

LAND MATTERS

Property ■ Services

20 October, 2003

Environment & Heritage Committee
House of Representatives
Parliament House
Canberra ACT 2600

Secretary: *Paul Saave*

RECEIVED

20 OCT 2003

HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON
ENVIRONMENT AND HERITAGE

RE: Inquiry into Sustainable Cities 2025

It is indeed pleasing to see our country investigating sustainable living practices and accordingly, we correspond to provide some information to the inquiry. We can only respond to terms of reference briefly due to overseas travel commitments. At the same time, we feel it is important to respond.

Our group, Landmatters, whose vision is to "inspire sustainable living and development practice awareness" and to this end, we are currently attempting to achieve our goal of "*Creating the World's Best Ecologically Sustainable Village*" to act as a model to inspire both the general populous, the development industry and government alike, creating more sustainable urban living.

I feel very strongly that our current cities are not sustainable, with the focus on living in one area and drawing resources from the outside, which of course results in very high environmental, social and economic impacts. Our research around the world, "best practice urban development", leaves us to believe that broad spectrum sustainability initiatives need to be included within all of our urban areas ie; not just satisfying some of the ESD triple bottom line, eg; this is an energy efficient house but there is no respect for biodiversity or perhaps food production. Accordingly, we advocate strongly to you that the environmental impacts of human settlement be viewed in a broad-spectrum way.

We invite review of our development, which has recently received Gold Coast City Council Town Planning Approval and is currently being implemented. We have received excellent support from the Queensland Government through its Environmental Protection Agency and attach herewith a copy of the Heads of Agreement, recently signed with the Minister for the Environment. We also attach an Executive Summary of the project, along with a Project Criteria, which was submitted to the Sustainable Urban Development Programme joint initiative between the Queensland EPA and the Urban Development Institute of Queensland.

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We hope that our project, *The Ecovillage at Currumbin*, will represent Australia's leading example of Sustainable urban settlement and could provide practical answers to your many questions for consideration stated within your discussion paper.

Unfortunately as I have to leave to catch a plane I cannot provide any further detail, but invite liaison upon my return to Australia on 5th November 2003.

I look forward to hearing from you and again compliment you on your initiative to provide a better future for Australia.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Chris Walton', with a long horizontal stroke extending to the right.

Chris Walton
Landmatters Pty Ltd

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the ecovillage

AT CURRUMBIN

EXECUTIVE SUMMARY

"THE ECOVILLAGE AT CURRUMBIN"

The challenge of this millennium is how to live sustainably – in harmony with nature, to have community and a modern quality of life. Landmatters is a group of property professionals who believe that Sustainability should be the key design principle in property development. Our vision is to inspire sustainable living, development practice and awareness by creating "*The World's Best Ecologically Sustainable Village*" - a project that inspires and sets a World's Best Standard for the future of community in Australia.

Landmatters proposes establishment of this vision on a 110ha site which is located on the Gold Coast close to the beaches and all facilities. The property is scenically beautiful and comprises a diversity of landscapes and living opportunities. The proposal provides for 144 eco-homes in a variety of residential configurations, together with community oriented facilities including a small Village Centre.

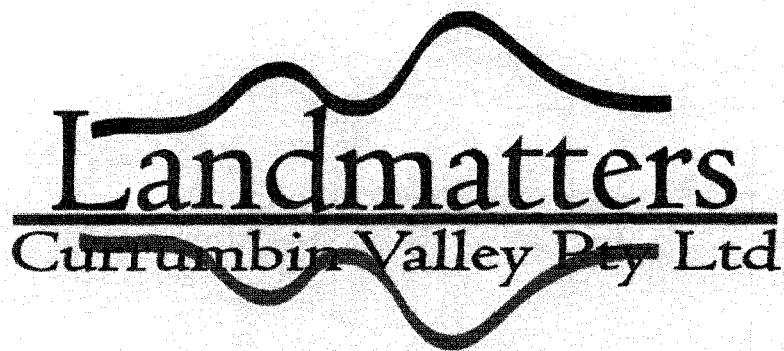
The Currumbin Valley Ecovillage targets:

- Autonomy in energy, water and waste water
- 80% of site designated as open-space, with more than 50% environmental reserve, and yet the same yield as standard development
- Edible landscaping and streetscaping, household farming and other productive strategies providing a high degree of self-sufficiency
- Preservation of landforms and rehabilitation of the site's environmental integrity
- Extensive wildlife corridors, negligible vegetation loss and extensive native plant regeneration
- Integrated water quality measures to exemplify Water Sensitive Design
- Cultural Heritage elements dedicated for preservation and integration into the design
- A mix of innovative ecological, energy efficient housing that caters for diverse needs
- On-site work strategies and facilities for village and Valley residents
- Waste recycling strategies including a recycling centre
- Traffic saving strategies to reduce vehicle impacts on and off site
- An administrative framework that provides for social equity
- Initial and ongoing social planning to foster sustainable community
- Interpretive Centre for providing continuing education of sustainable practices
- Economic performance both with the development and the ongoing community

The initial project design has recently been completed following an extensive Community Consultation program yielding strong design input from indigenous groups, residents, stakeholder groups, referral agencies and others.

The Gold Coast City Council, in August 2003, approved the Ecovillage Planning Application in its full content. There now exists the opportunity to continue sustainable design input as the subsequent stage Application/Approvals and "fine design" processes unfold with construction due to commence in mid 2004. The project's prospective buyer response has been overwhelming, confirming the public interest in sustainable community living and supporting the proposals economic feasibility.

The product of 8 years of research and design both in Australia and overseas, the Landmatters *Ecovillage at Currumbin* will set a benchmark standard for sustainable residential development, with environmental, social and economic sustainability as its integrated driving principles.



1. GENERAL CRITERIA – PROJECT STATEMENT & OBJECTIVES

PROJECT STATEMENT

Landmatters Currumbin Valley Pty Ltd intends to practically and successfully develop the subject land and achieve a vision of inspiring sustainable living / development practice and awareness by creating an Ecovillage that exemplifies World's Best Practice in its design, construction and accompanying processes. The project is intended as an inspirational model to the development industry and the broader community.

All activities included in undertaking the development must recognise the following factors: -

- (a) Environmental Sustainability / Ecology
- (b) Social Sustainability / Ecology
- (c) Economic Sustainability / Ecology

with each being given equal consideration, without marginalisation of any one factor in decision making processes.

PROJECT OBJECTIVES

To achieve the development's objectives, it will be important to challenge conventional industry thinking by employing practices, processes, systems & designs that embody innovation & excellence in keeping with the project goal. Private & public referral agencies will be asked to participate in this approach.

To achieve the project goal, each of the following principles will require consideration - again without individual marginalisation of any other of the principles. The principles should be utilised to achieve a desired project outcome that: -

- (a) Is sustainable over time
- (b) Relates to the local and global environments
- (c) Provides & allows for future beneficial change to occur in design, infrastructure & regulatory mechanisms.

(i) Environmental Principles

- Env.1 Restore, maintain & enhance biodiversity acknowledging the intrinsic right to life of all species
- Env.2 Strictly minimise impact & change to air, soil & water in any way to ensure equity for all elements of the natural environment whether living or inanimate
- Env.3 Strictly minimise consumption of resources & energy both now & in the future
- Env.4 Minimise impact on the local and global environments optimising local ecological food & material production opportunities
- Env.5 Foster a deep sense of human connection to & interdependence with the land, flora & fauna

(ii) Social Principles

- Soc.1 Respect & honour cultural, historical & spiritual values
- Soc.2 Enable sustainable community by designing for social equity, diversity & interdependence, honouring differences & catering for the needs of individuals through the different stages of life
- Soc.3 Maximise health, safety & comfort of the built environment to provide enduring quality of life
- Soc.4 Promote awareness & education of ecological issues including sustainability
- Soc.5 Utilise aesthetic sensitivity to create a continuing sense of place and beauty that inspires, affirms & ennobles
- Soc.6 Ensure regulatory mechanisms that ensure social equity over time
- Soc.7 Promote social connectedness, empathy, ownership & attachment to place & community.

(iii) Economic Principles

- Econ.1 Promote ecovillage economic viability through excellence of design
- Econ.2 Ensure enduring property value growth
- Econ.3 Ensure minimising of maintenance & operational costs
- Econ.4 Minimise obsolescence through design of enduring component life cycle;
- Econ.5 Provide for change & re-use at minimal cost / loss
- Econ.6 Enable economic productivity & contribution to local & world systems & economies.

These are the specific goals of the development that should guide project management, specialist consultants & referral agencies in the intrinsic decision making processes. The above principles are interpreted to achieve Ecologically Sustainable Development outcomes, which are detailed in the following Environmental, Social & Economic Criteria specification.

2. ENVIRONMENTAL CRITERIA

The Ecovillage design approach is to target autonomy – site self-sufficiency and this goal is assisted by viewing “normal” development constraints as potential opportunities, particularly with regard to environmental considerations eg: wastewater treatment is an opportunity for valuable water and nutrients to be redeployed in a “cyclic system” approach for landscaping and agriculture irrigation. This approach combined with the application of innovative technological design and construction solutions will yield more sustainable outcomes than traditional approaches:

- **Fauna & Flora**
 - Audit and value fauna and flora and design/construct for minimal loss of species and habitat
 - Provide connective corridors internal and external to site and preserve ecologically “valuable areas”
 - Design management/maintenance plans to minimise future impacts and enhance degraded flora/fauna areas
 - Promote community biodiversity awareness through interpretive strategies including, signed walks, permanent
 - Interpretive Centre, onsite bushcare group and biodiversity preservation in Body Corporate By-laws
 - Over 80% of the property will be open-space 50% dedicated as environmental reserve in perpetuity. Minimal vegetation loss with existing cleared land for housing etc.
 - Permanent endemic plant nursery on-site
- **Minimise impact to land forms**
 - “soft” engineering/infrastructure, following the land contour and natural features
 - Minimal cut and fill with laneway styled roads sensitively following slopes, trees and other natural features
 - Minimise size of infrastructure and employ cyclic systems approach eg: swales, in place of stormwater pipes
 - Siting buildings in ecologically appropriate areas – fitting into landscape with minimal impact
- **Water Quality**
 - Target improvement of existing water quality with preservation of existing drainage ways
 - Minimise flood impacts and use of Water Sensitive Urban Design, including “SQUIDS”
 - Emulate natural site drainage with nil import/export approach by not connecting to the available town water
 - Total re-use on-site of treated wastewater for productive irrigation – landscaping/agriculture (no sewer connection)
 - By-laws to restrict polluting activities including usage of inappropriate pesticides, and other toxic substances
- **Minimise changes to air quality**
 - Traffic and motor reduction strategies
 - Built design and social strategies (refer attached report)
- **Resources usage minimised**
 - Reuse existing site structures/infrastructure –(fencing, buildings, tracks, tanks etc)
 - Minimal cut and fill with laneway styled roads following slopes, trees and other natural features etc.
 - Simplify built design elements (buildings, roads etc.) and minimise practical size
 - Using renewable, reusable, recycled components
 - Design for future reuse of built design in all elements
 - Use “simple natural cyclic systems” approach eg; swale drainage putting water back into ground not export
 - Use locally sourced labour and materials (ie: minimise transport inputs)
- **Energy**
 - Maximise alternate energy production opportunities including in all buildings
 - Ensure buildings and infrastructure are energy efficient and climactically orientated
 - Ongoing resident education strategies for minimising energy usage
 - Various traffic, motor vehicle reduction strategies (see report attached)
 - Minimal street lighting and minimise embodied energy in buildings infrastructure
- **Regulate for Sustainable Homes**
 - Smaller in area making use of external areas
 - Climactically designed to maximum comfort and minimum energy usage and generally lightweight construction
- **Ecovillage Recycling Centre**
 - Established on-site prior to construction and continued with community to ensure
 - Maximisation of recycling opportunities and minimisation of waste – community waste education strategies
- **Promote Food and Material Production On-site**
 - Facilitate productive home landscaping
 - Edible/productive landscaping to common areas – plant nursery on-site
 - Community agriculture and horticultural dedicated space incorporating reuse water
 - Managed wood lot and natural produce production in environmental reserves
 - Enable low impact work at home materials production on site
 - Providing programs to enable produce bartering with co-operative produce store outlet

3. SOCIAL CRITERIA

Social ecology involves respecting and designing for social diversity - peoples varying needs, beliefs and values. These considerations are being incorporated proposed built design for the Ecovillage, and in its administrative framework (Body Corporate structure and documentation) and social programs. The project's principles reflect the intention to provide a strong social philosophy, to engender community over time with strategies as follows:

- **Indigenous Groups:** commencing with initial permission to commence consideration of the proposal in 1999, site review, design input and continuing input through and post development
- **Historical Review:** including records research and discussion with elders from the Currumbin Valley and past residents of the site to determine historical information and values of the property and its surrounds – started 1999
- **Community Consultation:** providing an open forum for the community to meet, interact and give input into the design and development of the land prior to and during formulation of concepts. This is an ongoing process and commenced in March 2002 (Refer attached report) and will continue through approval and development phases
- **Social Diversity:** designing homes of diverse size, residential configuration and location to suit a range of people's needs. The Ecovillage will provide maximum choice in living possibilities:
 - Village Centre Homes and Home Studios of small area
 - Creek flats eco-hamlets, homes, facing and sharing landscaped greenway common land. Each eco-hamlet will have a mix of 1, 2 and 3 bedroom homes and varied home-parcel (lot size) to cater for different needs (social and economic), to provide good resident mix
 - Valley Terrace eco-hamlets –similar mix with larger home-parcels
 - Highland eco-hamlets – home parcels of 3,000m² plus, located with bush surroundings
 - Intent of eco-hamlet clustering. The mix and diversity of residential type is to create a community that will appeal to residents through their various stages of life, building a sense of attachment to community and as changing needs are internally provided for. Differently abled persons, children and elderly persons will be specially catered for in all aspects of the proposal
- **Primary School:** maximum of 100 students, combining pre-school, for usage by Ecovillage and local valley residents, will assist in integration of the Ecovillage with the surrounding community
- **Tenure System Administrative Framework:** equitable ownership and management of common lands will be facilitated by Community Title (Refer Tenure Report attached). The Body Corporate and Community Management Act 1997 facilitates the subsidiary Bodies Corporate within the Ecovillage principle Body Corporate and will provide social cohesion, by enabling the smaller communities (eco-hamlets) in the larger Ecovillage community
- **Meeting Places:** provision of the Village Centre to assist in further integration of the Ecovillage into the Currumbin Valley community, with services as determined in the Community Consultation to include a co-operatively owned convenience produce store, a coffee shop/bakery, health practitioners room/s, public meeting hall and school, all centred around a village square nestled under Fig trees removed and hidden from Currumbin Creek Road.
- **Village Common:** an "informal oval" will be dedicated for public usage for "flying the kite with the kids or the valley cricket match", to be connected to dedicated public open-space of the creek corridor of some 8 ha. The creek area is intended for both active and passive recreation by Ecovillage and valley residents.
- **Recycling Centre:** as a social meeting opportunity, residents will be required to take rubbish to a reused farm-shed/waste recycling centre to be located next to the Village Centre, intensifying social focus to this area
- **Interpretive Centre:** a historical Museum and small Ecovillage Interpretive Centre as a resident manned display for interface with the broader community, parties interested in sustainability.
- **Old Dairy Residents Facilities:** existing building and cattle yards to be recycled into staffed multipurpose Ecovillage community meeting, admin and facilities, to include children's play and swimming pool etc.
- **Shared Agricultural Areas (Including farm plots):** for individual or group residents wanting to grow crops, and other edible landscaping areas that facilitate interaction by residents as ongoing community projects including, provision of greenways to each eco-hamlet and productive plantings to common areas and dedicated orchards
- **Community Communication Strategies:** notice boards at eco-hamlet and other meeting points, community Intranet cabling to homes and a central computer for community contact for carpooling, social activities etc.
- **Ongoing Social Program:** to include organisation of community events such as welcoming of new residents, monthly dinners, sporting activities, outings, disadvantaged persons/groups assistance, community "building" activities, such as establishment of interest groups eg: bushcare groups etc, shared construction of future facilities
- **Provision of Community Bus (and other community equipment):** farm maintenance, entertainment, tools etc.
- **Built Environment Social Features:** common mailboxes, walking trails, meditation areas, places of worship and dedication, recreation places, picnic areas, informal sporting areas eg: volleyball, boules etc.

The Ecovillage will be a managed place, empowering residents with the ability for continuing self-determination under an appropriate legislative framework which will also provide an important forum for residents' interaction. The eco-hamlet approach allows this to be attained at a micro level thus engendering a strong sense of community. The eco-hamlet clustering has been inspired by Village Homes in California, an enduring community based subdivision, world renowned for its resident collaboration, pride and input into upkeep of shared landscapes. Effective conflict resolution procedures will be facilitated to ensure disputes as productive and meaningful processes of human interaction.

4. ECONOMIC CRITERIA

Sustainable residential development requires satisfying "the bottom line" (initial project economic feasibility) and ongoing economic performance of the completed community.

Economic strategies for the Ecovillage are as follows:

- Targeted economic performance of the property development including:
 1. Strong buyer precommitment and settled sales rates
 2. Satisfactory development costs to enable project viability
 3. Bankable security for financiers, at development and home buyer levels
 4. Industry acceptable development profit.
- Provide homes no more expensive than comparatively sized and positioned lots in the general market place
- Continuing home buyer property value growth should be assured by creating residential and other products that through design building excellence grow in value and protect investment
- Structure of community administrative frame work and tenure, which ensures maintenance of the communities design and social principles and its upkeep
- Maintenance costs to be minimised by designing for longevity/enduring component lifecycle, with minimum obsolescence (both functional and aesthetic) – build houses that will endure with minimal maintenance and of classic style that will not be dated
- Provide common facilities such as wastewater and water systems that are simple, will endure over time and require minimal maintenance and operational costs.
- Use materials and components that can be re-used at minimal environmental/economic loss or cost.
- Provide an administrative framework with minimal overheads that can be managed by the community and allows for beneficial change over time.
- Provide ethos in the development vision and in the built design for fostering a cyclic local economy ie; it feeds itself with such strategies as – work at home provisions, village centre work apartments, including shared residents office, home studios workshop space, co-operative grocery store (non profit), resourcing local labour and service providers etc
- Provide production of edible produce and materials that can contribute to local and global systems and economies (refer food and material production as addressed in previous criteria)
- Provision of cash crops sustainable agro-forestry and other strategies such as hall or space hire to ameliorate Body Corporate costs
- Establish a high degree of economic independence to individuals by implementing strategies for residents self-sufficiency regarding food, water, energy, transport etc.
- Maximise use of economic renewable energy sources on-site
- Strategies to facilitate shared ownership and usage of capital cost items such as cars, pools, tools and equipment, recreational and educational items and facilities
- Utilise infrastructure systems that are simple and sustainable and result in reduced development costs
- Usage of local labour contractors and resource providers in and during construction
- Ongoing local employment and business in providing goods and services to the Ecovillage
- Provision of on-site autonomous infrastructure and therefore minimisation of local authority infrastructure initial and ongoing expenditure.

CONCLUSION:

The stated criteria are not fully comprehensive and have been limited to comply with the Sustainable Urban Development Programme entry requirements. More detailed information is available upon request.