raised in the DGRs, which outlines the relevant Section of the report that addresses each issue is also contained herein.

Section 5: Statutory and Non Statutory Planning Provisions

An analysis of the statutory context of the proposed development, including all environmental planning instruments, development control plans, strategic plans and policies applicable to the proposal.

Section 6: Response to Director General's Requirements and Government Correspondence

This Section incorporates the assessment of the potential impacts of the proposal on the environment, having regard to the Key Issues identified in the Director General's Requirements.

Section 7: Mitigation Measures & Draft Statement of Commitments

This Section outlines the intended environmental management, mitigation and monitoring measures to be implemented to address the potential environmental impacts of the project.

Section 8: Justification for the Development and Alternatives Considered

Provides justification for undertaking the proposed development, having regard to biophysical, economic and social considerations, and the principles of ecologically sustainable development:

Section 9: Summary

A summary of the proposed development, its environmental context, the intended mitigation measures to address potential environmental concerns, and the justification for the re-subdivision of the rural residential development.

Appendices

The plans and documents outlined in Attachment 2 of the Director General's Requirements, and the specialist studies undertaken to address the Key Issues are annexed to the main body of this report.



1.3 PROJECT TEAM

Given the complexities of this project application, a range of sub-consultants have been engaged to investigate specific elements of the subject site itself, and the potential impacts associated with the proposed residential subdivision.

The project team comprises:

- <u>Hopkins Consultants</u> is responsible for the project management of this application, the preparation of subdivision plans, servicing design and related supporting documentation including this Environmental Assessment report. Hopkins Consultants will act as the principle contact for the proponent during the project assessment;
- <u>Hastings Business Lawyers</u> have prepared a draft Community Management Statement to enable the subdivision to occur under the Community Titles Legislation. The draft Statement includes relevant by-laws pertaining to the use and management of community land within the estate, as well as restrictions and guidelines relating to the carrying out of land-use activities, and basic architectural and landscaping standards applying to development on private land.

A copy of the Draft Community Management Statement is annexed to this report at **Appendix F**.

Hastings Business Lawyers have also prepared a Draft Development Contract to be entered into between Port Macquarie-Hastings Council and the land-owners (the Community Association), and which outlines the process by which the construction of infrastructure and essential services is to be phased in accordance with the Community Scheme.

A copy of this Draft Development Contract is contained in **Appendix G**.

North Coast Forestry and Ecology Services undertook an ecological assessment of the site as part of the rezoning, proposed re-subdivision and future dwelling construction of the subject site. This report has also been recently updated to address the latest subdivision proposal against the changes to the Threatened Species Legislation since the rezoning was gazetted in 2006.

A copy of both the original, and the addendum report is annexed at **Appendix H**;

- Environmental Resource Management prepared a site/soils contamination investigation of the existing rural residential estate in 2004. The objective of the investigation was to evaluate the impacts of the site's previous and current landusage, and to assess the potential for soil or groundwater contamination. A copy of this report is contained in Appendix I;
- Coffey Environmental were responsible for undertaking an effluent disposal capability assessment for the estate. Specifically, this report was to address the merits of proposed sites to accommodate a range of individual site disposal systems, and to evaluate a cluster system of shared disposal to service marginal sites. A copy of their report is contained in Appendix J;
- Midcoast Environmental Services were responsible for preparing the bushfire hazard assessment of the proposed residential subdivision. A copy of their report is contained in Appendix K.



▶ Environmental & Earth Sciences undertook an Agricultural Suitability Assessment of the Le Clos Verdun estate in 2004. The objective of the assessment was to determine whether the site comprised "prime agricultural land". A copy of their report is annexed at **Appendix L**.



2 Subject Land

2.1 SUBJECT SITE

The original 'Le Clos Verdun' Estate is described in real property terms as Lot 51 DP775871, Lots 1-13, 15-66, 68, 70-72, 74-80, 83-84, 86-88 DP791199 and Lots 90-95 DP805549. It has frontage to Sancrox Road, River Bend Road, Bengal Street, Ferry Street and Wharf Street, Sancrox. The site is also bordered by Haydons Creek to the east and the Hastings River to the north. "Sancrox" is a rural locality on the Mid North Coast of NSW, about 5 hours drive north of Sydney, and 15 minutes drive west of Port Macquarie.

Appendix A contains a locality map which shows the context of the site within the Hastings Local Government Area. **Appendix A** also contains copies of the relevant Deposited Plans of the parent parcel.

The land has a total area of approximately 189 hectares, and the developable land has been recently rezoned 1(r1) Rural Residential under Hastings Local Environmental Plan 2001. Those sections of the site which retain some ecological and/or scenic value have been specifically zoned 7(h) Environment Protection - Habitat. The north-western boundary of the estate adjoins an area of public reserve zoned 6(a) Open Space separating the site from the Hastings River.

A copy of the zoning map relating to the draft LEP which was gazetted and rezoned the property in 2007 is contained within **Appendix A**.

2.2 SITE CONTEXT

Development surrounding the site comprises a mix of established rural residential lots, and rural land identified for subdivision investigation under PMHC's Rural Residential Strategy. There are a number of similarly sized englobo parcels neighbouring the subject land which are capable of smaller lot re-subdivision. The subject site is the first large-scale rezoning gazetted within the Sancrox area under the provisions of this Council Strategy.

A number of established small-lot, rural residential developments exist to the west of Le Clos Verdun along Rawdon Island Road, Walters Road, Muscio Road and Warrigal Ridge. Another viticultural farming estate (Le Clos Sancrox) is located south-east of the subject land, and is similarly identified for future rural residential development under the Council strategy. This site is similarly constrained by its historical subdivision pattern, and is to be rezoned and re-subdivided accordingly under this Strategy.

Land immediately adjoining to the east is of comparable size to the subject site and is also located within the Council's Rural Residential Strategy. A rezoning proposal is currently before Port Macquarie Hastings Council for this site.

The general locality of Sancrox itself is rural in character, and is zoned accordingly. Large-lot farming properties are located opposite the Hastings River, within the confines of Rawdon Island. These properties mainly consist of grazing and dairying farming parcels. Access to these properties is obtained via Rawdon Island Road.



The Sancrox locality is bordered by the Pacific Highway located approximately 2km to the east of the Verdun site. A future Employment Precinct and Enterprise Centre is under the early stages of consideration by Port Macquarie-Hastings Council per its adopted Industrial Strategy in this area. A number of existing commercial/industrial activities are present here, including Expressway Spares, HF Hand Constructors and Hanson's Quarry. However, this future enterprise centre is remote from the subject site, is well separated by intervening topography, and no adverse impacts are anticipated either to, or from this commercial area in respect to the rural residential proposal.

2.3 SITE ANALYSIS

A series of Site Analysis Plans are contained in **Appendix B** to this report. These plans illustrate the range of opportunities and constraints inherent to the site, which include its present subdivision pattern, ecology, infrastructure, bushfire hazard, flooding, acid sulphate soils, and the site's location within the NSW Coastal Zone.

Comments on the primary features of the site are listed below:

2.3.1 Subdivision Pattern and Land Tenure

The existing subdivision pattern reflects its establishment as a viticulture small plot land-sharing scheme in the 1980's. The estate's main entry road and four secondary roads are in place as are primary services such as water, electricity and telecommunications. The gently undulating property has been cleared for the purposes of the original viticulture farming and many plots are still fenced.

This current subdivision pattern of the Le Clos Verdun estate effectively sterilises the land. The estate can no longer be put to its originally intended purpose due to changes in building and health regulations. Just as relevant is the fact that the small-lot subdivision pattern, and multiple ownerships prevent the site being suitable for any future broad-scale farming practices. There are over 80 individuals who comprise the estate ownership, each of whom have individually agreed to pursue the re-subdivision of the estate.

2.3.2 Ecology

The fringes of the site are characterised by riparian rainforest vegetation corridors lining Haydons Creek, and the less vegetated, but equally sensitive riverbank vegetation of the Hastings River. These areas are recognised as sensitive sites per the provisions of SEPP No.71, and are now zoned appropriately to ensure their conservation. These zones form a strip of public reserve approximately 30m in width, and are not proposed to be affected by the development the subject of this Environmental Assessment.

A small copse of trees is located on the highest point of the property and straddles the existing western cul-se-sac. This stand of trees sits atop a natural ridge-line within the estate and while heavily disturbed, retains some characteristics of a dry sclerophyll forest. The copse is comprised of tall, individual trees with an open canopy and supports no understorey vegetation, largely due to past farming practices. As with the riparian vegetation, this copse has been specifically rezoned 7(h) Environment Protection – Habitat, and will be conserved.

A remnant of disturbed Swamp/sclerophyll forest also exists along the south-eastern fringe of the existing rural residential estate, adjacent the upper reaches of Haydons



Creek. This regrowth forest has similarly been rezoned 7(h), and extends along the Riparian corridor of Haydons Creek back to Sancrox Road. A cleared vehicular track and various motorbike trails traverse this area, establishing cleared land for the establishment of a future vehicular access without necessitating further clearing.

There are otherwise few trees on the site other than for ornamental tree/hedge plantings along the entry road and two internal roads, and within residential gardens of the established dwelling sites within the estate.

2.3.3 Infrastructure

The majority of existing lots within the estate are vacant. Four (4) residences presently exist, and support a range of smaller outbuildings. Many of the vacant residential and farming plots have been fenced, however the limitations of current health and building regulations have prevented any further dwellings being established in recent years.

Limited infrastructure has been established along the entry road and internal roads within the estate. Town reticulated water is connected along these access roads, as are telecommunications and electricity. These services are of sufficient capacity to service the existing residential lots within the estate, should there have been ability for their intended land-use to have been realised. Those parcels large enough to comply with relevant standards largely comprise the farming plots. In many cases however, direct road frontage and essential services were not established to these parcels given their original shared-lot, agricultural purpose.

2.3.4 Bushfire Hazard

The vegetated fringes of the site pose a medium bushfire risk to future residential occupation of the site. Category 1 Vegetation has been mapped along the Haydons Creek riparian zone, and to the west of the unformed Riverbend Road along the site's western boundary. A small proportion of the site is affected by this vegetation, or otherwise located within the identified buffer to these areas. This is illustrated in the analysis plans contained in **Appendix B**.

2.3.5 Flooding

Parts of the site are located at or below the 1 in 100 year flood level which has been calculated at 4.5m AHD for the site. This information has been obtained from the recent modelling of the Hastings River undertaken on PMHC's behalf by Patterson Britton & Partners Pty Ltd (Figure 24 of *Hastings River Flood Study – Issue No.3 – August 2006*). The 1 in 20 year flood level is taken to be 4.0m AHD for the site. This is illustrated in the analysis plans contained in **Appendix B**.

2.3.6 Acid Sulphate Soils

Marginal fringes of the 1(r1) zoned land are identified as potentially supporting Class 4 Acid Sulphate Soils. Class 4 soils are characteristically occur more than 2.0m below ground surface. Some areas of Class 2 and 3 soils are identified as potentially occurring within the fringes of the Hastings River and Haydons Creek Riparian zone. These are illustrated in the analysis plans contained in **Appendix B**.



2.3.7 NSW Coastal Zone

The reason for this application's preparation and necessity for assessment under Part 3A of the Environmental Planning and Assessment Act 1979 is in response to the development's location within the NSW Coastal Zone. The majority of the site is identified within this zone, with that land located within 100m of the Hastings River and the tidal waters of Haydons Creek being classified as a "sensitive coastal location". This is illustrated in the analysis plans contained in **Appendix B**.

A series of Photographic Plates of the site are contained in **Appendix C**.



3 Concept Plan Application

3.1 RE-SUBDIVISION PROPOSAL

The plans of the proposed subdivision are contained in **Appendix D** to this report. The subdivision layout is replicated in a number of sheets offering various details regarding the re-subdivision proposal, namely:

Sheet 1 Plan of proposed subdivision (divided into sheets 1A-1C); Sheet 2 Plan of proposed subdivision with contours & flood levels; Sheet 3 Plan of proposed subdivision with zone boundaries: Sheet 4 Plan of proposed subdivision with aerial photograph overlay; Sheet 5 - Plan of proposed subdivision with flood levels and intended Sheet 6 - Plan illustrating the subdivision's integrated surface and stormwater strategy (including MUSIC calculation data); Sheet 7 Plan illustrating the Cluster Lot system of effluent disposal proposed for Lots 45-49; Plan of the proposed Access Strategy for the subdivision; Sheet 8 Sheet 9 Plan of proposed staging/phasing strategy;

The Landscape Principles Plan for the proposed subdivision is divided into 2 Sheets covering the northern and southern sections of the development site (Sheet 1 and 2 respectively), and is contained in **Appendix E**.

Sheet 10 - Comparison of existing and proposed lot layouts.

In summary, the key components of the proposed re-subdivision of this rural residential estate are:

Boundary adjustment between Lot 51 in DP 775871, and the neighbouring parcels (Lots 22, 28, 52, 53, 56 and 86 in DP 791199 and Lot 92 DP 805549), under Torrens Title. Proposed Lot 144 (the present Lot 51) in the proposed subdivision layout is not to form part of the Community Title subdivision, nor does it form part of the Community Association. The draft Community Management Statement and Draft Development Contract (referred to below) do not apply to this parcel of land.

The boundary adjustment is minor, complies with all minimum development standards applying to the 1(r1) zoning, and allows for the rationalisation of lot boundaries associated with the re-configuration of this component of the overall subdivision plan;

- Re-subdivision of the remaining Le Clos Verdun estate into a total of 143 rural residential lots under Community Title;
- Lot sizes generally range in area from 4200m² (proposed Lots 47, 48 and 49), up to 8000m². The subdivision layout also includes a variety of larger lot sizes such as 2.32 Ha (Lot 80), 4.93 Ha (Lot 113), and up to 15.21 Ha for proposed Lot 52;
- The subdivision pattern achieves an average lot size of approximately 1.2 hectares;



- Existing residences within the estate are to be retained, and are provided within appropriately sized lots to accommodate area for the on-site disposal of effluent, and ensure compliance with relevant BCA, and bushfire management standards;
- It is proposed to retain as much of the existing infrastructure within the rural
 residential estate as is possible. Existing roads, water mains,
 telecommunication lines and electricity cables currently service the estate.
 While it is anticipated that much of this infrastructure may require replacement
 in the longer term, there are opportunities for most assets to be retained;
- Road access is currently available to approximately 76 Lots within the existing estate. Of these, water and electricity infrastructure is currently connected to approximately 53 lots;
- The creation of 20 lots to the east of Haydons Creek in the site's south-east will replace the 19 existing, un-serviced lots in this location. An extension of the internal road system will link these lots to the estate proper;
- The proposed access road extending to the aforementioned 20 lots has been designed to link with the adjacent rural land to the east identified under Council's Rural Residential Strategy for future investigation. An application to rezone this adjoining land is currently before Council;
- The potential building envelopes of all lots are located above the 1 in 100 year flood level. Of the 144 lots in the subdivision, only minor filling is proposed for Lots 108-110, and Lots 140-142. In each instance, the filling is minor, does not involve the disturbance of any existing vegetation, and will ensure the establishment of flood-free development parcels. Refer also to Section 6.3 of this report;
- Consultation with PMHC has resulted in a modification to the depth of proposed Lots 140-142 in the estate's south-east adjacent Sancrox Road. The amended subdivision now establishes sufficient building envelopes (minimum of 50m depth) outside each Lots' requisite APZ, which are located behind the building line and are otherwise free of any other environmental constraints:
- A Landscape Principles Plan has been prepared to address the management of existing landscaping within the estate, the proposed re-planting strategy within existing access and drainage routes, the identification and treatment of topographical features of the site such as ridge-lines, gullies and the riparian zones, a planting strategy for new access and drainage routes within the phased subdivision, and the revegetation and rehabilitation of disturbed sections within the Haydons Creek Riparian Zone. The two sheets which make up the Landscape Principles Plan are contained in Appendix E.
- An Integrated Surface and Stormwater Management strategy is illustrated in Sheet 6 of the plans of subdivision in Appendix D to this report. The system is described in detail within Section 6.2 of this report, but incorporates existing inter-allotment drainage, proposed bio-retention systems, culvert crossings for Haydons Creek road access, sediment control/detention dams to be located within community land, and a new dam structure to the northeast of the proposed cluster lots.



- A Cluster System for the treatment of effluent from 5 smaller lots is proposed in the northern part of the Estate. Proposed Lots 45-49 have areas ranging from 4200m² to 4500m². Given the parcel size, and proximity of these lots to the Hastings River, it is intended to establish a shared effluent disposal site located approximately 75m to the south-east (proposed Lot 1C). Full details regarding the treatment and construction of this infrastructure is discussed in **Section 6.7** of this report, and illustrated in **Sheet 7** of the plans of subdivision contained in **Appendix D**;
- An integrated system of fire-trails is proposed within the rear of affected sites, and serve to create linkages within the proposed internal road system for emergency vehicle access;
- All requisite APZs necessary to ensure future residential development is compliant with relevant building standards have been retained within each lot to which the APZ relates to:
- At the request of PMHC's engineers, an internal loop road was introduced to
 enable more efficient circulation of domestic traffic, while also optimising
 access opportunities for service and emergency vehicles. Note that an earlier
 suggestion to incorporate an external access linkage in the northern reaches
 of the estate was later dismissed by PMHC's engineers. The incorporation of
 the aforementioned loop road was considered to satisfy this objective;
- No lots are proposed with a frontage to Sancrox Road. The draft Community Management Statement also includes by-laws to this effect;
- The Community Title subdivision provides for the establishment of a number of Community lots within the estate. These parcels, collectively identified as Lot 1 on the proposed plan of subdivision include:
 - Private accessways including the internal vehicular access roads, and pedestrian pathways linking to the adjacent waterways;
 - Stormwater control dams and water quality control ponds within the estate;
 - The shared effluent disposal lot serving the Cluster System proposed for Proposed Lots 45-49 in the subdivision;
 - Community open space including the potential provision of tennis courts, a community building, amenities block, children's playground and associated passive and active recreation areas.

It is to be noted that the recreational amenities referred to above and proposed within the Community Open Space lot (surrounded by proposed lots 32-42) including the tennis court, community building, amenities block, children's playground and associated recreation areas are to remain part of the concept plan approval. For all other components of the re-subdivision as listed in **Section 3.1** above, it is requested that the Minister declare pursuant to Section 75P(1)(c) that no further environmental assessment is required for the project.

3.2 COMMUNITY MANAGEMENT PLAN

The proposed re-subdivision is to be undertaken under the provisions of the Community Titles Legislation. The original Le Clos farming estates were in fact a



pre-cursor to much of the current Community Title subdivision which occurs in NSW today. Le Clos Verdun itself is currently serviced with private roads and infrastructure, and was established with a shared arrangement of "community land" upon which the viticulture enterprise could be operated.

The use of Community Title Legislation allows for the appropriate management of the existing multiple ownerships, which will necessitate a single linen release at Phase One of the project.

A Community Management Scheme has thus been developed to enable this subdivision to occur, and to provide a management framework for the future occupation and management of the private estate. The draft Community Management Statement includes various by-laws, commitments and expectations relating to such items as:

- Minimum servicing expectations in respect to water tanks, garbage services, treatment of effluent and construction of farm dams;
- Management of rights of carriageway;
- The construction of private servicing infrastructure which is to be established via "phased" provision within the estate;
- Management of the community land including the future amenities block, tennis court, and open space areas;
- Controls in respect to the keeping of animals;
- Controls in respect to future development and the usage of private lands within the estate.

A copy of the Community Management Statement is annexed as **Appendix D** to this report. The Community Management Statement is also directly linked to the Development Contract proposed between the land-owners (Community Association) and Council, which is discussed in **Section 3.3** which follows.

3.3 DEVELOPMENT CONTRACT

The Le Clos Verdun estate is currently connected to privately maintained services. This includes the existing spine road and 4 culs-de-sac within the estate, existing water mains, telecommunications and electricity. However, approximately only one third of the proposed lots in the subdivision are able to be connected to these existing services at present.

As outlined in **Section 3.2** above, the present subdivision pattern and multiple ownerships demand a rationalisation of cadastral boundaries and entitlements in the first instance, i.e. Phase One. This will enable present ownership entitlements to be retained (with compensatory adjustments as necessary), but will create a number of un-serviced lots unable to be physically developed at the time of linen release.

Thus while a single linen registration for the entire subdivision is to occur as the first phase, the Development Contract is necessary to establish how and when individual lots are able to be fully developed, and thus "released". To ensure the provision of essential services is controlled with some certainty for relevant authorities, Port Macquarie-Hastings Council is to be a party to the Contract.

The Development Contract outlines each stage of infrastructure construction and subsequent lot "release" as separate Phases. The Phasing Plan is illustrated in **Sheet 8** of the subdivision plans in **Appendix D**. A copy of the Development



Contract is annexed at **Appendix G**. The phased connection of essential services in accordance with the Contract is also discussed in more detail within **Section 6.13** of this report.

Notwithstanding the proposed community title subdivision, which will enable these services to be retained in private ownership, there is an intention to explore options for the longer-term conversion of the development to torrens title.

This would require all services and access roads to be suitable for public dedication, notwithstanding their retention in private ownership during the Phased construction period. In this respect, the augmentation and re-construction of existing facilities is to be undertaken to current public standards as it would be the intention to return these assets to public ownership once fully completed – i.e. completion of Phase 6.

3.4 ARCHITECTURAL STANDARDS

A list of intended architectural standards is included within the draft Community Management Statement. These standards are not designed to suspend normal development standards or guidelines of Port Macquarie-Hastings Council or other relevant Government authorities, but provide a theme to guide the future character of the rural residential estate.

The matters encompassed by the Architectural Standards include:

- Consistency in architectural styles within individual properties;
- Landscaping standards and expectations;
- · Fencing details;
- · Limits on the scale and design of outbuildings;
- Controls over the erection of signage associated with home business or similar occupations;
- Siting and scaling standards for new buildings.

The proposed Architectural Standards are contained in Part 8 of the Draft Community Management Statement annexed as **Appendix D** to this report.

3.5 ALTERNATIVES CONSIDERED

The examination of re-development options for Le Clos Verdun estate has been a long and evolving process, involving extensive consultation with Council staff, RTA, neighbours and present owners. The present design was chosen to meet council requirements for water supply, emergency access, bushfire control, access to Sancrox road, access to future neighbouring estates, and to have minimal impact on neighbours along Sancrox Road. It was also specifically designed so each lot could accommodate an appropriate building area above the flood level for residential construction, open space & effluent disposal.

As is evidenced by the site analysis and contextual comments in **Section 2** of this report, the current layout has responded responsibly to the many opportunities and constraints of the site. Notwithstanding, a number of alternative re-development and design strategies were examined during the re-zoning and preparation of this Environmental Assessment report, and have included:



Retain Status Quo, and attempt to sell individual Clos Farms as is:

There have been a number of Clos Farms placed on the market by either Clos Farm Owners or their mortgagees since the early 1990s. Only two or three Clos Farms have ever sold, and each were at a considerable discount to the initial investment by each Clos Farm Owner.

The committee believes the private ownership of the internal roads and services and the lack of an entity having the legal or physical capacity to manage the farming operation and common property significantly affects the marketability of the Clos Farms. Moreover, the current moratorium preventing any development occurring within the estate imposed by Council in 2006 now obviously prevents this alternative being a consideration.

Sell the estate to a private developer:

Having regard to the site analysis which guided the present subdivision design, the Le Clos re-development committee considers that any third-party developer would seek to achieve a rural residential re-development very similar to that currently proposed by the committee. While there has been very little interest from such interests forth-coming thus far, the committee also anticipates that any sale to a developer would result in significant losses on the original investment of Clos Farm Owners. Such an option would thus do little to achieve the realistic expectations of the 80 present land-owners.

In this unique instance, the 80 Clos Farm Owners purchased their Clos Farm with the intention of ultimately constructing a residence in an attractive rural environment. These Clos Farm Owners understandably wish to retain a residential lot for this purpose if the estate re-develops as currently proposed by the committee.

Alternative Re-Development Types

The present Le Clos committee has examined a number of alternative development types over a number of years. A golf course design was mooted (as it was similarly intended with the original Le Clos estate in the 1980s), and discussions were held with the designers of the golf course proposed in the original Verdun estate. This would have required millions of dollars input and to justify such an investment, a much higher density housing development would have been required resulting in a much greater impact on the environment. In August 1999 in fact, Mitchell McCotter ERM undertook a feasibility proposal for Home Land Project Marketing. This involved in excess of 400 dwellings and a golf course for the estate.

For various reasons, not least of all related to those identified by the site analysis in **Section 2.3** of this report, this proposal did not proceed. For example, the golf course originally designed for the estate would have been located within the marginal environmentally sensitive areas along the banks of Haydons Creek. This area has since been rezoned 7(h).

The Le Clos Board have also examined higher-density residential development proposals, including the establishment of an independent reticulated sewerage scheme. This again however, would have required a large capital input which the present owners don't have. It was also felt that the density of population would have had a greater potential for detrimental impact on the environment. The location of the sewerage plant for a reticulated sewerage scheme for example, would also have been difficult with the proximity of Haydons Creek & the Hastings River.



Re-subdivide LCV by the farm owners.

This is the preferred option but Clos Farm Owners collectively do not have the capital to undertake the re-subdivision as a 'staged' development in their own right. For this reason Clos Farm Owners established Le Clos Verdun Redevelopment Limited to undertake the re-subdivision of the estate. The objectives of such an arrangement were:

- Each Clos Farm Owner will receive one Rural Residential Block upon registration of the re-subdivision;
- Clos Farms Owners will sell surplus land to Le Clos Verdun Redevelopment Limited consisting of approximately 40 Rural Residential Blocks and Common Property;
- Le Clos Verdun Redevelopment Limited will sell each Surplus Rural Residential Block to fund the re-subdivision and the Common Property will become Community or Public Land after registration of the plan of resubdivision:

As such, the registration of the re-subdivision plan and the necessary land transfers must be undertaken as a whole, which cannot be realistically achieved under Torrens Title. Key infrastructure such as roads can only be rebuilt as funds become available from later-stage land sales. This is necessary so that existing Owners retain their own land interests under the current DPs (or their equivalent) until title to their allocated/corresponding allotment is transferred in accordance with an exemption from the Managed Investment regime.

Ultimately, if the re-subdivision were to be undertaken in stages, most of the surplus lots are inevitably located in the last stage across Haydons Creek. These lots are therefore not able to fund the initial road & infrastructure costs required should the resubdivision be undertaken in a traditional staged subdivision plan.

Chosen Development Option

The present Community Title concept was decided on as the best medium to facilitate the development because of the complex multiple ownership of the present estate. In order to maintain ownership of a Land Title within the estate all present owners (approx. 80) must be entitled with a new block of land in the new subdivision immediately upon relinquishing their old title. The only way this can realistically happen is by means of a private Community Title estate.

This option was in fact initially suggested by Port Macquarie-Hastings Council staff during early re-development consultations.

3.6 JUSTIFICATION FOR THE DEVELOPMENT

After considering all realistic alternatives to the redevelopment of Le Clos Verdun, it has been determined that the development proposal as outlined in **Section 3.1** of this report is the most environmentally feasible and realistic re-development option for the site.

The failed vineyard development and current layout means this estate is rendered sterilised, and unable to be utilised by the owners. As a development investment, the estate has also proven itself to be non-marketable in its present configuration.



The realistic economic impact of redeveloping Le Clos Verdun is such that 80 people who invested in the area will finally be able to recoup this investment. Many spent hundreds of thousands of dollars in the 1980's in good faith that this vineyard development, approved by the Hastings Council, would be successful. They have since suffered ongoing costs associated with its retention. In its present state, particularly now with the inability to build on their land, their investment is virtually worthless unless it is redeveloped.

This development will have a positive social impact in establishing a desirable residential address within an attractive rural residential environment. The area is close to Port Macquarie, which is located less than 15 minutes drive to the east. Residents will thus have the benefit of proximity to town whilst still able to enjoy a rural residential lifestyle, including the benefits of access to the Hastings River & Haydons Creek. This is essentially the basis for this location's identification within the Hastings Rural Residential Strategy.

The new community title estate will encourage a community spirit with the shared recreational facilities including tennis courts, picnic areas and associated amenities. The subdivision design also encourages a healthy lifestyle with a safe access environment & walking tracks.

Port Macquarie-Hastings Council has specifically requested that LCV be redeveloped. Council recognises that the existing approved subdivision has failed and would cause major environmental problems with 80 on-site septics on small blocks in the original (present) subdivision plan. On 12th October 2006, a formal moratorium was placed on further ad-hoc development within Verdun until the whole estate was appropriately re-developed.

We submit that this Environmental Assessment report demonstrates that all Key Issues relevant to this site's redevelopment have been responsibly addressed, and the current subdivision proposal is an appropriate design response to the site's opportunities and constraints.



4 Director General's Requirements

4.1 DEPARTMENT OF PLANNING (DOP)

As per the requirements of the State Environmental Planning Policy (Major Projects), the Department of Planning provided the applicant with a list of the Director General's Requirements that this Environmental Assessment must address. The Key Issues raised in this advice are summarised in the table below:

Table 4.1 Director General's Requirements

Content of Environmental Assessment	Relevant section
	of Report
Subdivision Layout, Desired Future Character and Sustainability	
 Suitability of the proposed development; 	○ Section 6.1
 Subdivision design; 	○ Section 6.1
 Pedestrian and cycle movements; 	○ Section 6.11
 Regard to SEPP 71; 	○ Section 5.6
 Regard to PMHC's DCP 17; 	○ Section 6.1
 Proposed staging and infrastructure provision; 	○ Section 6.13
 Nature of subdivision titling proposed. 	o Section 6.13
Water Cycle Management	
 Impacts on water quality of Hastings River, Haydons Creek 	o Section 6.2
and groundwater;	
 Integrated Surface Stormwater Management Plan; 	○ Section 6.2
 Potential impacts on the watertable 	o Section 6.2
Flooding	
 Assessment of the risk of flooding to the development 	o Section 6.3
Flora and fauna	
 Assessment of threatened flora and fauna; 	○ Section 6.4
 Assessment of native vegetation clearing; 	○ Section 6.4
 Identify areas suitable for rehabilitation and revegetation; 	Section 6.12
 Provide mapping of buffers to waterways and wetlands 	o Section 6.12
Aboriginal and Cultural Heritage	
 Assessment of Aboriginal and European heritage values. 	Section 6.5
Contamination and Remediation	
 Identify any site contamination and necessary mitigation 	○ Section 6.6.1
measures;	
 Determine presence of Acid Sulfate Soils and necessary 	○ Section 6.6.2
mitigation measures;	
 Remediation plans for soil, gullies, landscape features, 	○ Section 6.12
existing roads, road works and drainage;	
Wastewater Management	
 Geotechnical assessment addressing site stability and on- 	○ Section 6.7
site effluent disposal;	
 Address PMHC Wastewater Management Policy 	Section 6.7
 Wastewater management management strategy and risk 	Section 6.7
assessment for effluent disposal.	
Bushfire	
 Bushfire risk assessment and management plan 	○ Section 6.8
Agriculture	
 Agricultural suitability assessment of the site; 	Section 6.9
 Consideration of Mid North Coast Farmland Mapping 	Section 6.9
Project	
Mineral Resources	
 Sustainability of construction material and resources in the 	o Section 6.10
district	



▶ Traf	fic and Access	
0	Traffic assessment having regard to the RTA's "Guide to	o Section 6.11
	Traffic Generating Developments";	
0	Address potential for conflicts between residential traffic	o Section 6.11
	and industrial traffic in Sancrox locality, and the nature of	
	road access associated with the Pacific Highway;	0 " 0 "
0	Assessment of impacts associated with junctions to	o Section 6.11
	Sancrox Road.	
▶ Ripa	arian Corridor and Foreshore Access	
0	Address protection of and access to the Riparian zone and	o Section 6.12
	foreshore of the Hastings River and Haydons Creek;	
0	Address securing public access to the river and foreshores;	o Section 6.12
0	Provide adequate buffer to the riparian corridor;	o Section 6.12
0	Assess maintenance, protection and ownership of the	o Section 6.12
	foreshore and riparian corridor;	
0	Address potential impacts on the shoreline such as bank	o Section 6.12
	erosion, public access;	
0	Address principles of ESD and NSW Coastal Policy.	○ Section 5.3
▶ Prov	vision of public service and infrastructure	
0	Address existing capacity and requirements of essential	○ Section 6.13
	services	
0	Identify staging of infrastructure works.	○ Section 6.13
Plan	nning Agreements and/or Developer Contributions	
0	Provide likely scope of any planning agreements &/or	 Section 6.14
	developer contributions	

A copy of the original correspondence received from the Department of Planning, which contains detailed descriptions of the expectations for the investigation of the above Key Issues is contained in **Appendix N**.

4.2 PORT MACQUARIE-HASTINGS COUNCIL (PMHC)

The PMHC's response to the Department of Planning dated 16 October 2006 outlining their requirements for this Environmental Assessment highlighted the following key issues:

Table 4.2 Port Macquarie-Hastings Council's Key Issues and Requirements

Content	of Environmental Assessment	Relevant section of Report
D C	consistency with the draft LEP (since gazetted)	o Section 5.9
	on-site Effluent Disposal (with particular reference to the ancrox Rural Residential – Watewater Management Policy)	o Section 6.7
		 Section 6.1 Section 6.11 Section 6.8 Section 6.7

A copy of the original correspondence from Port Macquarie-Hastings Council is contained in $\mbox{\bf Appendix}\ \mbox{\bf N}.$

Since this advice, a number of meetings and discussions have been held with technical officers of the Council to address specific Key Issues. A summary of these meetings, and the items discussed therein is detailed below:



<u>2nd April 2007</u> – Meeting with Cliff Toms, Tim Molloy, Anthony Deutschmann to discuss the site history and alternative options for re-development of Le Clos Verdun Estate (post re-zoning). Alternatives for the site's rationalisation were discussed, particularly relating to resolution of the problems associated with funding the provision of infrastructure given the existing multiple land ownerships.

2nd July 2007 – Meeting with Nick Houston, Jeff Sharp and Ben Harlor to discuss water supply and on-site effluent disposal issues.

1st August 2007 – Meeting with Leanne Fuller, Fiona Conlon, Jeff Sharp, Anthony Deutschmann and Tim Molloy to discuss a range of issues including:

- One-stage linen release with limited services provision;
- Internal traffic circulation, regarding the need for greater circulation within the internal road layout. The loop road adjacent proposed Lots 59-78 was an amendment made to the subdivision layout in direct response to this meeting;
- Water supply. There were initial concerns raised by Council's Water Supply section that the Sancrox Precinct did not have sufficient supply to service the Le Clos Verdun re-subdivision. This advice was later over-turned by Fiona Conlon, who provided verbal agreement to the assessment of this application on 8th August 2008;
- Water circulation. Council was supportive of the notion of an internal circulatory water connection generally following the route of the amended road loop discussed above.
- Existing water mains infrastructure. Council confirmed there are concerns
 regarding the quality of the present water service within the estate. As such,
 use of the existing infrastructure could not be relied upon should there be
 intentions to transfer ownership of this infrastructure back to Council at some
 point in the future.
- On-site effluent disposal. Council's preliminary review of the effluent disposal assessment prepared by Coffey Geotechnics indicated that the recommendations relating to the "cluster lot" system proposed to service Lots 44-49, was acceptable in concept.
- Bushfire investigation. The progress of the latest Bushfire Hazard assessment in compliance with the new 2006 guidelines was acknowledged.
- Recent amendments to SEPP (Major Projects) 2005 were also acknowledged.

A letter outlining an understanding of the items discussed in this meeting was forwarded to Council on the 2nd August 2007, a copy of which is contained in **Appendix N** to this report. No written reply to this letter has been received.

10th January 2008 – Meeting with Leanne Fuller and Dan Croft to discuss Draft Environmental Assessment (EA) report and compliance with DGRs. Direction given on need to update original Ecological report, to provide landscaping and revegetation principles plan and urban design strategy, and to re-format the structure of the EA report. Recommendations were also made to discuss other matters such as timing of infrastructure, flooding impacts, traffic and drainage with specialist technical officers of Council.

<u>25th January 2008</u> – Meeting with Cliff Toms and Dan Croft to discuss details regarding infrastructure provision, particularly in respect to timing and the need for a Development Contract or similar to supplement the Community Management Statement. This meeting also determined that a separate Traffic Study for the project



was unnecessary given the extensive studies being undertaken on Council's behalf for the Sancrox Precinct.

1st February 2008 – Meeting with Gordon Cameron to discuss preferred method of presenting the site's integrated surface and stormwater management plan. A determination as to the information required in respect to local flooding issues was also made. It was also confirmed that a separate flood study for the property was not required given the recent 2006 study undertaken on Council's behalf for the Hastings River.

<u>12th March 2008</u> – Meeting with Dan Croft to review and submit the revised Draft Environmental Assessment.

<u>31st March 2008</u> – Receipt of preliminary Test of Adequacy for the draft Environmental Assessment from Port Macquarie-Hastings Council.

4.3 NSW RURAL FIRE SERVICE (RFS)

The NSW RFS responded to the Department of Planning on 10 October 2006. The key issues raised in the Service's correspondence are highlighted below:

Table 4.3 NSW Rural fire Service's Key Issues and Requirements

Conte	nt of Environmental Assessment	Relevant section of Report
•	The subdivision site is mapped as bushfire prone. Future residential and Special Fire Protection Purpose developments are likely to be subject to the requirements of S.100B of the Rural Fires Act 1997 and S.79BA of the Environmental Planning & Assessment Act 1979.	o Section 6.8
•	Separation of the development from the bushfire hazard to minimise the impact of radiant heat and direct flame contact.	○ Section 6.8
•	Demonstrate the ability to provide adequate egress/access to the proposed development	o Section 6.8
•	Demonstrate the ability to site and provide for future water supplied for bushfire suppression operations.	o Section 6.13
•	Minimise the vulnerability of buildings to ignition from radiation and ember attack & address AS 3959	o Section 6.8
•	Describe the future management regimes for any hazard areas within the subject site.	o Section 6.8

A copy of the correspondence from the RFS is contained in **Appendix N**. Given the relatively straightforward nature of the proposal in respect to these issues, further consultation with this authority has not been necessary.

4.4 DEPARTMENT OF NATURAL RESOURCES (DNR)

The Department of Natural Resources responded to the Department of Planning on 18 October 2006. The key issues raised in the DNR's correspondence are highlighted below:

Table 4.4 Department of Natural Resources' Key Issues and Requirements

Cont	ent of Environmental Assessment	Relevant section of Report
•	Remediation plans for soil, gully and landscape features including remediation associated with existing roads, proposed	o Section 6.13



road works and drainage lines	
Demonstrated Integrated Surface Stormwater Management Plans to ensure water quality of adjacent waterways are maintained.	o Section 6.2
Effluent disposal to have regard to surface water and ground water implications.	o Section 6.7
Vegetation masterplan and landscaping plan for the site including riparian zone of adjacent waterways.	o Section 6.4
Vegetation buffers to environmental assets in addition to any bushfire asset protection zones.	o Section 6.4 & 6.8
Detailed engineering designs for any waterways crossings.	 Section 6.3
Demonstrate compliance with the Hastings River Estuary Management Plan.	o Section 6.3
 Floodplain risk management, including: Any PMHC plans/policies relating to management of flood risk; Latest flood information from PMHC; PMHC's requirements for flood investigations; Full range of flood events up to and including probably maximum flood; Flood hazard in the area; Flood hazard of the flood access and evacuation route; The implications of climate change in estimating flood levels; Impact of flooding on the proposed development; Impact of the development on flood behaviour; 	 Section 6.3.1 Section 6.3.1 Section 6.3.3 Section 6.3.1 Section 6.3.1 Section 6.3.2 Section 6.3.1 Section 6.3.1 Section 6.3.1 Section 6.3.1 Section 6.3.1
 Impact of flooding on safety of future occupants. 	o Section 6.3.1

A copy of the original correspondence from the DNR is contained in **Appendix N**. Given the relatively straightforward nature of the proposal in respect to these issues, further consultation with this authority has not been necessary.

4.5 DEPARTMENT OF PRIMARY INDUSTRIES (DPI)

The Department of Primary Industries responded to the Department of Planning on 18 October 2006. The key issues raised in the DPI's correspondence are highlighted below:

Table 4.5 Department of Primary Industries' Key Issues and Requirements

Conte	nt of Environmental Assessment	Relevant section of Report
	Maintain aquatic habitats in adjacent waterways	o Section 6.2
•	Details of the intended buffer zones to the surrounding waterways and wetlands to be mapped.	o Section 6.1
•	Demonstrated that the proposed stormwater management scheme can achieve no net increase in nutrient/pollutant loads entering waterway systems.	o Section 6.2
•	Determine the material requirements for construction of the residential development	o Section 6.10
•	Concerns about the potential for land-use conflict in the Sancrox area, such as limiting operations at the nearby Sancrox quarry.	o Section 6.10
•	Potential conflict with road traffic between the residential use and the nearby Sancrox Quarry.	o Section 6.11
•	Unsatisfactory nature of road access to the Pacific Highway, particularly regarding present uncertainty over the future access upgrade.	o Section 6.11
	Concerns about the lack of integrated land-use planning in the	o Section 6.1



	Sancrox area in general	
	Need to ensure the proposal meets the expectations and desires of the current land-owners, particularly given the potential agricultural usages of the property.	o Section 6.9
•	1 0 0 117	o Section 6.9

A copy of the correspondence from the DPI is contained in **Appendix N**. Given the relatively straightforward nature of the proposal in respect to these issues, further consultation with this authority has not been necessary.

4.6 ROADS AND TRAFFIC AUTHORITY (RTA)

The Roads and Traffic Authority responded to the Department of Planning on 8 October 2006. The key issues raised in the RTA's correspondence are highlighted below:

Table 4.6 Roads and Traffic Authority's Key Issues and Requirements

Conter	nt of Environmental Assessment	Relevant section of Report
•	Access and junctions should be located where adequate safe intersection sight distances are available.	○ Section 6.11
	Establish future internal road connections with adjoining developments	○ Section 6.11
•	Speed environment within the subdivision should be self- enforcing or supported by an appropriate traffic management scheme.	o Section 6.11
•	Any new/existing junctions with Sancrox Road should be assessed to identify any improvements to maintain the safety and efficiency of the road network	o Section 6.11
	Cross intersections should be avoided	 Achieved
	Consideration should be given to managing impacts from Traffic noise.	o Section 6.11
	No lots should directly access Sancrox Road	 Achieved
	Facilities need to be provided for public transport such as buses etc, and incorporated in the subdivision layout	o Section 6.11
	An internal pedestrian/cycle path should be provided that forms a link between areas and the overall bicycle network	o Section 6.11
	Individual driveways should be constructed to AUSTROADS or RTA standards	o Achieved

A copy of the correspondence from the RTA is contained in **Appendix N**. Given the relatively straightforward nature of the proposal in respect to these issues, further consultation with this authority has not been necessary.

4.7 DEPARTMENT OF ENVIRONMENT AND CONSERVATION (DEC)

The Department of Environment and Conservation responded to the Department of Planning on 17 October 2006. The key issues raised in the DEC's correspondence are highlighted below:



Table 4.7 Department of Environment and Conservation's Key Issues and Requirements

Content of Environmental Assessment		Relevant section of Report
	Address the impact on threatened species;	o Section 6.4
•	Address the impact on potential endangered ecological communities	o Section 6.4
•	Address the impact on corridor links and wildlife movement	o Section 6.4
)	Address the impacts on Aboriginal cultural heritage values	o Section 6.5

A copy of the correspondence from the DEC is contained in **Appendix N**. Given the relatively straightforward nature of the proposal in respect to this issue, further consultation with this authority has not been necessary.

4.8 NORTHERN RIVERS CATCHMENT MANAGEMENT AUTHORITY (CMA)

The CMA responded to the Department of Planning on 11 October 2006, and reported they had no key issues relating to the proposed rural residential development.

A copy of the correspondence from the CMA is contained in **Appendix N**.

4.9 COMMUNITY CONSULTATION

The Le Clos Board has discussed the proposed development alternatives with all neighbours along Sancrox Road. The project management team for the redevelopment of Le Clos Sancrox located opposite Sancrox Road has also provided input into the planning of this project application. The local and wider community have had opportunity to review the development in detail during the public exhibition period associated with the rezoning process. One of the site's neighbours has since included their property in the rezoning process as a result of this exhibition.

Other neighbouring land-owners have been invited, but declined to be included in the rezoning and re-subdivision process, such as Lots 5 and 6 in DP 625109 and Lots 2-5 DP 791197. This has influenced the traffic pattern within the subdivision layout. For example, the provision of access from Sancrox road to the area east of Haydons Creek was considered, but was decided against following discussions with the owners of Lots 5 and 6 DP 625109 as the present layout had less impact on their future intentions.



5 Statutory and Non Statutory Planning Provisions

A number of statutory planning and policy controls apply to the site and to the rural residential development proposal. A summary of the key provisions of those Instruments and where relevant, specific comment on their application to the site's development, are provided below.

5.1 ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) is legislation designed to protected the environment, particularly in respect to matters of National Environmental Significance. It streamlines the national Environmental Assessment and approvals process, protects Australian biodiversity and integrates management of important natural and cultural places.

There are no matters of National Environmental Significance which occur in proximity to the subject site nor would any matters of National Environmental Significance be affected by the development proposal. These conclusions were determined by the Ecological Assessment (Part D) undertaken by North Coast Forestry and Ecology Services in support of the recent rezoning of this site. A copy of this full assessment is contained in **Appendix H** to this report.

5.2 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Part 3A of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) determines the assessment procedures, and sets out those matters for which a consent authority is to take into consideration when determining a Major Project application. In this instance, the proposed residential development is captured by the provisions relating to the subdivision of land located partly within a sensitive coastal location.

This Environmental Assessment has been prepared in accordance with the provisions under the Environmental Planning & Assessment Act 1979 and Environmental Planning & Assessment Regulation 2000 relating to Major Projects accordingly.

5.3 NSW COASTAL POLICY 1997

The proposed residential subdivision is consistent with the objectives of the NSW Coastal Policy as commented on below:

Goal 1 Protect, rehabilitate & improve the natural environment of the Coastal Zone

<u>Comment</u>: The proposal is for the re-subdivision of an existing estate which integrates with the established rural residential character of the Sancrox locality. Detailed reports relating to the site's ecology, water management, agricultural potential, bushfire management, soils and groundwater quality management accompany this report and demonstrate the project application will not have any adverse impact on these aspects of the coastal zone.



Goal 2 Recognise & accommodate the natural processes of the coastal zone

<u>Comment</u>: The project application is for a re-subdivision of an established rural residential development, and is not considered to negatively impact upon the natural processes of the area. Moreover, the estate is buffered by a 30m-wide public reserve adjoining the Hastings River and along frontage to the tidal waters of Haydons Creek, and has been designed in direct response to local flooding patterns, bushfire risks and other natural processes.

Goal 3 Protect and enhance the aesthetic qualities of the coastal zone

<u>Comment</u>: The existing estate has been cleared in previous years to enable its use as a shared-farming viticulture enterprise. There is thus minimal vegetation within the estate itself. Similarly, the site does not support any distinguishing topographical feature other than the Riparian zone adjacent Haydons Creek, and a small copse of trees in the site's central west, both of which are to remain untouched by the resubdivision.

In addition to the strict protective arrangements within the Land-use tables and the draft Community Management Statement provisions applying to these lands, a revegetation and rehabilitation strategy along disturbed sections of the Riparian Zone is also proposed. This is detailed in the Ecological report in **Appendix H** and the Landscape Principles Plan contained in **Appendix E**. The Landscape Principles Plan also provides for an intended landscaping strategy responding to current urban design guidelines as discussed further in **Section 6.1** of this report.

The subdivision design is such that the future rural residential allotments can accommodate a built environment of aesthetic qualities that will be in keeping with the established rural character of Sancrox.

Goal 4 Protect & conserve cultural heritage

<u>Comment</u>: The Aboriginal archaeological report undertaken by Birpai Local Aboriginal Land Council demonstrates the site is not likely to support any items of cultural heritage. Furthermore, there are no items of European cultural heritage located within, or in proximity of the subject site.

Goal 5 Promote ecologically sustainable development and the use of resources

<u>Comment</u>: The subdivision layout has been designed having regard to sound ecological sustainable development principles as detailed in the specific sections of the report that follows (refer also **Section 8**).

Goal 6 Provide for ecologically sustainable human settlement

<u>Comment</u>: The subject site is located within the Sancrox study area of the Port Macquarie-Hastings Council's Rural Residential Strategy. The Strategy has undergone extensive community and Government consultation, and reflects the direction of Port Macquarie-Hastings Council to cater for a greater supply of this form of development in appropriately planned locations.

The recent support from Port Macquarie-Hastings Council and the Department of Planning in rezoning this land to 1(r1) in January 2007 is reflective of this principle (refer also **Section 8**).



Goal 7 Provide for appropriate public access and use

<u>Comment</u>: The subdivision provides for improved pedestrian and vehicular access throughout the estate, and enables public access to the foreshore areas of Hastings River and Haydons Creek via the formalisation of pedestrian accessways within the subdivision layout (refer Sheet 8 in **Appendix D**).

Existing public access available to the foreshore of Haydons Creek and Hastings River via Bengal Street is not affected by the proposal. No intrusions, improvements or barriers are proposed within these areas. In fact, there are no works proposed within these areas at all. In this respect, this land is under the care, control and management of the Crown and is subject to a Plan of Management prepared by the Department of Lands. No such Plan exists for this land at this point.

Goal 8 Provide information to enable effective management of the Coastal Zone

<u>Comment</u>: This goal is not directly applicable to a statutory assessment under Part 3A or Part 4 of the Environmental Planning & Assessment Act 1979.

Goal 9 Provide for integrated planning and management of the Coastal Zone

<u>Comment</u>: This proposal has not been considered in isolation, but rather has been master-planned with respect to future expected rural residential development in the Sancrox locality. Strategic planning of the locality's appropriate road hierarchy, intersection priorities, servicing needs and recognition of an appropriate residential settlement strategy has been on-going, and the land-owners have been an active party in this process.

The proposed re-subdivision is in direct response to the consultation process for the Sancrox rural residential release strategy, and satisfies all of the above strategic principles. Refer also to **Section 6** of this report.

5.4 COASTAL DESIGN GUIDELINES FOR NSW

Under the Coastal Design Guidelines for NSW, the following issues have been identified as "challenges" to be addressed in ensuring that new quality subdivisions are planned for the coastal areas. These issues are primarily related to urban environments, but have some relevance to this rural-residential development, notwithstanding its rural location.

The Design Guidelines identifies the following issues as being key factors affecting new settlements within coastal areas:

- removal of the unique topographic and natural features of the location, the site and the local area
- new development that is not planned to respond to the local context in terms of open space, access and existing centres or main streets
- privatisation of the coastal and natural edges
- a lack of public open space for recreation, water management, ecological protection and social functions
- subdivisions designed merely for efficient traffic movement
- development too close to fragile coastal environments, particularly dunes, beaches, lakes, riverine and stream corridors



- development located on flood prone land involving land fill
- development that disturbs acid sulphate soils
- indiscriminate expansion on the edges of existing coastal hamlets and villages
- development creating strip or ribbon development along the coast including major arterial roads
- locating new settlements within the greenbelts of existing settlements
- residential development without neighbourhood centres or a main street
- development on land likely to be affected by coastal hazards, now or in the future
- privatised enclaves and gated communities that restrict public access and connection to the local area
- a street pattern that forces residents to drive rather than walk or cycle
- building design and materials inappropriate for the local climate
- high site coverage and no private open space
- no diversity in housing choice
- degraded ground and surface water quality resulting from urban pollutants and sedimentation
- poorly maintained, unsafe and under utilised public lands.

It is considered the proposal is consistent with the aims of these Design Guidelines in that:

- ▶ The land is identified as part of Port Macquarie-Hastings Council's Rural Residential Strategy and has already been rezoned accordingly;
- The development consists of the re-subdivision of an existing rural residential estate which is serviced, has been previously cleared, and is partially developed;
- ▶ The development is located within a rural-residential setting, and provides for the future integration with likely development opportunities on neighbouring land;
- The proposal does not involve the disturbance of any areas of native vegetation, or native fauna habitat;
- ▶ The proposed re-subdivision aims to establish access to 6(a) Open Space zoned public land adjacent the Hastings River, and 7(h) Environment Protection zoned land adjacent Haydons Creek via the retention of the existing public access and provision of internal pedestrian accessways;
- The subdivision layout includes the creation of community land which incorporates open space opportunities for residents including a future tennis court, amenities building, playground and active recreation area;
- The zoned, and developable land within the estate is relatively free of environmental constraints such as native vegetation, habitat corridors, severe topography, flood prone lands, bushfire hazard or acid sulphate soils. Where the developable land borders such areas, appropriate management and mitigation measures have been proposed to minimise potential impacts at the interface;
- The site is far removed from any coastal headlands, beaches or dunes or any other lands likely to be impacted by coastal hazards:
- The current estate is under-utilised to the point where it is uneconomic to retain it in its current status, and is sterilised from any other rural purpose due to the multiple ownerships;
- ▶ The subdivision establishes a wide-range of lot sizes and orientations, thereby enabling a diversity of future housing options within the estate;
- Wastewater and integrated surface and stormwater strategies have been developed to mitigate potential impacts on the quality of neighbouring waterways (refer Section 6 of this report).



5.5 STATE ENVIRONMENTAL PLANNING POLICY NO.44 - KOALA HABITAT

This SEPP aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to ensure a permanent free-living population over their present range and reverse the current trend of koala population decline:

- (a) by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat, and
- (b) by encouraging the identification of areas of core koala habitat, and
- (c) by encouraging the inclusion of areas of core koala habitat in environment protection zones.

The Ecological Assessment accompanying this Environmental Assessment is contained in **Appendix E** to this report, and contains a comprehensive assessment of the site against the provisions of SEPP 44. The report notes that the majority of the site is devoid of vegetation due to the past viticulture usage of the land. However, of those pockets of vegetation which do occur on or adjacent the site, one area is subject to an assessment under SEPP 44 given it contains potential habitat. This area (referred to as Area I in the ecological report) is located in the far eastern portion of the site.

The ecological assessment found at the time that:

- In accordance with the provisions of SEPP 44, the forest cover in Area I is "Potential Koala Habitat" as defined by SEPP 44, i.e. Schedule 2 species content at least 15%.
- While it is reasonable to conclude that koalas do occur in this immediate locality, there is insufficient evidence of occurrence of the factors defining core habitat occurring. These are:
 - "an area of land with a resident population of koalas" whilst scats were detected during current surveys, past records are sparse in the locality. Therefore, it is a reasonable conclusion that a resident population does not occur.
 - "attributes such as breeding females (that is, females with young)" no strong evidence exists that breeding females occur (or have previously occurred) on the site (ie, small area of Area I).
 - "recent sightings of and historical records of a population" none detected during current surveys. No record of past presence of a population on the site (ie small part of Area I).
- As a consequence of the above review, the subject site is not considered to be "core Koala Habitat", and according to the provisions of SEPP 44, a Koala Management Plan is not required.

This rezoning of the site was largely guided by the recommendations of this Ecological Assessment. Moreover, the proposed plan of subdivision to which this Environmental Assessment now applies has ensured that all vegetation in this location is not disturbed. This area has since been rezoned 7(h) Environment Protection – Habitat accordingly.



As described above, the current plan of subdivision responds directly to the recommendations of this Ecology report. The overall subdivision layout has since been modified to eliminate the need for any clearing within this identified area of the site. The impacts associated with the current re-subdivision proposal are thus less than the 'acceptable' impacts assessed and endorsed by the Ecology Report contained in **Appendix H**. Furthermore, the Ecology Report is now supported by a 2008 addendum report which determined that after assessment of the latest subdivision layout, the same conclusions with respect to SEPP #44 still apply. The addendum report is also included in **Appendix H**.

In this respect, we submit that the relevant provisions of State Environmental Planning Policy No.44 are adequately satisfied, and the rural residential proposal is consistent with the objectives of the Policy.

5.6 STATE ENVIRONMENTAL PLANNING POLICY NO. 71 – COASTAL PROTECTION

SEPP 71 applies to the subject site which is considered within the NSW "coastal zone". The aims of this SEPP are:

- (a) to protect and manage the natural, cultural, recreational and economic attributes of the New South Wales coast, and
- (b) to protect and improve existing public access to and along coastal foreshores to the extent that this is compatible with the natural attributes of the coastal foreshore, and
- (c) to ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the coastal foreshore, and
- (d) to protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and
- (e) to ensure that the visual amenity of the coast is protected, and
- (f) to protect and preserve beach environments and beach amenity, and
- (g) to protect and preserve native coastal vegetation, and
- (h) to protect and preserve the marine environment of NSW, and
- (i) to protect and preserve rock platforms, and
- (j) to manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6(2) of the Protection of the Environment Administration Act 1991), and
- (k) to ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area, and
- (I) to encourage a strategic approach to coastal management.

In ensuring these aims are met, Clause 8 of SEPP 71 sets out those matters which are required to be taken into account by the consent authority when it determines an application to carry out development on land to which SEPP 71 applies. The table below demonstrates how the proposal is consistent with these Matters for Consideration, and thus compliant with the aims and objectives of SEPP 71:

Table 5.1 SEPP #71 - Clause 8 Matters for Consideration

Matters for Consideration	Compliance with consideration
(a) the aims of this Policy set out in clause 2,	As demonstrated in the comments that follow,
	the proposed development is consistent with



Matters for Consideration Compliance with consideration		
watters for Consideration	Compliance with consideration the aims set out in clause 2 of SEPP 71.	
	and difficultiful diduct 2 of OLI 1 71.	
(b) existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved,	The rural residential subdivision does not adversely affect existing public access to or along any area of coastal foreshore. Rather, the proposed plan of subdivision incorporates a number of opportunities to formalise and enhance public access opportunities to both the Hastings River and to Haydons Creek. Given the site's rural setting, the site's internal accessways are not specifically designed to incorporate all-weather access. However, the proposed access design will not deny any foreshore access to disabled persons.	
(c) opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability,	Refer comments above	
(d) the suitability of development given its type, location and design and its relationship with the surrounding area,	The proposed development responds to the recommendations of the PMHC Rural Residential Strategy, and is reflective of the specific LEP amendment gazetted in January 2007 to enable its re-subdivision. The development is located within a rural residential context. The development site is cleared of sensitive vegetation, is not constrained by topography, or is otherwise unsuitable for the scale of development proposed. The re-subdivision is appropriate to its context taking into account the subdivision's integration with surrounding rural residential developments in the locality, both existing and proposed, which has guided the design of internal access roads, fire trails, pedestrian pathways and the Sancrox Road entry.	
(e) any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore,	The proposed development will not have a detrimental impact on the amenity of the coastal zone. The proposed development will not result in overshadowing of the coastal foreshore, nor would it result in any significant loss of views from a public place to any public places along the coast.	
(f) the scenic qualities of the New South Wales coast, and means to protect and improve these qualities,	The site has been cleared previously, and does not contain any significant or otherwise remarkable topographical features worthy of special conservation. Areas of vegetation worthy of scenic protection have been reserved within an Environmental Protection zoning, and are to be conserved.	



Matters for Consideration	Compliance with consideration
	The Landscaping Principles Plan has aimed to reinforce these areas of existing vegetation, the elevated sections of the site, and lower-lying gullies. Endemic species to the area have been selected in the planting schedule wherever possible. The resultant re-subdivision of the site is consistent with the character of neighbouring developments in the Sancrox locality. We submit the proposal would not have a detrimental impact on the scenic qualities of the NSW Coast.
(g) measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act), and their habitats,	The Ecological Assessment prepared in support of this Environmental Assessment determined there will be no adverse effects on any species of fauna or flora, given the preservation and conservation of habitat areas from future development (refer to Appendix E). The recent rezoning of such land to either 6(a) Open Space, or 7(h) environment Protection – Habitat is reflective of this. The proposed plan of re-subdivision has been designed to specifically incorporate the preservation of these areas. No areas of significant vegetation are to be disturbed by the proposed subdivision (refer also to Section 6.4).
(h) measures to conserve fish (within the meaning of Part 7A of the <i>Fisheries Management Act 1994</i>) and marine vegetation (within the meaning of that Part), and their habitats,	The proposed methods of stormwater control and wastewater management will ensure that the site's re-subdivision has no adverse impacts on the aquatic environment, including to neighbouring fisheries habitats. Refer specifically to Section 6.2
(i) existing wildlife corridors and the impact of development on these corridors,	The appropriately zoned, and developable areas of the site are on the fringe of a larger vegetated area. The proposed re-subdivision will not impact on these vegetated areas, and thus will not adversely impact on the integrity of any existing wildlife corridor. There are no corridors of vegetation which exist within the developable areas of the site.
(j) the likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards,	The likelihood of significant coastal processes and coastal hazards impacting on the proposed development is negligible given the distance between the subject site and the Pacific Ocean. The land is located approximately 15km upriver from the Hastings river-mouth. Similarly, the proposed development would not give cause to create any impact on coastal processes or exacerbate the potential impacts of coastal hazards in the local area.



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Matters for Consideration	Compliance with consideration	
(k) measures to reduce the potential for conflict between land-based and water-based coastal activities,	The proposed plan of subdivision introduces formal access to the river foreshore areas of the site, and does not sterilise these areas from public access.	
(I) measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals,	There are no known places or items of cultural significance to the Aboriginal population within the subject site. Refer specifically to Section 6.5 of this	
	report.	
(m) likely impacts of development on the water quality of coastal waterbodies,	Works to be undertaken during the construction phase of the project will be subject to the provisions of an approved erosion and sediment control plan. The wastewater and stormwater assessments demonstrate the proposed re-subdivision will have no adverse impacts on the quality of neighbouring waterbodies.	
	Refer also to Sections 6.2 and 6.7 of this report.	
(n) the conservation and preservation of items of heritage, archaeological or historic significance,	There are no items of European or Aboriginal heritage, archaeological or historic significance known to exist on or in proximity of the subject site.	
(o) only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities,	N/A	
(p) only in cases in which a development application in relation to proposed development is determined:		
(i) the cumulative impacts of the proposed development on the environment, and	It is submitted that provided all recommended management and mitigation measures are appropriately implemented per Section 7 of this report, the proposed re-subdivision of this land identified for rural residential purposes will have no adverse cumulative impacts on the environment.	
(ii) measures to ensure that water and energy usage by the proposed development is efficient.	These are detailed in Section 7 of this report	

In addition to the above, Part 4 of SEPP #71 applies to all development undertaken within the NSW Coastal Zone, and establishes provisions relevant to Development Control under the Environmental Planning and Assessment Act 1979. These Clauses are commented on below:

<u>Clause 13</u> – There are no proposals to seek a flexible interpretation of neighbouring zone boundaries in this project application.



<u>Clause 14</u> – The proposal does not impede, diminish or otherwise obstruct any existing public access opportunities along the adjacent Hastings River or Haydons Creek foreshores.

<u>Clause 15</u> – The proposed strategy for disposal of effluent on-site is addressed in the Coffey Environmental report contained in **Appendix J**, and is further commented on in **Section 6.7** of this Environmental Assessment report.

<u>Clause 16</u> – An integrated surface and stormwater strategy has been developed for the re-subdivision design and is reflected in Sheet 6 of the plans of subdivision contained in **Appendix D**. This is further discussed in **Section 6.2** of this Environmental Assessment report.

5.7 STATE ENVIRONMENTAL PLANNING POLICY – MAJOR PROJECTS

The subject site is located within the NSW Coastal Zone. Pursuant to State Environmental Planning Policy (Major Projects) 2005 Schedule 2 Clause 1(4), part of the subject site is classified as a sensitive coastal location as being within 100m of the mean high water mark of the Hastings River and Haydons Creek. The proposed number of lots within the intended re-subdivision proposal triggers the provisions under Schedule 2, Clause 1(h) of the SEPP.

Pursuant to Clause 6 of State Environmental Planning Policy (Major Projects) 2005 and as advised by Department of Planning (15th March 2006), the proposed rural-residential subdivision is considered to be a Part 3A project. This Environmental Assessment has been prepared in accordance with the requirements of the Environmental Planning & Assessment Act 1979 and Regulation as they relate to the provisions of this SEPP (Major Projects).

Under the advice provided by the Department of Planning dated 15 January 2007, Port Macquarie-Hastings Council has been delegated authority to conduct the assessment of the concept plan application including its receipt, initiation of referrals, exhibition, and assessment of the project. The Department of Planning remains the consent authority for the proposal. Refer also to copies of correspondence contained in **Appendix K** to this report.

5.8 NORTH COAST REGIONAL ENVIRONMENTAL PLAN

The proposed residential subdivision responds to the Development Control Clauses of the North Coast REP, and thus is consistent with the aims and objectives of the REP, as commented on below:

Clause 12 – Impact of Development on Agricultural Activities

The subdivision proposal will not impact on any mining, agricultural or other natural resources. The Agricultural Assessment accompanying this Environmental Assessment found that the site does not constitute prime agricultural land (refer specifically to **Section 6.9** of this report).

Clause 15 - Wetlands or Fisheries Habitats

The proposed stormwater management scheme is specifically designed to be sympathetic to the adjacent estuarine environment, including fisheries habitats, riverbank vegetation and other sensitive locations;



No works are proposed within the 30m buffer to the tidal waters of Haydons Creek or Hastings River.

Clause 32B - Coastal Lands

- No access to/from the coastal foreshore is being adversely affected by the development. Rather, the subdivision seeks to formalise a number of casual points of access to the Hastings River and Haydons Creek, and present public access which exists at present;
- Areas identified as a sensitive coastal location within the 100m buffer to both the Hastings River and Haydons Creek have been protected. The intended subdivision design has responded to the identification of these marginal areas of the site by retaining their integrity, and ensuring residential lots within the subdivision layout do not adversely impact on the identified locations. The cluster system of effluent disposal for Lots 44-49 is reflective of this design response (refer **Section 6.7**).

Clause 33 - Coastal Hazard Areas

The site is far removed from any coastal headlands, beaches or dunes or any other lands likely to be impacted by coastal hazards.

Clause 36 – Heritage Items

The site is remote from any items of either Aboriginal or European heritage significance, and/or coastal conservation areas.

Clause 43 – Residential Development

- ▶ The proposed density of development is appropriate, and will have no negative impact on the amenity of the locality;
- Infrastructure necessary to enable the adequate servicing of the rural residential development is either currently available, and/or can be satisfactorily extended/augmented to comply with current standards for rural-residential development as per the Draft Development Contract contained in **Appendix G**.

5.9 HASTINGS LOCAL ENVIRONMENTAL PLAN 2001

The majority of the site is zoned 1(r1) Rural under Hastings LEP 2001 by virtue of the recent rezoning of the estate gazetted in January 2007. The proposed rural residential subdivision is permissible with consent under this zone, which was introduced in specific response to the need to re-subdivide and rationalise this estate.

The objectives of the 1(r1) Rural Residential zone are:

"To enable the development of land within this zone for rural residential purposes.

To enable appropriate development where allowed with consent."

The proposed re-subdivision of the existing rural residential estate is therefore consistent with these zone objectives.



In addition, the following Clauses of Hastings Local Environmental Plan 2001 are relevant to the assessment of this project application:

<u>Clause 13 – Essential Services.</u> This Clause aims to ensure that all new development occurs in a co-ordinated manner by requiring essential services such as water, sewer and drainage are established to the development site.

In this instance, while some services presently exist, the extension, augmentation and re-construction of some services is to be undertaken via a phased strategy of private infrastructure provision. This is detailed in the Draft Development Contract in **Appendix G** to this report, and as further discussed in **Section 6.13** of this report.

<u>Clause 17(1)</u> of the Hastings Local Environmental Plan 2001 establishes minimum development standards applicable to the 1(r1) zone. Specifically, the Clause states:

- (1) Consent may be granted to the subdivision of land by a plan of subdivision, within the meaning of Section 195 of the Conveyancing Act 1919:
 - (e) within Zone 1(r1), only if:
 - (i) the area of each lot created is, in the opinion of the Council, sufficient to accommodate:
 - (A) on-site disposal of effluent, and
 - (B) any relevant asset protection zone identified in a bushfire risk management plan under the Rural Fires Act 1997

Sections 6.7 and 6.8 of this Environmental Assessment illustrate that this can be achieved for the proposed subdivision in relation to wastewater and bushfire management respectively.

<u>Clause 25</u> of the Hastings LEP relates to the appropriate management of Flood Liable Land. This key issue is specifically addressed in **Section 6.3** of this Environmental Assessment.

<u>Clause 26</u> of the Hastings LEP relates to the appropriate management of Acid Sulphate Soils. This key issue is specifically addressed in **Section 6.6.2** of this Environmental Assessment.

There are otherwise no specific development standards or provisions within the Hastings Local Environmental Plan 2001 which are of direct relevance to this site, or the rural residential subdivision proposal.

5.10 DEVELOPMENT CONTROL PLANS

Development Control Plans applicable to the area &/or to the proposed rural residential subdivision include:

- ▶ Development Control Plan No. 17 Subdivision Code
- ▶ Development Control Plan No. 34 Acid Sulphate Soils
- Development Control Plan No. 38 Dwelling Houses and Ancillary Development

Compliance with the provisions of these documents is addressed within **Sections 6.1**, **6.6.2** and **6.1** of this Environmental Assessment respectively.



5.11 CONTRIBUTIONS PLANS

Council has in place a number of Section 64 and Section 94 Contributions Plans that relate to the provision of public services and infrastructure relevant to rural locations, including:

- Major Roads:
- Community Facilities;
- District Water Supply;
- Bushfire Facilities;
- Outdoor Recreation; &
- Administration.

It is anticipated that contributions consistent with these plans will be applied as part of the project approval conditions, taking into account the existing credits for 84 Lots.

5.12 DRAFT ENVIRONMENTAL PLANNING INSTRUMENTS

To the knowledge of the author, there are no draft Environmental Planning Instruments applicable to the subject site or proposed development at the time of this Environmental Assessment's preparation.



6 Environmental Assessment of Director General's Requirements

As described in Section 4 of this report, the Director General's Requirements cover a wide range of Key Issues which this Environmental Assessment is expected to address. These reflect the relatively large size of the site itself, its regional context within the Sancrox Rural Residential Strategy, its coastal location adjacent tidally affected waterways, its susceptibility to minor flooding and bushfire hazards, and the complexities regarding the nature of multiple ownerships within the estate.

It has thus been necessary to engage a range of Specialist's reports to ensure these Key Issues are satisfied, and to adequately address the expectations of the Director General. The proponents' responses to the identified Key Issues, including summaries of the findings from the specialists' reports, are detailed in the following sections.

6.1 SUBDIVISION LAYOUT, DESIRED FUTURE CHARACTER AND SUSTAINABILITY

This current subdivision pattern of the Le Clos Verdun estate effectively sterilises the land. The original farm plots within the estate are not permitted for residential occupation, and the residential blocks are now too small to comply with current-day building and health regulations, specifically relating to the on-site disposal of effluent. In respect to the original viticulture enterprise, the operational problems of the shared farming arrangements were manifested in un-workable management conditions relating to the site's farming practices.

The small-lot subdivision pattern, and multiple ownerships across the estate prevent the site being available for consolidation and future broad-scale farming, or other forms of agricultural practices (refer **Sections 3.5 and 6.9** of this report). The phased re-subdivision of the estate thus enables the land to become "usable" in the sense that there is no social or economic benefit that can be gained from the current subdivision pattern.

The key components of the proposed re-subdivision of this rural residential estate are:

- Creation of a total of 144(*) rural residential lots with lot sizes ranging in area from 4200m² (proposed Lots 49, 50 and 51) up to 15.21 hectares for proposed Lot 54. An average lot size of approximately 1.2 hectares has been achieved in the layout.
 - * Note that proposed Lot 144 in the subdivision layout is not to form part of the Community Title subdivision, nor does it form part of the Community Association. This site is to be created in Phase 1 via boundary adjustment under Torrens Title;
- The creation of 20 lots in Phase 5 to the east of Haydons Creek in the site's south-east will replace the 19 existing, un-serviced lots in this location. An extension of the internal road system will link these lots to the estate proper. The phasing of these lots in the last stage of the subdivision's development reflects the "new" additional infrastructure required to service this location;



- The proposed access road extending to the aforementioned 20 lots has been designed to link with the adjacent rural land identified under Council's Rural Residential Strategy for future investigation. An application to rezone this adjoining land is currently before Council;
- The potential building envelopes of all lots are located above the 1 in 100 year flood level. Of the 144 lots in the subdivision, only minor filling is proposed for Lots 110-112, and Lots 142-144. In each instance, the filling is minor, does not involve the disturbance of any existing vegetation, and will ensure the establishment of flood-free development parcels. Refer also to **Section 6.3** of this report;
- A Landscape Principles Plan has been prepared to address the management of existing landscaping within the estate, the proposed re-planting strategy within existing access and drainage routes, the identification and treatment of topographical features of the site such as ridge-lines, natural gullies and the riparian zones, a planting strategy for new access and drainage routes within the phased subdivision, and the revegetation and rehabilitation of disturbed sections within the Haydons Creek Riparian Zone. The two sheets which make up the Landscape Principles Plan are contained in Appendix E.

The objectives of the landscaping proposals are to utilise current urban design principles designed to improve on the visual amenity of the locality. Naturally occurring ridge-lines within the site are to be reinforced by supplementary planting of endemic tree species to provide scale and bulk to inform the topographical features of the site.

Road intersections are proposed with higher density landscaping treatments so as to define the junction, and optimise amenity for neighbouring residential lots (i.e. provide a privacy screen and reduce headlight glare).

Naturally occurring gullies are to be planted to assist in stabilisation of these areas, and to establish visual links along these natural corridors.

• The subdivision will create a wide-range of lot sizes and orientations, thereby enabling a diversity of future housing options within the estate. Individual freedom of design is thereby maximised with this rural setting. While the larger lot sizes facilitate best-practice water sensitive design and stormwater management, they also promote greater scope for future dwelling design to optimise solar access opportunities and energy efficient design.

Strict urban design strategies for the site are thus somewhat limited given the rural residential lot typology and large lot sizes – i.e. $8000m^2$ lots provide flexibility of dwelling siting options, and a relative freedom of design for future dwellings. Notwithstanding, the Community Management Statement also makes provision for an adopted set of architectural controls for the community title development, including controls relating building siting, scale, consistency in design and landscaping principles.

These are designed to complement and supplement the controls in PMHC's DCP Nos. 17 and 38 as they relate to quality urban design in new residential neighbourhoods and future dwelling design.



- An Integrated Surface and Stormwater Management strategy is illustrated in **Sheet 6** of the plans of subdivision in **Appendix D** to this report. The system is described in detail within **Section 6.2** of this report, but incorporates existing inter-allotment drainage, proposed bio-retention systems, culvert crossings for Haydons Creek road access, sediment control/detention dams to be located within community land, and a new dam structure to the northeast of the proposed cluster lots.
- A Cluster System for the treatment of effluent from 5 smaller lots is proposed in the northern part of the Estate. Proposed Lots 45-49 have areas ranging from 4200m² to 4500m². Given the parcel size, and proximity of these lots to the Hastings River, it is intended to establish a shared effluent disposal site located approximately 75m to the south-east (proposed Lot 1C). Full details regarding the treatment and construction of this infrastructure is discussed in **Section 6.7** of this report, and illustrated in **Sheet 7** of the plans of subdivision contained in **Appendix D**;
- Sheet 5 of the plans of subdivision contained in Appendix C also illustrates the 100m buffer to the Hastings River recognised by SEPP 71. This demonstrates that all adjacent lots, with the exception of Lots 45-49 referred to above, have sufficiently sized building envelopes, and potential effluent disposal areas located outside of this zone;
- The Community Title subdivision provides for the establishment of a number of Community lots within the estate. These parcels, collectively identified as Lot 1 on the proposed plan of subdivision include:
 - Community open space including provision for future tennis courts, community building/amenities block, passive and active recreation areas:
 - Private accessways including the internal vehicular access roads, and public pedestrian pathways linking to the adjacent waterways;
 - Existing dams and water quality control ponds within the estate;
 - The shared effluent disposal lot serving the Cluster System proposed for Proposed Lots 47-51 in the subdivision.
- An integrated system of fire-trails has been accommodated within the rear of all affected sites identified by the Bushfire Hazard Assessment, a full copy of which is contained in **Appendix K**. These trails have been strategically located outside the area of each respective lot's building envelope, outside the existing line of vegetation, and thus outside those areas of the site zoned for Environment Protection. Their location is further illustrated in Sheet 8 of the subdivision plans contained in **Appendix D**.
 - Construction of these trails is to be carried out by the Community Association in accordance with the guidelines contained in the Planning for Bushfire Protection document produced by the NSW RFS;
- All APZs required for identified sites within the Bushfire Hazard Assessment have been able to be retained wholly within each lot to which they relate to. Such APZs can be established in accordance with the guidelines of the Planning for Bushfire Protection document without compromising the values of neighbouring habitat areas or Riparian zones. In this respect, all APZs are



located within each lot's respective fire trail, and thus outside the 7(h) zoned land;

- Existing residences within the estate are to be retained, and are provided within appropriately sized lots to accommodate sufficient dwelling curtilage for the on-site disposal of effluent, and ensure compliance with relevant BCA, and bushfire management standards;
- No lots are proposed with a frontage to Sancrox Road. The draft Community Management Statement includes by-laws to this effect. This was also a direct request of both the RTA and PMHC;
- The proposal does not involve the disturbance of any areas of native vegetation, or native fauna habitat;
- The proposed re-subdivision aims to establish access to 6(a) Open Space zoned public land adjacent the Hastings River, and 7(h) Environment Protection zoned land adjacent Haydons Creek via the retention of the existing public access and provision of internal pedestrian accessways;
- The subdivision layout includes the creation of community land which incorporates open space opportunities for future residents including a tennis court, amenities building, playground and active recreation area;
- It is proposed to retain as much of the existing infrastructure within the rural
 residential estate as is possible. Existing roads, water mains,
 telecommunication lines and electricity cables currently service the estate.
 While it is anticipated that much of this infrastructure may require replacement
 in the longer term, there are opportunities for most assets to be retained.
 This will largely be determined at the detailed design stage.

Strategically, the proposed re-subdivision responds to the recommendations of the PMHC Rural Residential Strategy, is reflective of the specific LEP amendment gazetted in January 2007 to enable its purpose, and responds to the recommendations of the Sancrox Strategic Working Party. Importantly, the proposed plan of subdivision makes provision for the future integration with surrounding rural residential developments in the locality. This can occur directly via the connection of a link road to the adjoining property to the east, and indirectly via the retention of existing crown road reserve access bordering the site to the west.

The zoned, and developable land within the estate is relatively free of environmental constraints such as native vegetation, habitat corridors, severe topography, flood prone lands, bushfire hazard or acid sulphate soils. Where the developable land borders such areas, appropriate management and mitigation measures have been proposed to minimise potential impacts at the interface.

The development is located within an established rural residential context, is cleared of sensitive vegetation, is not constrained by topography, and is otherwise suitable for the scale of development proposed.

6.2 WATER CYCLE MANAGEMENT

Stormwater quality control and drainage details are provided in **Sheet 6** of the proposed plans of subdivision, the full set of which is contained in **Appendix C**.



The proposed design incorporates the existing system of stormwater drainage management which was established at the time of the original creation of Le Clos Verdun Estate. This comprises a system of inter-allotment drainage via established grass drainage swales and small farm dams. These features are now primarily located within the community lots of the proposed plans of subdivision, although easements will be necessary for some drainage, resulting from the re-subdivision of existing lot boundaries over the existing drainage infrastructure.

Upgrading of existing drainage infrastructure, and construction of new infrastructure will be required for later phases of the project. This will comprise re-grading of existing swales and earth berms which direct over-land flow into the existing catchment ponds/dams. A new dam is also proposed downstream of the proposed disposal lot (proposed Lot 1C) of the intended cluster system servicing Lots 47-51 (refer also to **Section 6.7** of this report). New drainage including road-side swales, piped culverts and bio-retention systems are included in the surface and stormwater management strategy for the project.

This Management Strategy has been modelled on a series of internal catchments, with calculations undertaken using the MUSIC methodology to determine water flows, and water quality demands. These calculations have generated the proposed surface and stormwater management scheme which combines existing and new drainage infrastructure. These catchments are represented below:

Table 6.1 Drainage Catchments

Catchment	Area	Proposed Treatments
Α	11.2 Hectares	Road-side Swales & Bio-retention system
C1	1.6 Hectares	Road-side Swales
C2	0.5 Hectares	Road-side Swales
D	20.3 Hectares	Road-side Swales & Bio-retention system
E	2.5 Hectares	Road-side Swales
F	3.5 Hectares	Road-side Swales & Bio-retention system

The proposed bio-retention systems will serve to remove sediments and potential pollutants by filtering stormwater through both the surface vegetation and an underlying sand filtration layer. The systems also allow for the retention of water, thereby delaying peak run-off flows.

Modelling of the site suggests that 3 of these systems are required as illustrated on the scheme shown in Sheet 6 referred to above. The strategy for the site's water management, combining the existing and proposed drainage infrastructure is illustrated in Sheet 6 of the Subdivision Plans in **Appendix D**. A summary of the MUSIC-generated Treatment Train Effectiveness is also included with this plan in **Appendix D**.

Concept landscaping treatments for the proposed bio-retention systems and existing depressions within the site are illustrated in **Appendix E**. Detailed designs for all drainage works will be provided prior to application for the Construction Certificate.

It is to be further noted that no works within the subdivision generate the need to intersect with the present water-table. All excavation and/or sub-surface site-works are proposed above the 1 in 100 year flood level. The Haydons Creek road crossing also only involves work and activities above natural ground level in this location.



Refer to the long-section of the creek crossing illustrated in Sheet 10 of the subdivision plans in **Appendix D**.

We therefore submit that a groundwater management plan is not required for this project.

6.3 FLOODING

6.3.1 Local Flooding Behaviour

The 1 in 100 year flood level for the site is illustrated in the Site Analysis Plans contained in **Appendix B**, and in Sheet 2 of the Subdivision Plans of **Appendix D**. The 1 in 100 year level has been established from modelling of the Hastings River undertaken by Patterson Britton and Partners on behalf of Port Macquarie-Hastings Council. Undertaken in 2006, this study served to review and update the last study of the Hastings River undertaken in 1983.

For the Le Clos Verdun estate, the 1 in 100 year flood level has been calculated to be 4.5m AHD. The 1 in 20 year flood event is modelled to reach 4.0m AHD. Copies of the modelled flood levels for the Hastings River in the vicinity of the site are contained in the Site Analysis Plans contained in **Appendix B**.

While portions of the site are anticipated to be inundated in a 1 in 100 year flood event, the subdivision layout has responded directly to this flood level as a development constraint. In this respect, the boundaries of the proposed subdivision have been guided and shaped by this flood level (refer subdivision plans in **Appendix D**). Similarly, the road layout, lot configuration and community land has also been guided by the constraint of this flood level. All significant features of the subdivision are located above this level, such as all road access including the link road to the eastern lots 114-133 to be constructed in Phase 5. Therefore flood-free access and egress is available to all lots in the subdivision.

Note that while Sancrox Road itself is flood-liable to the east of the estate's existing intersection and entry point, flood-free emergency egress is available to the Oxley Highway via Rawdon Island Road west of the site.

All house sites are constraint-free and capable of achieving the minimum requirement of 800mm freeboard above this level. Minor filling is proposed as per **Sheet 5** of the plans of subdivision contained in **Appendix C** to this report. Of the 144 lots proposed in the subdivision, only minor areas of Lots 108-109 and 140-142 are proposed with a small amount of fill to provide satisfactory building envelopes and areas for the on-site disposal of effluent. These areas of intended filling are free of vegetation, drainage infrastructure or any other significant features of the site. The total area of the estate proposed to be filled therefore amounts to approximately $9000m^2$.

Given the negligible volume of fill material proposed over the 189 hectare site, the proposed re-subdivision will have no impact on the flooding behaviour of the Hastings River. Note that care has been taken to avoid works within 40m of both the Hastings River and Haydons Creek. Only Lots 140-142 propose any disturbances within the non-tidal, upper reaches of Haydons Creek, constituting minor fill at the rear of these lots' building envelopes and within their APZ. No vegetation is to be affected by this filling.



6.3.2 Effects of Climate Change

The potential impact of global warming on the above assumptions has also been considered in the modelling undertaken while preparing the 2006 Flood Study for the Hastings River. A sensitivity factor applying to the assumed Ocean level in the vicinity of Port Macquarie was factored into the modelling data to allow for some variability in the calculation of the 1 in 100 year level taking into account possible ocean rises due to climate change.

Council recognises however that much of this data is based on predictive modelling, and a separate brief for the preparation of a Flood Management Plan for the Hastings River is under current investigation. This future management plan is intended to apply latest guidelines relating to climate change impacts on flood level modelling, which may in turn revise the calculated 1 in 100 year flood levels for the Hastings River. However, relevant climate change data is still being gathered by CSIRO and is not presently available to the Council or other Government authorities. In this regard, the 2006 study is currently accurate based on best information presently available.

Notwithstanding, given the location of the estate some 15km upstream of the rivermouth, the small proportion of 1(r1) zoned land within the estate susceptible to flooding, and the minimal amount of filling proposed accordingly, this factor is likely to have a negligible impact on the subdivision design proposed. For example, adjustments to the extent of minor proposed filling (presently <1ha), and/or an acceptance of revised minimum freeboard standards (which is most likely) can be easily accommodated within the proposed development.

6.3.3 Probable Maximum Flood Event

The Probable Maximum Flood (PMF) has also been modelled for the Hastings River. Figure 37 of the Patterson & Britton report (and as reprinted in the flooding information of the Site Analysis Plans in **Appendix C**) illustrates the potential impacts of such an event on the subject site. While such an event would be expected to have a severe impact on downstream properties, particularly in the lower reaches of the Hastings River flood-plain east of Dennis Bridge, the impacts on the subject site are manageable.

Given the compliance with the 1 in 100 year flood height, the relatively larger potential building envelopes afforded by the average lot size of 1.2 hectares for the rural residential proposal, and the location of roads and services along the relatively higher ridgelines of the property, it is considered the design appropriately protects against severe impacts to likely building sites from such an event.

As referred to above, flood-free emergency egress exists to the Oxley Highway to the west of this site from the estate's main entry point. Given only minor back-watering is anticipated to occur in this location, this egress is not compromised by the PMF event.

6.4 FLORA AND FAUNA

In 2004, a comprehensive ecological assessment of the Le Clos Verdun estate was undertaken to determine its suitability for rezoning and subsequent re-subdivision for rural residential purposes. The ecological assessment responded to the minimum statutory standards prescribed by Sections 5A and 79C of the Environmental Planning & Assessment Act 1979, State Environmental Planning Policy No.44 –



Koala Habitat, and the Commonwealth's Environment Protection and Biodiversity Conservation Act.

This assessment found that:

"Within the areas proposed for development, the lots are mostly cleared and have minimal ecological values, nor areas warranting conservation. For this and a range of other reasons, it is a reasonable assumption that on ecological grounds, both rezoning and subdivision will proceed. With these conclusions in mind, this Report has been prepared to address the ecological requirements of both rezoning and subsequent subdivision."

More specifically, the assessment determined that the proposal should not have a significant impact on flora, fauna and biodiversity. An Environmental Protection and Biodiversity Conservation Act assessment also found there would not be a significant impact on any matter of national environmental significance.

However, it was assumed that of the 189 hectares of land within the estate, up to 2 hectares of vegetation may be disturbed in 5 separate areas by the proposed resubdivision. The assessment also was made on the basis of a 122-lot re-subdivision proposal, which differs slightly, if not in total area and actual impacts, from the current proposal for 144 Lots. While some of these details vary slightly from the project application being made, we submit that the methodology, findings and recommendations of this earlier report are still valid by virtue of:

- The current plan of subdivision has responded to the recommendations of this original ecological report. In this respect, the previously assumed disturbances to select pockets of vegetation are now not affected by the intended subdivision works, for example:
 - The sensitive vegetation on or adjoining the site has since been rezoned
 7(h) Environment Protection, and the subdivision layout contains no building envelopes within this zone;
 - The proposed road access linking the central estate area to the 20 lots in the far eastern fringe of the site has been designed to "meander" through the existing vegetation. At best, only 2-3 minor trees would require removal to enable its construction. Selection of individual trees for removal (if necessary) would be undertaken at the detailed design stage;
 - The 3 lots located adjacent the eastern side of the entrance road adjoining Sancrox road no longer require any clearing to establish suitable building envelopes clear of requisite APZs. In this respect, these lots' depths have been increased in the current plan of subdivision, and APZ dimensions have been relaxed with the subsequent introduction of 2006 Regulations since the original Ecological Assessment was completed:
 - Lot 106 (now proposed lot 130) includes a cleared building envelope outside the area of the requisite APZ. As per the previous comments, the APZ dimensions have been relaxed under the 2006 Regulations introduced since the original Ecological Assessment.
- Moreover, the "extent" of the disturbed land is less than that assumed in the study area of the original report's assessment, despite the fact that more lots in total are now proposed within the current plan of subdivision.



Upon preparation of the revised subdivision layout in response to these findings, an updated assessment of the project's impact on the site's ecology was also undertaken. This addendum report is attached to the original assessment report, and is annexed at **Appendix H**.

The addendum report has regard to recent changes to the Threatened Species legislation and conducts a specific assessment in respect to the current subdivision plan. The report found that:

"Essentially, there is no variation to the conclusions previously drawn"

The previous conclusions alluded to in the Ecological assessment were that:

- "Rezoning is not prevented, nor is Council prevented by the provisions of SEPP No.44 from granting consent to this development application for residential development.
- Nor is it considered a Section 91 Licence is required from the NP&WS nor imposition of a Section 88 Instrument.
- It is considered that the impact of the proposal on threatened species will not be significant and a Species Impact Statement is therefore not required.
- The proposal should not have a significant impact on flora, fauna and biodiversity. However, impacts will occur and these should be managed and reduced by adoption of the recommendations ... found in Part E.
- It has been determined that the proposal will not have a significant impact on any matter of national environmental significance nor on any Commonwealth Land. Therefore the Commonwealth Minister of Environment's approval to undertake the activity is not required.
- Hence Council is not prevented by the provisions of SEPP No.44, nor Sections 5A or 79C of the EP&A Act from granting consent to the development application."

As described above, the current plan of subdivision directly responds to the recommendations of this ecological assessment. Moreover, the layout has been modified to eliminate the need for any clearing within the site. The impacts associated with the re-subdivision are thus less than the 'acceptable' impacts assessed and endorsed by the original 2004 Ecology Report.

The recommendations of the 2008 addendum report are:

- Recommendation 10 The road proposed through the 7 (h) Environment
 Protection Zone adjacent lots 114 and 132 either should not be fenced, or
 alternatively be fenced with koala/wildlife friendly fencing that does not restrict
 the free movement of koalas and larger mammals across this road. This road
 should have Koala warning signs installed and speed humps. Additional
 planting of trees/shrubs should not occur immediately adjacent this road.
- Recommendation 11 The road proposed through the 7 (h) Environment
 Protection Zone adjacent proposed lots 114 and 132 should be adequately
 designed and engineered to ensure no sediment movement into Haydon's
 Creek occurs.
- Recommendation 12 Within lots that either contain or adjoin land within the Environment Protection Zone, eg proposed Lots 28-31, 36-38 and 132-133, 141-144 (but not exclusively so) – building sites, access driveways, bushfire



buffers can and should be located to avoid the need for tree removal. Council should adopt controls to ensure this vegetation is protected.

- Recommendation 13 On other partly forested lots, eg proposed Lots 11-16, 65, 101-102 (but not exclusively so), building sites, access driveways, other structures and where required bushfire protection buffers - can and should be located to avoid the need for tree removal. Council should adopt controls to ensure this vegetation is protected.
- Recommendation 14 To the extent reasonably deemed practical, the Environment Protection Zoned land should be managed by application of the proposed Community Management Plan and address issues such as access, fencing, grazing, weed control, fire protection and enrichment planting. Development Consent condition, eg Covenants, may be needed to address this matter.
- Recommendation 15 If in accord with Council policy, dogs should be constrained within fenced enclosures on all lots that adjoin the Environment Protection Zone corridor. Other koala protection practices, eg escape means from swimming pools, should be considered on these lots.

These recommendations, and those of the original ecology report still relevant to the current subdivision layout, have been incorporated in the draft Statement of Commitments as detailed in **Section 7** of this report.

Note that there are no impacts on any individual specimen, or existing stands of vegetation proposed by this application. No trees require removal for the creation of the Haydons Creek crossing, for the creation of individual driveways on any house lots containing individual trees (including the copse of trees located on the western spine road and zoned 7(h) – Environment Protection), or for future building sites on any of the lots. This is further illustrated in the photographic plates in **Appendix D**.

Notwithstanding the lack of vegetation disturbance, the Ecology Report and Landscape Principles Plan contained in **Appendix F** provide for the revegetation and rehabilitation of previously disturbed areas of the Haydons Creek Riparian Zone, restoration of existing gullies and ridgelines, and on the fringes of the private recreation community lots. This is illustrated in the Landscaping Principles Plan in Appendix E, and discussed in more detail in **Section 6.12** of this report.

In this regard, we submit that the relevant provisions of the Environmental Protection and Biodiversity Conservation Act 1999, the Environmental Planning & Assessment Act 1979, and State Environmental Planning Policy No.44 are adequately satisfied. The rural residential proposal is consistent with the objectives of these instruments.

6.5 ABORIGINAL AND CULTURAL HERITAGE

The proposed development site is not within the vicinity of a designated heritage item identified under Council's LEP 2001. The proposed re-subdivision will have no impacts on any items of European heritage.

Lindsay Moran of the Birpai Local Aboriginal Land Council undertook an Archaeological Sites Investigation of the subject land in February 2006. The investigation had regard to the fact that sites do exist (within a 5km radius) of the existing estate. However, the survey revealed no evidence of any relic or Aboriginal place within the study area.



The report concluded that:

"No artefact material was located or unearthed during this survey of the Le Clos Verdun redevelopment site.

Therefore we the Birpai LALC and Mingaletta Development Corporation have no objections to the development proceeding."

A copy of the advice from the Birpai Local Aboriginal Land Council is contained in **Appendix M** to this report.

6.6 CONTAMINATION AND REMEDIATION

6.6.1 Past Contaminating Land-uses

A Phase I and Phase II Environmental Site Assessment of the Le Clos Verdun estate was undertaken in February 2004. The purpose of the assessment was to determine the site's land-use history, as well the current land practices so as to identify any potential sources of soil and/or groundwater contamination. The assessment responds directly to the obligations under State Environmental Planning Policy No.55, and also aims at determining any potential responsibilities under the Contaminated Land Management Act 1997.

The Site Assessment determined that neither the EPA, or Port Macquarie-Hastings Council had identified the site as being subject to any past or present potentially contaminating land-use activities. Site investigations revealed the existence of a small fuel storage area within the estate's management lot (existing Lot 86 DP 791199), however this was of a domestic scale, and was not uncommon to the site's rural location.

No land contamination issues were thus found to have occurred, or were occurring on the site at the time of the site assessment. Furthermore, there has been no change in land-use activity on the subject land since the preparation of this original report in 2004. As such, the conclusions reached in this site assessment are still relevant, which are:

"The Phase I preliminary investigation of the Le Clos Verdun Estate did not identify potential areas of concern due to historical and existing land uses other than those identified on the management lot, which was subject to the Phase II detailed investigation.

The results from the preliminary surface soil investigation of the vineyard area did not identify the presence of organopesticides or the selected inorganics above the relevant residential land use criteria.

Investigation for bulk contamination of natural soils around the UST and fuel lines did not identify selected hydrocarbon compounds and inroganics above the relevant residential land use criteria.

Results from the surface soil investigation did not identify the presence of TPH, BTEX, organopesticides or the selected inorganics above the relevant residential land use criteria."



Accordingly, there were no remedial actions proposed by the recommendations of the Environmental Sites Assessment. It is thus submitted that the provisions of SEPP 55 – Remediation of Land are satisfied.

A copy of the full Phase I and Phase II Environmental Site Assessment is included in **Appendix I** to this report.

6.6.2 Acid Sulphate Soils

As per Clause 26 of Hastings LEP 2001 and the provisions of Port Macquarie-Hastings Council's DCP No.34 – Acid Sulphate Soils, a small portion of the land adjacent the Hastings River, and the Haydons Creek Riparian Zone is identified as Class 4 land. This Class 4 land serves as a buffer to the creekline itself which contains some Class 2 land within immediate proximity of the high water mark.

Class 4 soils are typically located >2m below the ground surface and are generally located below the 1 in 100 year flood level for this site. The soils are located well clear of likely building envelopes, and at >2m depth, would be not susceptible to disturbance by any works proposed by this project regardless.

Some Class 2 soils have been identified within the Haydons Creek Riparian Zone, which again would remain undisturbed given the 7(h) zoning of this area. However, the eastern link road to be undertaken in Phase 5 will cross this marked location.

Again however, no works are proposed within this area that would have the effect of disturbing these soil-types. No vegetation requires removal, and only filling works to establish the flood-free access are required in this location. The road culvert would be emplaced at the existing ground level or higher, and all road works would be established up to the 1 in 100 year flood level, some 2m above natural ground.

In this regard, we submit that an Acid Sulphate Soils Management Plan is not required for the project, and the re-subdivision proposal is consistent with the aims and objectives of both Clause 26 of the Hastings LEP, and the provisions of DCP 34.

6.7 WASTEWATER MANAGEMENT

The development site is not connected to the town reticulated sewerage system, but rather relies on the adoption of on-site effluent disposal for individual lots. Accordingly, a wastewater disposal report was commissioned to investigate the capability of the site to accommodate development at the scale of a 144 Lot rural residential development, having specific regard to the environmental characteristics of the subject site (refer Coffey Environmental report contained in **Appendix J**).

The investigation was based on the understanding that all proposed lots will utilise on-site disposal of effluent, but will be connected to town water. The investigation also recognised that parts of the site are below the 1 in 100 year flood level and the 1 in 20 year flood level. It was also recognised there are a number of significant watercourses adjacent to the site.

Chandler Geotechnical carried out several stages of previous study on the site, and a Wastewater Management Study (December 2005) carried out for Port Macquarie-Hastings Council by Whitehead & Associates related specifically to the Sancrox locality. Both these documents were referred to during Coffey's recent investigations for this proposed plan of re-subdivision.



Based on this background information, the report sought to examine the options for:

- Identification of lots where standard individual on-site systems are suitable;
- 2. Identification of lots where high performance individual on-site systems are required;
- 3. Identification of lots where a "cluster" system servicing several lots is required; and to
- 4. Rank disposal options in terms of preference and cost.

The investigation found that the site, the subdivision layout and intended lot sizes to be suitable for a range of on-site disposal options. Moreover, the report did not recommend any limitations on the development potential for any lots in the subdivision proposal.

As per point 3 above, a Cluster System for the treatment of effluent from 5 small lots is proposed in the northern part of the Estate. Proposed Lots 45-49 have areas ranging from 4200m² and 4500m². The size of these lots is essentially dictated by the location of the existing road in this location and its proximity to the Hastings River.

Given the parcel size, and proximity of these lots to the Hastings River, it is intended to establish a shared effluent disposal site located approximately 75m to the southeast (proposed Lot 1C). This site will be retained in community ownership and will be maintained by the Community Association. Full details regarding the purpose and treatment of this infrastructure is illustrated in Sheet 7 of the plans of subdivision contained in **Appendix D**.

The investigation of the site, the subdivision layout, and documentation relating to recommended systems of effluent disposal is contained in full in **Appendix J** to this report.

6.8 BUSHFIRE

Pursuant to Council's bushfire-prone land mapping, the site is partially designated as bushfire prone. Some small pockets of Category 1 vegetation have been identified along the site's western and eastern fringes, and portions of the land fall within the buffer zone to this vegetation. Accordingly, a comprehensive bushfire hazard assessment has been prepared for the entire site.

The objectives of this report were to ensure the proposed subdivision proposal incorporated sufficient measures to minimise the potential impact of bushfires on future occupants, and to reduce the potential risk to property and the community from bushfire incidents.

In responding to these objectives, a number of recommendations have been made including references to minimum APZ, the location/construction of fire trails as appropriate, and the imposition of minimum construction standards for new dwellings on specifically identified lots. APZ and Fire Trail locations are documented in the Bushfire Hazard Assessment in Appendix K. Importantly, all APZs and Fire Trails are located outside the Riparian Zone and 7(h) zoned portions of the site.

The locations of recommended fire trails and APZs are also illustrated on the Access Strategy which comprises Sheet 8 of the plans of subdivision contained in **Appendix D** to this report.



By implementing such measures, the bushfire hazard assessment concludes:

"It is considered that the proposed subdivision of Lots 1-80,83,84, 86-88 DP791199 and Los 90-95 DP805549, Le Clos Verdun Estate, Sancrox is at risk of bushfire attack; however it is in our opinion that with the implementation of the bushfire threat reduction measures and consideration of the recommendations in this report, the bushfire risk is manageable for the proposed subdivision.

With the implementation of the preliminary recommendations it is considered that it will be possible for the proposed subdivision to meet the applicable acceptable solutions as provided for in NSW Rural Fire Service, Planning for Bushfire Protection, 2006."

A copy of the full Bushfire Hazard Assessment is included in **Appendix K** to this report.

6.9 AGRICULTURE

To determine the long term agricultural capability of the site, an Agricultural Suitability Assessment was undertaken over the Le Clos Verdun rural residential estate in April 2004. The objective of this investigation was to determine whether the site exhibited any characteristics of "prime agricultural land". The report was originally commissioned in support of the proposal to rezone the site 1(r1) which was since supported by PMHC and the Department of Planning in terms of the recent LEP modification gazetted on 12 January 2007.

The investigation was undertaken as a land capability assessment, addressing the suitability of the estate for a range of commonly &/or typically occurring agricultural enterprises considered appropriate for its Sancrox location. These included viticulture, general and intensive grazing practices, and general horticulture.

The report concluded that as the site is under a large number of separate land ownerships, and comprises smaller sized parcels of approximately 1.2 hectares average area, the financial viability of most agricultural enterprises was limited. Specifically, the assessment reported that:

"Increasing the viability of these parcels would require significant inputs and intense farming practices. This would result in significant environmental degradation of the land itself and the sensitive ecosystems surround the site (Hastings River).

As no land unit was found to be ideally suited to the chosen agricultural enterprises (viticulture, grazing land, and general horticulture) and that significant improvements or best management practices would be required to address the identified limitations, it is concluded that the Verdun Estate is not "prime agricultural land"

A copy of the full Agricultural Suitability Assessment prepared by Environmental & Earth Sciences is contained in **Appendix L** to this report.

The recently exhibited Draft Mid-North Coast farmland Mapping Project does not identify the existing estate as Prime, or Regionally Significant Farmland. The only areas of the rural-residential site identified as Farmland occur along the fringes of the estate, which are below the 1 in 100 year flood level. These fringe areas are



constrained by the environmental constraints identified by the site analysis (refer **Section 2.3**), and are further sterilised by the existing small-lot subdivision layout and multiple ownerships. Therefore, the Mapping Project does not establish any criteria that would suggest the findings of this original Agricultural Suitability Assessment are incorrect.

It is also important to stress that all LCV landowners are in agreement that this development should proceed, and have all signed authorities for this to occur. In this respect, no individual land-owners seek to continue the vineyard venture, nor turn the land towards any other agricultural farming activity. The investment in this estate was primarily as a rural residential address with some potential for a return on the shared farming scheme, neither of which are now possible under current regulations. There is therefore no conflict between competing land use activities.

6.10 MINERAL RESOURCES

The subject land is not known to contain, nor has it been elsewhere identified as a potential source of valuable mineral resources. The site's previous land-use history relates to agricultural uses only, having operated as an area of light grazing prior to its attempted conversion to viticulture in the 1980s.

The potential for the site to be re-investigated for possible mineral extraction or similar activities is now compromised by the multiple ownerships over the estate. Over 80 individual land-owners have high expectations for the land's future rural residential re-subdivision given the expectations offered by the initial land-release for the shared viticulture enterprise. Establishing the site as a potential source for mineral extraction is therefore not a realistic option for the estate's future.

In terms of supply of construction material to the proposed construction of the project, we submit that as the site is located within the mid-north coast of NSW, an area experiencing some of the highest growth rates in the state, that construction supplies in the locality are appropriately resourced for this scale of development. There are a large number of competing industries and quarries in the Sancrox, Kings Creek, Bago and Port Macquarie regions with sufficient resources to supply the urban growth centres of the Hastings including Areas 13, 14 and 15 for a period of well over 20-30 years.

With the recent expansion of the urban centres of Port Macquarie, Wauchope, Lake Cathie, Bonny Hills and Laurieton, so too has there been an expansion of labour stocks associated with the construction industry. Thus not only are construction resources in abundant supply, but the economic impact of such a development will be positive both for the employment, and economic climate of the community.

6.11 TRAFFIC AND ACCESS

6.11.1 Road Design

Le Clos Verdun is currently accessed from Sancrox road via the internal private road system which serves as a spine to the existing rural residential estate. This road links to four internal culs-de-sac, and provides direct frontage to approximately 75 lots within the subdivision. The proposed re-subdivision intends to utilise these existing roads, with future link road extensions as illustrated in the proposed plans of subdivision contained in **Appendix D** to this report.



As recommended by both the RTA and PMHC, the proposed plan of re-subdivision has been amended to make provision for vehicular integration with adjoining properties. This includes a future access connection to land immediately to the east. This land is similarly identified for rural residential investigation under Council's Rural Residential Strategy. The access link, which services Lots 112 - 131 in the attached plans of subdivision, has been specifically extended to the adjoining property for this purpose.

During pre-lodgement discussions with PMHC, the option of establishing a further vehicular linkage to the north of the estate was also discussed. Detailed investigations revealed this was not practicable for a number of reasons, including the potential impacts on the lower reaches of Haydons Creek associated with the creek crossing that would be required. Additionally, full emergency access within the proposed estate is adequately served by the system of proposed fire-trails. Furthermore, consultation with the adjoining land-owner to the north-east indicated this would not provide any advantage to their site.

To compensate, an internal loop road was incorporated into the design in the vicinity of proposed Lots 59 - 68. This met with the agreement of PMHC engineers, not only in terms of its value in providing greater vehicular circulation within the estate, but as a way of avoiding a potential 'dead-end' in respects to the internal water service.

To ensure adequate road safety, while still enabling unencumbered service vehicle access within the subdivision, a wide meandering carriageway design has been adopted. This is partly reflective of the existing spine road location, but also of an over-arching desire to establish a safe residential environment capable of shared traffic opportunities.

Coupled with the Landscaping Principles Plan, the proposed road design attempts to encourage a 30km/hr desirable speed environment as per the RTA Road Safety 2000 guidelines, and in accordance with AMCORD principles. In this regard, the road design is consistent with the objectives of the RTA Guide to Traffic Generating Developments in aiming to establish a safe rural traffic environment for future residents. Such design measures have included:

- ▶ The existing divided and landscaped spine road adjacent proposed Lots 12-16 has been retained, which is to promote a domestic feel to the subdivision estate;
- Intersections to be constructed in contrasting paving textures (stamped concrete, paving bricks or similar);
- The deliberate absence of an external link road in the site's north, thereby reducing potential vehicle numbers and ensuring traffic volumes are representative of the local residential estate;
- ▶ A meandering street pattern designed to force drivers to slow on corner approaches, and adjacent intersections;
- All existing vegetation adjacent existing streets is to be retained in the short term, with longer term re-planting strategies included in the landscaping principles plan to replace existing inappropriate species for a road environment;
- ▶ Adoption of an appropriate number of 3-way intersections, thereby enabling appropriate traffic circulation, without interrupting residential traffic flow;
- ▶ No cross intersections have been utilised in the overall road design.

These are all subject to detailed design at the construction certificate stage of each development phase. However, the objective is to ensure that the proposed road design measures are self-enforcing in respect to the speed environment they are designed to encourage.



6.11.2 Pedestrians, Bicycles and other forms of Transport

Given the site's rural location, and the fact the site does not serve as a major linkage between traffic generating destinations, a system of cycleways linking to external locations is not proposed. Furthermore, the internal road system is not of sufficient traffic volumes to warrant the construction of separate cycle-lanes within the internal carriageways. The rural setting also precludes the site as being suitable for all-weather, pedestrian footpath formation.

However, all internal roads have been designed to accommodate suitable area to enable a safe, shared access system within proposed road reserve widths. Grassed verges will enable the safe movement of pedestrians and domestic animals, while road carriageways are proposed with sufficient width to permit shared access by motor vehicles and bicycles. All internal roads link to intended areas of community land, including the formalised pathways serving to link with the adjoining public spaces adjacent the Hastings River and Haydons Creek.

All internal roads are designed to accommodate large vehicles (garbage, fire-fighting, ambulance, removalist and construction vehicles), including local buses. However, it is not anticipated that the volume of lots proposed would generate the demand for a separate bus-service "within" the estate itself. Bus stop locations and the like have not been included in the preliminary road design in this regard, although there is capability within the layout to accommodate such services if directed by Council.

6.11.3 Road Formation

As all internal roads within the estate are privately owned, constructed and maintained, a formal Assessment of Roads was undertaken for the internal road system of Le Clos Verdun Estate in 2001 and more recently reviewed in 2006. The purpose of the report was to assess the current condition of the existing road pavements within the estate, and to determine the likely costs involved with the remediation of these assets to compliant standards.

This report determined that the existing roads were more appropriate to an urban environment in terms of their compliance with the minimum standards of Council's subdivision policy (DCP No.17). Further road widening and drainage works would be necessary for the roads to be brought up to rural residential standards, and to satisfy anticipated traffic generating rates as per Daily Trip Calculations under Section 3.3.1 of the RTA Guide to Traffic Generating Developments.

It is acknowledged that the undertaking of general road improvements will be necessary to adequate service all lots within the rural residential estate. Moreover, a large number of lots within the proposed plan of subdivision (refer **Appendix C**), require new road construction to enable vehicular access to be obtained.

As intimated earlier in **Section 3.3** of this report, these roads will remain in private ownership/management while-ever the land remains under community title. However, it would be anticipated that at some point in the future, these assets (once reconstructed) could be returned to public ownership. In this respect, it is intended that all future road construction is to be undertaken in full compliance with Port Macquarie-Hastings Council minimum expected standards for public road construction.



6.11.4 Sancrox Road

The proposed subdivision's intersection with Sancrox Road is the same as that which currently services the existing estate and is appropriate. Good sight distances are available in both directions, is in compliance with AUS-SPEC for the existing 80km//hr speed-limited environment, and the surface treatment of the intersection is satisfactory subject to minor re-grading. Re-location of the access to the west was investigated to ascertain if a larger lot area could be achieved for Lots 140-142 in the proposed plan of subdivision. However, sight distances and adequate safety could not be achieved to comply with AUS-SPEC due to the existing crest located towards the intersection with Rawdon Island Road west of the site.

Similarly, a second access to Sancrox Road to the east, in the vicinity of Lots 112-124 was examined, but could not be safely established given a similar crest and long bend present in Sancrox Road in this location. Moreover, both RTA and PMHC have previously confirmed in their Sancrox Precinct roads strategies that no additional access points to Sancrox Road should be established, and that the existing Verdun entry point should be retained.

6.11.5 Regional Transport Issues

In respect to the wider regional implications of the proposed re-subdivision of Le Clos Verdun, the proposal is consistent with all relevant strategic documents produced by PMHC and other agencies relating to the locality. The development fulfils the stated demand for rural residential land in the Sancrox area, and will have no impact on, nor be adversely impacted by the established industrial development 2km to the east of the site such as Hanson Quarry, Cassegrains Winery and Expressway spares. There is similarly considered to be no conflict with the anticipated expansion of this employment precinct under Council's exhibited Industrial Strategy.

The rural residential subdivision is within the capacity of the existing road system, which has been under close investigation within the ambit of the Sancrox Strategic Working Group. These investigations, which include a separately commissioned Traffic Study currently being prepared on behalf of PMHC, indicate the Sancrox Road and Pacific Highway intersection is operating well within its capacity at present.

It is noted that the RTA has recently exhibited a proposed overpass at the intersection of the Pacific Highway and Sancrox Road. This is a long term solution, but will ultimately reduce pressure on this intersection as industrial expansion of the employment precinct occurs. However, the existing traffic capacity of the Sancrox locality, including the accommodation of the Le Clos Verdun re-subdivision, does not warrant the bringing forward of these works.

Note that as per the provisions of State Environmental Planning Policy (Infrastructure), the proposed subdivision involves the creation of more than 50 allotments. However, as access to the subdivision is not taken directly from, or within 90m of a main/arterial road, the provisions of Schedule 3 of this SEPP do not apply to this project.

6.12 RIPARIAN CORRIDOR AND FORESHORE ACCESS

6.12.1 Riparian Zone Management

The satisfactory management of the Riparian Zone relies on the principle that the resubdivision will not involve any disturbance to the Riparian zone itself. The



identification of sensitive lands adjacent the Hastings River and Haydons Creek at the rezoning stage resulted in the zoning of these lands into reserved lands, thereby enabling their long-term conservation.

The subdivision layout has since responded to the identification and subsequent rezoning of these areas, such that appropriate APZ distances and adequate buffers can be established between any future dwelling construction and the existing vegetation within these sensitive zones. This is exclusive of the existing 30m-wide buffers which presently exist adjacent these waterways.

Further, the ecological recommendations and proposed landscape principles work together to establish a strategy for the rehabilitation and revegetation of these marginal areas. Recommendations in the Ecology Report contained in **Appendix H** have been replicated in the Landscape Principles Plan contained in **Appendix F**, and which provides for the supplementary planting of Koala food trees and rainforest vegetation within the disturbed area of the Riparian Zone. Coupled with the revegetation strategies, the implementation of appropriate water management strategies within the subdivision is also discussed in **Sections 6.2 and 6.7** within this report.

Advice from Port Macquarie-Hastings Council has indicated an unwillingness to acquire any more lands for public ownership, particularly sensitive lands adjacent Haydons Creek which imply a responsibility in terms of bushfire management, thereby establishing liability concerns for Council. As proposed by this project, the management responsibilities and potential liabilities are to lie with the respective individual land-owners within the Community Scheme, and thus the Community Association itself.

The draft Community Management Statement introduces land-use controls for future residents of those lots which back onto these sensitive lands. The management and mitigation measures proposed by the Bushfire Hazard and Ecological Assessments (as detailed in **Section 7** of this report) will ensure that the occupation of these lands adjacent the Riparian zone will not compromise the integrity of these sensitive lands. Appropriate stormwater and sediment/erosion control measures are also to be implemented as per the concept integrated storm-water management plan contained in Sheet 6 of **Appendix E** and as discussed in more detail in **Section 6.2** of this report.

6.12.2 Riparian Zone Access

All points of existing public access to the Hastings River and Haydons Creek are retained, and not affected by this subdivision design. The upper reaches of Haydons Creek are already in private ownership, as is the case for the neighbouring areas of Haydons Creek to the south of Sancrox Road. Port Macquarie-Hastings Council have expressed an unwillingness to amend this tenure.

The subdivision plan and community management statement makes specific provision for the formalisation of current pedestrian accessways linking the internal road system with the foreshore areas of both Hastings River and Haydons Creek. These accessways will not impact on the integrity of these foreshore areas, yet will allow for unrestricted public access to the foreshore areas for the enjoyment of future residents of the Sancrox locality, and retain this asset for future generations.



6.12.3 Reserve Trust

There are no planned works for the shoreline of the Hastings River in this project application. It is to be noted however, that local Verdun land-owners are in the process of negotiating with the Department of Lands to establish a Reserve Trust for the long-term maintenance and management of the foreshore Crown reserve along the Hastings River & Haydons Creek. This Trust would be established in accordance with the guidelines set out by the Department of Lands.

It is envisaged this trust would be responsible for any development within the 30m waterfront reserves, such as jetty, boat ramp, picnic areas & walking trails and other associated amenities. The Trust would also be responsible for foreshore restoration works in the long-term, and would work in co-ordination with the Community Association in maintaining the waterfront.

A copy of the initial letter of correspondence with the Department of Lands in this respect is contained within **Appendix N**.

6.13 PROVISION OF PUBLIC SERVICE AND INFRASTRUCTURE

The established rural residential estate is currently serviced by town water, telecommunications and electricity services, but under a private maintenance arrangement. This is also true for the existing internal road system, which is entirely contained in private ownership.

Future construction of roads, services and associated infrastructure will again be undertaken as private works, and will be in accordance with the commitments and by-laws of the draft Community Management Statement contained in **Appendix F** to this report, and more specifically the draft Development Contract contained in **Appendix G**.

This latter Development Contract has been drafted to establish a Phasing of works associated with the completion of the subdivision and the timing for construction of infrastructure and essential services. The Contract has been specifically written to contract the Community Association with Port Macquarie-Hastings Council so that both parties are bound to the development's satisfactory completion. The Development Contract is to be registered (with the Community Management Statement) at the LPI NSW with the plan of subdivision.

Each phase of construction and development works is documented in the draft Contract and includes the provision of water, electricity, telecommunications, drainage and all necessary service conduits, as well as fire trails, community facilities and amenities, and roadworks with all earthworks and drainage associated therein.

The Development Contract also establishes the timeframe of the phases, enabling residential development to occur on those lots so identified. For example, Phase 1 allows the "release" of those lots which presently enjoy road frontage and access to essential water, electricity and telecommunication services. Other than for minor reconstruction of a small section of the internal access road (fronting lots 12-16), and the establishment of the Cluster system of effluent disposal servicing Lots 45-49 (which is to be undertaken by the Community Association), no additional works are necessary to make these lots available for occupation.

Phase 2 then provides for the extension of water and electricity services to the remaining lots which enjoy physical road frontage at present. Phase 3 commences



the construction of new roadworks, and so on, as fully detailed in the draft Development Contract. Suggested timelines for the completion of each Phase are included in the draft Contract, to ensure an "end-date" to the completion of the project.

Note that consultation with each service provider reveals no concerns with respect to the ability of this development to be accommodated within the current service capacity of the Sancrox locality. Electricity and Telecommunications services are available and well within capacity for example.

The long term capacity of the Sancrox Water Supply has been under recent investigation by Council. More specifically, the Sancrox Strategic Working Group have determined that the Precinct's existing capacity is sufficient to accommodate the re-subdivision of Le Clos Verdun at the scale currently proposed. This is reflected in the recent rezoning of the property endorsed by both the Department of Planning and Port Macquarie-Hastings Council, and as confirmed in recent meetings with Fiona Conlon of Council's Water Supply Section.

6.14 PLANNING AGREEMENTS AND/OR DEVELOPER CONTRIBUTIONS

There are no existing planning agreements in place or under consideration for this site or for any major public works in vicinity of the subject land. The draft Development Contract outlines the extent of infrastructure works envisaged and necessary for the project's completion. No external public works are intended, nor considered necessary such as to generate the need for a planning agreement for same.

As per **Section 5.11** of this Environmental Assessment, it would be anticipated that Port Macquarie-Hastings Council would make recommendations towards the levying of S.64 and S.94 developer contributions as appropriate for the proposed rural residential subdivision.

It is to be noted that contributions have been paid previously for 84 lots within this estate.

6.15 SOCIAL AND ECONOMIC IMPACTS

There is a present under-supply of rural residential lots in the Hastings locality, a situation which has been described by Housing Industry representatives in the local media as a *chronic shortage* over recent years. For the land-owners of the Le Clos Verdun estate, the inability to utilise existing entitlements to their rural residential lots is even more personally and financially crippling.

The Port Macquarie-Hastings Council's Rural Residential Strategy estimates that there will be continual demand for rural residential lots within the Hastings locality, and this demand cannot be met by the current supply of land appropriately zoned for this purpose. The Strategy notes that:

"It is not unusual for local real estate agents to report a lack of supply of rural residential lots especially in those areas outside Kings Creek where there is no land zoned for rural residential subdivision and where there has been little subdivision activity for the past ten years such as Telegraph Point, Sancrox and Kendall."



The Le Clos farms are identified as one potential source of meeting this demand, but the Strategy recognises the limitations of this land under its current subdivision layout, which precludes new dwellings from complying with current legislative standards. In this regard, the Rural Residential Strategy indicates that:

"In general terms, it would be preferred that the development of the Le Clos Estates not proceed through incremental dwelling approvals under the existing subdivision. The preferred approach would be for all property owners to co-operatively seek and agree to a rezoning of the estates for conventional rural residential subdivision which meets current environmental and infrastructure standards."

The proposed development is in accordance with this directive and will have a positive and beneficial social and economic impact in that it will:

- Rationalise and enhance the subject land's subdivision layout to meet the demands for rural residential development in the Hastings;
- Provide an opportunity for high quality and sustainable housing in an area where there is demand for new rural-residential land;
- Ensure that areas of significant environmental value are protected;
- Provide for a riparian buffer to protect and enhance the Haydons Creek environment;
- Provide for new access linkages between the site and adjoining rural-residential areas:
- Generate economic and employment opportunities during construction.

No significant adverse social or economic impacts have been identified which would preclude the land being re-subdivided in the manner proposed.



7 Draft Statement of Commitments

This Section provides an outline of the recommended strategies designed to address the potential impacts to the environment identified either in the DGR's Key Issues, within the findings of the specialist reports, or as otherwise discussed in **Section 6** of this report.

The proposed mitigation and management measures are each designed to ensure the major project causes minimal harm to the biophysical and social environment, and to provide an ability for the performance of these measures to be appropriately monitored.

7.1 GENERAL

The proponent will undertake the development in accordance with the commitments of this Environmental Assessment report prepared by Hopkins Consultants dated November 2007 including:

- 1. Subdivision Plans numbered Sheets 1-11 prepared by Hopkins Consultants, provided in **Appendix D** to this report;
- 2. The Landscape Principles Plan numbered Sheets 1-2 prepared by Rupert M Home, Landscape Architect, provided in **Appendix E** to this report;
- 3. The Development Contract between the Community Association and Port Macquarie-Hastings Council, provided in **Appendix G** to this report;
- 4. This Statement of Commitments.

7.2 STATUTORY REQUIREMENTS

In relation to any requirements or statutory obligations under other Acts, the proponent will ensure that all licences, permits and approvals are obtained and kept current as required throughout the construction and post-construction phases of the development.

7.3 SOILS AND WATER CYCLE MANAGEMENT

To mitigate potential impacts associated with downstream water quality, the management of soils and groundwater, the following measures are to be undertaken:

- Water quality control measures will be designed and installed in accordance with detailed designs based on the Surface and Stormwater Management Plan contained in **Sheet 6** of **Appendix C**, and as per the recommendations of Hopkins Consultants Pty Ltd;
- 2. All construction works will be undertaken in accordance with Erosion and Sediment Control Plans to be prepared prior to release of the construction certificate.

7.4 FLOODING

To mitigate potential flooding impacts associated with the re-subdivision of this site for rural residential purposes, the following measures are to be undertaken:



- 1. Filling works to be undertaken in accordance with standard best practice guidelines and as otherwise directed by Port Macquarie-Hastings Council;
- 2. Drainage infrastructure to be constructed in accordance with the Integrated Surface Storm-water Management plans contained in the plans of subdivision prepared by Hopkins Consultants.

7.5 FLORA AND FAUNA

In accordance with the recommendations of the Ecological Assessment contained in **Appendix H** to this report, the following measures are recommended to be implemented to mitigate potential impacts to the native flora and fauna present within the study areas:

- 1. Prior to the commencement of Phases 3, 4 and 5, plans for the construction certificate are to include a detailed Tree Plan of Management to form the strategy for maximum tree retention during construction activities. The Plan of Management is to incorporate the following:
 - (a) A survey plan prepared by a registered surveyor indicating the location of all trees over 3 metres in height and 200mm in diameter relative to the proposed lot boundaries of each Phase;
 - (b) Location of water, sewer, electricity, telecommunication and drainage services so as to minimise the removal of trees;
 - (c) Retention of immature trees within roads and public reserve, except where required to be removed to provide services and construct roads;
 - (d) Details of means of protecting trees nominated for retention during construction of the subdivision.
- 2. The occurrence of Coastal Lowland Rainforest both on and adjacent the site is not to be disturbed in any manner;
- 3. Clearing is to be minimised to the extent possible. Wherever practicable, large trees are to be retained;
- 4. Any trees to be cleared are to be closely inspected immediately prior to clearing to ensure that a Koala is not resident. If a Koala should be found, clearing within 100m is to be delayed until the Koala leaves the area, and if not within three days, the animal(s) can be captured and relocated by an appropriately qualified person;
- 5. At the time of clearing, a representative form FAWNA will be contacted to collect any injured fauna for rehabilitation and subsequent release nearby. Injured Koalas will be taken to the Koala Preservation Society;
- 6. The vegetation adjoining the identified development working area for each Phase is not to be damaged by any clearing or burning undertaken as a result of the development;



- 7. The connective link of dry sclerophyll/Swamp Oak adjacent the eastern boundaries of proposed Lots 140-142 and neighbouring proposed Lot 130 is to be conserved:
- 8. Revegetation of the Riparian Zone as identified in the Landscaping Principles Plan is to be icorporate Koala feed tree species eg. Forest Red Gum, Swamp Mahogany and is to be undertaken in accordance with a future revegetation plan to be lodged prior to the construction certificate for Phase 3;
- 9. The road proposed through the 7(h) Environment Protection Zone adjacent lots 112 and 130 either is not to be fenced, nor restrict the free movement of koalas and larger mammals across this road. This road is to have Koala warning signs installed;
- 10. Additional planting of trees/shrubs is not to occur immediately adjacent this road (i.e. within a 10m radius);
- 11. The road proposed through the 7 (h) Environment Protection Zone adjacent proposed lots 112 and 130 is to be designed and engineered to ensure no sediment movement into Haydons Creek occurs;
- 12. Within lots that either contain or adjoin land within the Environment Protection Zone, building sites, access driveways, bushfire buffers are to be located to avoid the need for tree removal. Controls are to be included in the final Community Management Statement;
- 13. On other partly forested lots, building sites, access driveways, other structures and where required bushfire protection buffers are to be located to avoid the need for tree removal. Controls are to be included in the final Community Management Statement;
- 14. The Environment Protection Zoned land is to be managed by the proposed Community Management Statement and address issues such as access, fencing, grazing, weed control, fire protection and enrichment planting;
- 15. Dogs are to be constrained within fenced enclosures on all lots that adjoin the Environment Protection Zone corridor. Other koala protection practices, eg escape means from swimming pools, should be considered on these lots. Controls are to be included in the final Community Management Statement.

7.6 ABORIGINAL AND CULTURAL HERITAGE

The following commitments are to be met with respect to the management of potential archaeological assets within the property:

 It is acknowledged that under the terms of the N.S.W. National Parks & Wildlife Service Act 1974, it is illegal for any person to knowingly destroy, deface or damage, or to permit the destruction, defacement or damage to a 'relic' or Aboriginal Place without first obtaining written consent to do so from the Director-General of the N.S.W. National Parks and Wildlife Service (Section 90[1]).



7.7 WASTEWATER MANAGEMENT

The following measures are to be implemented to appropriately manage the on-site disposal of effluent:

- 1. All necessary wastewater treatment systems are to be established as per the recommendations of the Effluent Disposal Assessment prepared by Coffey Geotechnics dated 8 November 2007:
- 2. All wastewater disposal areas are to be fully bunded and have drainage works installed upslope as per Hastings Council's On-Site Sewage Management Code.
- 3. Construction of the systems is to comply with Appendix 4.5 of AS/NZS 1547:2000. Wet weather storage should comply with local government regulations;
- 4. The proposed cluster system servicing Lots 45-49 is to be established by the Community Association in Phase 1 of the subdivision and as per the Development Contract, and is to be undertaken as per the concept specifications prepared by Coffey Geotechnics dated November 2007.

7.8 BUSHFIRE HAZARD MANAGEMENT

The following measures are to be implemented to mitigate potential bushfire hazard:

- 1. Adopt Landscaping principals in accordance with section 3.6 of the Bushfire Hazard Assessment;
- 2. The Bushfire Risk Management Plan contained in Appendix 7 of the Bushfire Hazard Assessment is to be implemented with the proposed subdivision and any proposed dwellings on the new allotments on the site;
- 3. Assessments in relation to Asset Protection Zones are to be adopted with the construction of any dwellings on the proposed new lots;
- 4. Fire trials are to be provided across the rear of the proposed lots in accordance with the concept plan provided in Appendix 6 of the Bushfire Hazard Assessment:
- 5. The ongoing maintenance of the fire trails will be imposed upon the owners of the rural residential lots via a positive covenant pursuant to section 88B of the Conveyancing Act, 1919 and/or via the draft Community Management Statement contained in **Appendix F**:
- 6. The design and construction of the internal roads and fire trails are to comply with the acceptable solutions provided for in section 4.1.3 of NSW Rural Fire Services, Planning for Bushfire Protection, 2006;
- 7. Water and other services are to be provided to the proposed lots in accordance with the requirements detailed in section 3.5 of the Bushfire Hazard Assessment;
- 8. Property management plans are to be prepared for the areas of the proposed subdivision nominated as private recreation areas. The property management



plans are to provide for the ongoing management of these areas as bushfire hazard vegetation free areas. The ongoing implementation of the property management plans is to be imposed upon the future land owners via a positive covenant pursuant to section 88B of the Conveyancing Act, 1919 and/or via the draft Community Management Statement contained in **Appendix F**.

7.9 TRAFFIC AND ACCESS

As alluded to earlier in **Section 6.11** of this report, the proposed access roads shown in the plans of subdivision will remain in private ownership/management while-ever the land remains under community title. However, it would be anticipated that at some point in the future, these assets could be returned to public ownership. In this respect, it is intended that all future road construction would be undertaken in full compliance with Port Macquarie-Hastings Council's minimum expected standards for public road construction.

7.10 PROVISION OF PUBLIC SERVICE AND INFRASTRUCTURE

The established rural residential estate is currently serviced by private water, telecommunications and electricity services connected to the public infrastructure system. All roads within the existing estate are also privately owned and maintained.

This private infrastructure is to be retained for the purposes of servicing the resubdivision of the land, hence the proposal to subdivide under the Community Titles Legislation. The draft Community Management Statement provides for expectations relating to the management and future, phased re-construction of these private assets.

7.11 SECTION 94 & 64 CONTRIBUTIONS

The proponent will pay Section 94 developer contributions in accordance with Council's Section 94 plans, subject to negotiation with Council regarding material public benefit associated with the provision and embellishment of additional open space. It is to be noted that contributions have been paid previously for 84 lots within this estate.

The development will be serviced by water, but not by reticulated sewer. Any necessary upgrades to the established water supply would be in accordance with Council's DSP to upgrade infrastructure for the surrounding area. Any contributions would be reflective of the demand proposed by the additional lots proposed in the land's re-subdivision only.



8 Justification for the Development

As demonstrated in earlier sections of this report, the proposed development is required to, and has been assessed against a wide range of social, economic, social and biophysical issues. By way of summarising the development's ability to adequately address these matters, the following Sections of this report demonstrate the proposal's compliance with the accepted principles of ecologically sustainable development.

These principles are more clearly defined and justified as per the comments which follow:

8.1 THE PRECAUTIONARY PRINCIPLE

The purpose of the precautionary principle is to ensure that any development is assessed with the aim of avoiding serious or irreversible damage to the environment and to assess the consequences of any actions to be undertaken to avoid such damage.

- ▶ This principle has guided the entire management of the proposed development, from inception of the planning for the site's rezoning for rural residential purposes, through to this Project application's lodgement. The current project design is one that has responded directly to the need to avoid any potential adverse impact to the environment:
- Alternative avenues were taken into consideration during the design stage of this proposed development, resulting in the consideration of a number of alternative subdivision layouts prior to the current proposal. Measures to better improve the interface with the riparian zone, to reduce the intrusion of lot areas within that land subject to the 1% flood event, the creation of an improved internal vehicular circulation are all representative of the responsive design processes which occurred during the project;
- Any potential harm has been avoided via responding to site analysis, and the recommendations of the various environmental studies and assessments carried out during the project's design. Thorough assessment and consultation has been undertaken at key stages of the planning process to ensure that all relevant issues have been identified and addressed throughout the design;
- The statement of commitments detailing the site management and mitigation measures summarised in **Section 7** of this report will ensure that all recommendations of the specialist reports will be adhered to.

In summary, the planning of the proposed development has been guided by the need to respond to the scientific studies undertaken to determine the best possible development option and to thusly minimise environmental impact. Consultation with specialist consultants and Government authorities has ensured the proposed development will not result in any serious or irreversible damage to the environment.

8.2 INTER-GENERATIONAL EQUITY PRINCIPLE

This principle is to ensure that the proposed development constructed today, for the current generation of the population, does not hinder on the ability for future



generations to enjoy that environment. The principle asks that the environment available for enjoyment by today's generation be made available in similar condition for future generations to also enjoy.

- ▶ This current subdivision pattern of the Le Clos Verdun estate effectively sterilises the land holdings. The land cannot be put to its originally intended purpose due to the limitations of current building and health regulations. Conversely, the small-lot subdivision pattern, and multiple ownerships also prevent the site being available for any broad-scale, or other forms of farming or rural practices;
- The re-subdivision of the estate enables the land to become "usable" in the sense there is no social or economic benefit that can be gained from the current subdivision pattern;
- The proposed re-subdivision enables the primary objective of the Port Macquarie-Hastings Council Rural Residential Strategy to be realised via the creation of usable rural residential lots within an area designated, and recently re-zoned for that purpose;
- ▶ The re-subdivision establishes an alternative housing choice for the fast-growing Hastings community, which is not available to the current generation given the limitations of the estate's existing subdivision pattern, and the present shortage of this form of rural subdivision in the Hastings region;
- Currently zoned areas of open space adjacent the subject land will not be affected by the proposal. Access to these areas will be enhanced by virtue of the proposed pedestrian pathways within the proposed re-subdivision layout and existing public access opportunities will be maintained.

In conclusion, the need to consider inter-generational equity is accepted, and has guided the design process. The re-establishment of this once sterilised land for its original intention will only provide a positive, long-term economic and social benefit to the local community.

8.3 CONSERVATION OF BIOLOGICAL DIVERSITY AND ECOLOGICAL INTEGRITY

Biological Diversity is concerned with all life forms and is measured against three principles: genetic diversity, species diversity and ecosystem diversity. Ecological Integrity is concerned with the condition of the ecosystem and to ensure it is minimally altered from its natural state.

- The site's planning began at the stage when it was determined that rezoning of the site was required to enable the estate's re-subdivision. The specialist studies prepared to support the rezoning proposal determined those areas of the subject site which displayed a degree of environmental "sensitivity". Those marginal areas were re-zoned for environmental protection appropriately, and set aside to ensure their long term conservation;
- ▶ The proposed subdivision layout does not involve the disturbance of any areas so zoned for Environment Protection;
- ▶ The re-subdivision does not disturb any existing areas of native vegetation. No individuals, or stands of vegetation will require removal for the site's development, and nor will areas of natural habitat be affected by the project;



- A revegetation and rehabilitation strategy for the previously disturbed Riparian Zone has been recommended by the Ecological Report, and thus formulated by the Landscaping Principles Plan. This will serve to improve the ecological integrity of the Haydons Creek waterways and riparian vegetation, and enhance the site's biological value;
- ▶ The water cycle management measures proposed for the site's development will ensure there is no adverse impact to neighbouring waterways;

It is submitted the proposed development adheres to the principles of Conservation, Biodiversity and Ecological Integrity.

8.4 IMPROVED VALUATION, PRICING AND INCENTIVE MECHANISMS

This final principle deals with the environmental resources surrounding the proposed development including air, water, living things and the land. The principle requires the development to demonstrate that no adverse impacts on these environmental resources would occur as a consequence of the development proceeding.

- A full Agricultural Suitability Assessment of the subject land determined that the land does not comprise Prime Agricultural Land, and that given the current multiple ownerships and PMHC's objectives in affirming this land's suitability for rural residential development, the estate cannot realistically be put to any meaningful agricultural purpose;
- ▶ The Environmental Site Assessment determined that the site has not been, nor is it currently used for any potential contaminating land usage. Moreover, the proposed rural residential subdivision will not produce any physical, technological or other hazard to the local environment:
- Potentially occurring Acid Sulphate Soils are not to be impacted by any works proposed by the re-subdivision;
- Recognition of flood-liable areas of the site has shaped the subdivision layout itself, thus best ensuring the safety of future occupants of the residential development;
- ▶ The large-lot typology proposed by the rural-residential subdivision affords maximum potential for future residential occupation to optimise the solar-access and energy-efficiency opportunities available to this desirable residential location;
- The proposed re-subdivision will ensure that the once-sterilised land becomes an economically, and socially viable resource;

Re-subdivision of this land identified for that purpose under an adopted Council policy will ensure that local community needs are met and that the principle of improved valuation, pricing and incentive mechanisms is adhered to.



9. Summary

This Environmental Assessment Report is submitted to the Department of Planning under Part 3A of the Environmental Planning and Assessment Act 1979 and as per the provisions of State Environmental Planning Policy (Major Projects) 2005.

The project comprises the re-subdivision of the subject site into 144 rural residential lots under community title. This Environmental Assessment provides a detailed description of both the proposed development and the site, and evaluates the potential environmental impacts of the development. Measures to mitigate any impacts are included in the assessment.

The proposal complies with all relevant planning policies, statutory instruments and plans that pertain both to the site and to the proposed subdivision. This includes Hastings Local Environmental Plan 2001, DCP No.17, State Environmental Planning Policy Nos.44 – Koala Habitat, No.71 – Coastal Protection & Major Projects and the over-arching statutory provisions of the Environmental Planning & Assessment Act 1979 and Regulation 2000.

The Environmental Assessment has been specifically prepared in accordance with the requirements of the Director-General of the Department of Planning. A range of Key Issues are addressed in the environmental assessment as required by the Department and other relevant Government Authorities who were consulted during the project's preparation.

The key potential environmental impacts associated with the development were identified as follows:

- Subdivision layout, desired Future Character and Sustainability;
- Water Cycle Management;
- Flooding;
- Flora and Fauna;
- Aboriginal and Cultural Heritage;
- Contamination and Remediation;
- Wastewater Management;
- Bushfire Hazard;
- Agricultural Potential;
- Mineral Resources;
- Traffic and Access;
- Riparian Corridor and Foreshore Access;
- Provision of Public Service and Infrastructure; &
- Planning Agreements and/or Developer Contributions

Upon thorough examination of the proposed re-subdivision, none of these issues were found to raise any significant environmental concerns, nor would the realisation of the subdivision project result in adverse social or economic consequences.

A draft statement of commitments has been prepared which identifies the proposed mitigation measures, and means of monitoring environmental management of the proposed development both during, and after the construction phase. The applicant undertakes to carry out the development in accordance with these commitments.



In summary, it is considered that the proposed development will have a positive and beneficial environmental, social and economic impact in that it will:

- Provide land for high quality and sustainable housing in an area that is growing and experiencing significant demand for new rural residential development;
- Ensure that areas of significant environment value are protected;
- Provide for, and rehabilitate a riparian buffer to protect and enhance Haydons Creek:
- Generate economic and employment opportunities during construction;
- Provide public access to adjacent foreshore areas for the benefit of the wider community;
- Generate additional demand for local retail and business services;
- Provide for improved pedestrian linkages between the site and adjoining public areas of coastal foreshore; and
- Provide for the rationalisation of a historical residential/agricultural venture which failed, and which has burdened multiple land-owners with a costly and unusable land development.

No adverse environmental, social or economic impacts have been identified which would preclude the existing estate being re-subdivided for rural residential development in the manner proposed. The concept plan application is submitted for your favourable consideration accordingly.

