

Date: February 16, 2007

From: Cliff Lentz

Re: Baylands Development

"We must become the change we wish to see in the world."

Ghandi

When I went to the 2006 West Coast Green Building Conference in San Francisco, I had the opportunity to be exposed to some of the latest techniques and creative approaches to Sustainable Living. The Conference brought together some of the most forward thinking people who are dedicated to saving the planet through sustainability. The resounding call from the Conference was to take notice of ones own place in the world, and strive to make the planet a better place through local responsibility.

I came away from the Conference feeling empowered and hopeful, not only for our planet, but also for our Community.

With the early stages of formulating the Baylands alternatives before us, Brisbane has a remarkable opportunity to create a progressive sustainable building project for the site. If we choose to take the initiative, the Baylands project has the potential to become a model eco-community, an important example of green building and a lasting legacy for future generations. I've heard from so many of you in the Community saying that the Baylands development should be unique, inspiring, and express the values that are representative of our town.

To achieve theses goals will require help and guidance from experts in the field of sustainable building. If the Baylands is to become a world-class destination, it will take the knowledge of the world to create it. Many countries in Europe have taken progressive, eco friendly steps in dealing with their brownfields, minimizing their waste, and implementing alternative fuel sources into their new developments. Though there are many examples of sustainable building projects in our own country, I hope we also look beyond our shores at sustainable building techniques in other parts of the world.

I'm proud of our City's high sustainability standards. With the implementation of a proposed Green Building Ordinance, as well as our strong desire to require the site to have significant Open Space, the Baylands has a good eco-friendly footing. When we look at alternatives for the site, our Green goals and objectives will need to be supported by examples that have proven themselves, as well as being economically practical to the nature of the site. It will be very difficult to require the developer to build the project to our standards, if we cannot back up our recommendations, or does not make economic sense.

Many of the people I heard give lectures at the West Coast Green

Conference believed that green building and economic responsibility go hand in hand. In order for green building to be mainstream, it must not be an economic burden to the developer nor the community.

The Baylands development we create will not only have an impact on the local area, but will also have effects regionally, statewide, nationally and perhaps worldwide. It will be very interesting to see how we balance the desire of a competitive local economy with the reality of a global economy that is dominated by large multi-national corporations.

Finally, with global warming producing so many harmful effects on our planet, can Brisbane play a part in helping to reduce its impacts? Could Brisbane create a development in the Baylands that would be shining example of a city willing to make the commitment to reducing global warming, dependency on the automobile and creating a development that is for all people? Can Brisbane's commitment to Open Space be implemented in a manner that provides harmony between man and nature?

Below are some examples of places and projects in the world that are making a difference in sustainable building. I learned about this information while attending the West Coast Green Conference, and I would like to share this information with you; my Community.

Areas to be addressed for Sustainable Living:

Energy:

Energy was the focus of several lectures I attended. Many of the projects that were highlighted utilized many green energy sources such as solar, wind, and bio-waste. Some of the buildings were designed to waste zero heat, had installed passive heating systems, and implemented natural air conditioning systems. Some buildings even had their own internal biogas production.

A few of the larger developments emphasized self-sufficiency for their energy needs. I hope that the Baylands project provides an opportunity for us to explore the possibilities of producing its own energy supply. Perhaps a green power plant could be built to accommodate green sources of energy from solar, wind and bio-waste and distribute the energy throughout the site, and perhaps to other areas of Brisbane? Maybe the development could partner with the SF Scavenger Company to implement a system where bio-waste from their operation can be incorporated into producing biogas?

Water:

Though water is a valuable resource, many developments considered rain as something you get rid of. Perhaps buildings could be designed to capture rainwater for consumption, while gray water could be treated for landscaping and fountains? With the San Bruno Mountain Watershed in our own backyard, it would be interesting to see if natural springs could be utilized to provide a source of

water; these local sources could prove vital if an earthquake damaged pipelines from San Francisco? I hope the EIR examines the possibility of diverting the major ground water sources that flow to the landfill and infiltrate the contaminants of the Baylands?

Waste:

Many cities and developments in the U.S. and Europe have implemented user-friendly waste management systems that encourage zero waste; the goal is to provide structure and ease for people to recycle, reuse or turn waste into energy. I hope that all buildings will be on the same page in regards to recycling, recovering and reusing of waste resources and materials.

Could the Baylands divert its black water from something we pay San Francisco to get rid of, to something we could turn into a source of energy for Brisbane? I hope we explore the possibilities of installing a biological sewage treatment plant in the Baylands to turn the solid waste into biogas and the left over water for another use. This biological sewage treatment plant could also treat the rest of Brisbane's sewage.

Many newer buildings are being constructed to be carbon neutral. For the sake of not adding to the impacts of global warming, we could look into the possibilities of making the buildings in the Baylands carbon neutral?

Open Space:

I think all of the Open Space recommendations that were outlined in the scoping document that was submitted by the Open Space and Ecology Committee are great. I hope that it is possible to landscape the Open Space in the Baylands with San Francisco Bay Area vegetation. Brisbane has always valued its relationship with the surrounding Open Space, so I encourage the developer to respect our desire for significant Open Space for the Baylands.

Architecture:

Could the architecture for the Baylands provide a grounded sense of place that is characteristic of Brisbane? James Wines wrote, 'The integration of architecture and landscape, the fusion of buildings with context, and using the elements of earth and vegetation in such a way that they seem to be a part of the raw material of construction,' is what one sees of Central Brisbane when looking from the Baylands. What will be our view of the Baylands from Central Brisbane? Could the southern portion of the Baylands be developed so that the buildings compliment the Open Space, rather than provide distractions to the eye?

Housing:

Part of the EIR analysis will review housing in the Baylands. If housing were to be allowed, could the site be as safe as Central Brisbane? If we created housing where the buildings were sustainable, could we emphasize that the units be affordable to the working poor and the lower middle class? I personally do not think that single-family homes and luxury condos would be sustainable for the site or affordable.

Quite a bit of research has shown that if we as a society are going to make a strong commitment to reducing our dependency on the automobile, housing will need to be within close proximity to efficient public transportation, as well as shops, services, recreation, entertainment, open space and employment. Perhaps a housing plan that encompasses these human needs would not need assigned parking?

Transportation:

With a multi-modal station being built in the Baylands, it seems only fit to investigate what the potential prospects would be if a larger portion of the Baylands were serviced with light rail?

I hope we look at the impact light rail has had on other Bay Area cities (Mt. View, Sunnyvale) which have recently laid down tracks? Did it reduce traffic, stimulate the economy, create new work opportunities, provide easier access to shops and services for youth and seniors?

How do we provide a sustainable connection to the Baylands from other parts of Brisbane that will not add greenhouse gases to the atmosphere? Perhaps a free shuttle service connecting the Baylands with Central Brisbane, the Ridge, Crocker Industrial Park and Sierra Point that could be fueled by biogas developed in the Baylands?

Would it be practical to install electrical hookups in all parking garages? If so, the City could sell green power that might be generated in the Baylands.

Economics:

Could the Baylands be the birthplace of "Green Development" in the way that South San Francisco has become the birthplace of "Biotech?" At the West Coast Green Conference, I was shown many examples of how huge corporations like Lockheed Martin, The GAP, Adobe are realizing that building green makes smart economic sense. If corporations are beginning to understand that building for the long term, utilizing alternative energy sources, and providing healthier work environments are in their best interest, perhaps the next "Economy" is in Green Building? If the Baylands provides the fertile ground for young, visionary companies to develop and market their green technologies, perhaps Brisbane could be supported by an economy that would be unique to the region?

I hope we'll also have discussions for creating a sustainable market place where employees are paid a living wage and that many of the goods are either produced locally, organically, or with fair trade practices.

Art:

During his lecture, James Wines said, "Without art, the whole idea of sustainability fails." I hope that when we lay out the details for this project, that art takes a prominent position at the table. Just as we are learning about the opportunities to turn waste into energy, there are also many opportunities to take everyday things and turn them in to artistic expressions. We have such a creative Community! I hope we can truly harness our artistic energy and apply it to the Baylands in a way that inspires others and instills a sense of pride in our connection to this newly developed part of Brisbane.

Examples:

Mata de Sesimbra:

Mata de Sesimbra is a large project in Portugal, creating homes and buildings that will be zero carbon and zero waste. The project will also rehabilitate over 4500 hectares of open space, create a sustainable public transportation system, supports the local economy, while encouraging new eco-minded businesses to locate their headquarters at the development.

BedZED:

BedZed is the United Kingdom's largest eco-village. A former brownfield, the site comprises of 100 homes, community facilities, and work places for 100 people. The buildings were built green and affordable. The project is carbon neutral and uses 90% less energy than a typical house. This site in London has won numerous awards in sustainable building.

Z-squared:

Z-squared is a design concept in the United Kingdom to create a large live work community that will be zero carbon, zero waste. The project will support living and working opportunities for 5,000 people, while also providing retail, leisure, health, and educational opportunities.

Green Wedges:

In Stockholm, Sweden, ecological corridors called "Green Wedges," are embedded throughout the city, providing recreational opportunities, improving air quality, aiding in filtration of storm run off, while also functioning as a natural ecosystem. Stockholm is an excellent model of how a healthy environment is essential to a healthy community. Green Wedges are great examples of how bio-diverse landscapes can be compatible with development, as well as an asset.

Ecosan: www.gtz.de/ecosan

"Ecological Sanitation" represents a more holistic approach towards ecological and economical sound sanitation. The goal of an ecological sanitation system is to not only recover and reuse the water (such as for irrigation), but also to recover the nutrients from black water and food waste, and deliver them to a site where these ingredients can be turned into energy and compost. The Ecosan approach has been endorsed by Germany.

Anaerobic Waste Treatment:

The application of anaerobic digestion processes for the treatment of wet organic waste provides an alternative to conventional disposal methods by preparing the waste for recycling and the transformation into a renewable energy source; biogas. Biogas as a renewable energy source will help reduce CO2 emissions. Germany is a major leader in anaerobic waste treatment, as they have built hundreds of biogas plants in the country.

Avenue Coking Works near Chesterfield, Derbyshire, United Kingdom:

This site is considered one of the most contaminated in Europe. The government is committed to bringing in highly innovative solutions to cleaning up the site and will be the largest remediation project in Europe that will use in-situ remediation techniques. The remediation techniques used for this project could be helpful in determining how to remediate the contaminants in the former rail yard.

ACROS Building:

This building in Fukuoka, Japan, is a great example of how architecture can be woven into the landscape like a grove of trees or a mountain, so that the building doesn't take away from the natural surroundings.

One Planet Living:

One Planet Living is committed to creating a sustainable planet. Here are their guiding principles that could be implemented into the Baylands project:

- Zero carbon
- Zero waste
- Sustainable transport
- Local and sustainable materials
- Local and sustainable food
- Sustainable water
- Natural habitats and wildlife
- Culture and heritage
- Equity and fair trade
- Health and happiness