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By email: andrew@hopcon.com.au

25th February 2009

RE: Issues raised by Port Macquarie Hastings Council
Le Clos Verdun, Sancrox

Dear Andrew,

Thank you for providing the plans for the proposed development of Le Clos Verdun Sancrox showing the final revised lot layout (file reference 6096\temp\6096-0011_SHEET 4, dated 14/10/2008) and access strategy (file reference 6096\6096-0011-8. dated 14/10/2008).

I note also the comments from Port Macquarie Hastings Council regarding the Flora and Fauna Impact Assessment prepared by Keystone Ecological (file reference PMHC 07-060, dated December 2008). In particular, Council is concerned that the following issues are addressed:

1. More detailed information re management objectives and strategies for retained areas, particularly foreshore and riparian corridors;
2. Impact assessment of the fire trail crossing Haydons Creek;
3. Inconsistency of lot numbers; and
4. Clarification of the lots within which Swamp Oak Floodplain Forest may be cleared.

Each of these issues is discussed below.

1. Management objectives and strategies

Overleaf are a draft Table of Contents and a table of management actions that should be used to scope the Vegetation and Habitat Management Plan for the retained areas. The critical features of this plan are:

- to define the management issues that are applicable or likely to be applicable;
- to identify management zones across the site that have common features, outcomes or actions; and
- to identify appropriate management responses, using best practice, low impact techniques.

Draft Table of Contents for Vegetation and Habitat Management Plan

Issue		**Actions**
Weed management	Vegetation and habitat protection and enhancement	Regular sweeps across each management zone to identify major weed species
		Species-appropriate weed control responses formulated and implemented, with particular emphasis on Lantana and pasture grasses
		Removal of grazing
Threatened species habitat	Protection of existing habitat	Formal protection of existing bushland
		Hollow-bearing trees identified and protected by tree protection zones
		Dams maintained
	Enhancement of habitat	Removal of grazing
		Weed control
		Feral animal control
		Provision of nest boxes of a diversity of sizes and types
Endangered ecological community	Protection of existing habitat	Weed control
		Erosion and sediment control during all construction
		Implementation of appropriate fire regime
	Enhancement of habitat	Removal of grazing
		Control of feral animals
Feral animals	Deer	Control program in conjunction with local Catchment Management Authority
	Rabbits	Control program in conjunction with local Catchment Management Authority
	Foxes	Control program in conjunction with local Catchment Management Authority
Fire	Property protection - fire exclusion	Maintain asset protection zones in cleared areas
		Fire fighting response plan in conjunction with local Rural Fire Service
	Vegetation protection – appropriate fire regime	Determine appropriate fire regime for each vegetation type
		Exclude fire where required (e.g. Rainforest) or impose small ecological burns where appropriate

Issue		**Actions**
Public access	Vegetation protection	Provision of formal paths to minimise trampling of understorey vegetation
		Education of residents re impacts of inappropriate disposal of garden refuse
		Education of residents re impacts of garden practices on adjacent bushland e.g. use of herbicides, species with potential to become weeds
	Killing of native fauna by pets	Education of owners re need for control of domestic pets, particularly at night
	Killing of native fauna by road trauma	Speed controls on internal roads
		Education of residents
Edge effects	Vegetation protection	Isolated trees protected by implementation of tree protection zones
		Weed incursions into adjacent bushland monitored
		Species-appropriate weed control with particular emphasis along the edges of bushland
Changes to hydrology	Sedimentation hazard to downslope environments	Implementation of strict sediment and erosion control plan during all activities where soil is exposed
	Erosion hazard to downslope environments	Implementation of strict sediment and erosion control plan
		No point source delivery of stormwater runoff – use of water sensitive urban design principles such as diffuse water delivery
	Nutrient hazard to downslope environments	Siting of effluent disposal in open cleared areas distant from sensitive vegetation
Fauna habitat	Habitat protection	Hollow-bearing trees identified and protected by tree protection zones
		Formal protection of existing bushland
		Dams maintained
		Weed control
		Feral animal control
		Provision of fauna-friendly fencing
	Habitat enhancement	Provision of nest boxes of a diversity of types and sizes
		Monitor and maintain nest boxes
Monitoring		Monitor all actions on regular basis and report to Council

2. Impact assessment of the proposed crossings of Haydons Creek

The fire trail no longer is intended to cross Haydons Creek (see the final amended drawings listed above), thus obviating the need for impact assessment.

The existing unmanaged informal crossing of Haydons Creek is to be upgraded to allow vehicular and pedestrian access between the eastern and western parts of the site. This will also provide the opportunity to protect and rehabilitate the crossing point, which is now highly degraded with cleared woody vegetation, pugged soil from unrestricted use by cattle and the presence of many exotic and weed species. Despite its proximity to a part of Haydons Creek with wide deep water, the creek was a water course in name only at the existing crossing point which had only a few small muddy pools at the time of survey. Thus it provided little potential habitat for only the hardiest of amphibians and did not allow for fish passage.

The proposed crossing point was inspected by officers of the local Council, the Department of Environment and Climate Change along with the client during our site meeting in the middle of 2008. It was agreed at that meeting that the proposed location was suitable as it is already highly disturbed and that formalisation of a crossing allowed for the cessation of threatening processes as well as the opportunity to rehabilitate the degraded banks and install local provenance plantings. Although engineering designs have not been finalised for this crossing, low impact structures (such as pre-fabricated box culverts) shall be used and the design parameters will be in accordance with the Department of Water and Energy's 2008 Guidelines for controlled activities - Watercourse crossings, particularly those features that will allow fish passage. This includes the alignment of the culverts with the downstream channel and the use of elevated dry cells and recessed wet cells with the invert at or below the stable bed level. Further, the culvert design will be certified by a suitably qualified engineer.

Such details shall be shown in works plans. Protection measures to be implemented during construction are appropriately placed in construction environmental protection plans and rehabilitation actions detailed in the Vegetation and Habitat Management Plan discussed above.

3. Inconsistency of lot numbers

The final layout has been determined and the lot numbers altered in the plans shown in the Flora and Fauna Impact Assessment.

4. Clarification of the lots within which Swamp Oak Floodplain Forest may be cleared

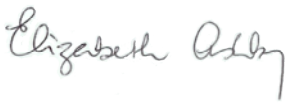
This issue is able to be clarified now that the final layout has been determined.

The only areas that remained unresolved are Lots 110 and 111. A total of approximately 1,500 square metres of Swamp Oak Floodplain Forest shall be lost at the rear of these lots. This occurs at the edge of the large area of vegetation to be retained and is mostly within a narrow ribbon running upslope into the open cleared exotic grassland.

I hope this information satisfies all of Council's requirements and supplementary questions.

Please do not hesitate to call if any clarifications are required.

Yours sincerely,



Elizabeth Ashby
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