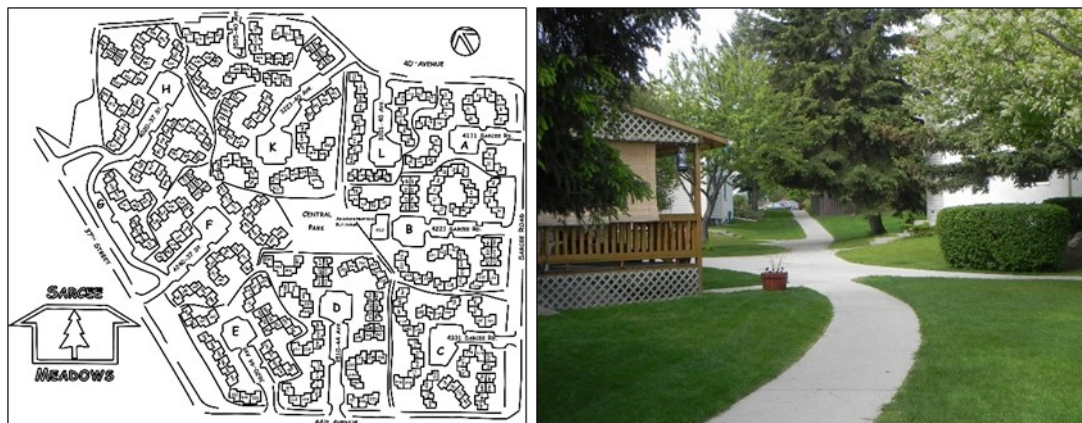


CHAPTER FIVE - DESIGNING FOR PEOPLE AND THE LAND

Introduction. This chapter describes design projects featuring environments focused on the needs of people. Landscape and nature were still very important, but these works required special attention and respect to human behaviour at various life conditions and stages.

In 1969, returning to the USA from our two-year US Peace Corps Volunteer service in tropical Brazil (see Chapter eight) the Vietnam War was still raging. Susan and I decided to join our UC Berkeley classmates Jim Taylor and Cameron Man in their new office Man Taylor Muret office Jim opened in the prairies of Calgary Alberta, Canada. Their home office was in Winnipeg, Manitoba. Susan and I both worked in the Calgary office of Man Taylor Muret (later known as Lombard North Planning), she for three years and I for four years, until 1973.

Low-income housing was needed in Calgary, which was a magnet for economic migrants from poorer areas of eastern Canada. We designed government supported low-income housing developments, usually fourplexes or short strings of attached townhouses. Most were designed by Architect Jack Long and Associates, with whom we developed an excellent relationship. Jack's firm designed easy-to-build and user-friendly residential units. We arranged them on the land, along with service roads, parking, play areas, plantings, and other landscape amenities. Susan developed excellent skills in this work. Her overall site design was outstanding, and her site engineering work remarkable. Shaping the land to establish individual building floor levels, and proper drainage, while minimizing construction cut and fill is difficult, especially on steep sites with high density housing. But Susan made it look effortless, often achieving a balance of cut and fill in the first try. One builder identified Susan to do all his work. Yet overall, her work was not as well appreciated as it deserved to be.



Figures 28. Overall Sarcee Meadows plan showing irregular strings of townhouses forming sub-community clusters and unique social spaces inspired by my experience living in a Brazilian favela. Note the abundant verdure as shown in the photo.

Sarcee Meadows Housing Cooperative Village was my favorite housing design project. Most high-density attached housing forms a monotonous grid, with each

residence much like its neighbors. Having recently returned from living in a free-form Brazilian favela and understanding the social interactions creating that form, and enhanced by it, I realized that busybodies want active locations, while others seek more privacy. Most people want choice and variety. The attached 360 housing units were designed so that they could be moved forward or back relative to their neighbors, allowing strings of units to form curved lines. Units could be near active intersections, others such as end units, had more privacy. Everyone had access to the central park area, mini-parks and play areas. An organic village was formed. Residents in a cooperative housing association own their homes, but can only sell to the coop. Thus, they cannot use increasing residential values as investments. The tradeoff is that housing remains very affordable. The program was originally intended to provide initial housing for economic migrants arriving in Calgary while they earned enough to buy a typical house in the suburbs. However, the first residents enjoyed living there and would not leave. A waiting list was maintained for six years and still no one left. When I visited over forty years later I was told very few residents had left and there were 2nd and 3rd generation families remaining in the village. They were building housing for the elderly so no one would need to leave the village when they aged. This may be my career's best work, integrating human psychological and social factors in site design. Had I showed such a plan to my international-style architectural modernist faculty at Harvard it would have been rejected, and it wouldn't win awards in local architectural competitions, but the residents for the last fifty years have shown it to be a winner.

Rundell Lodge. My favorite design project with Jack Long Architects was the Rundell Lodge elderly home. Jack reasoned that anyone growing old in Calgary had grown up in a small rural town. So, he toured local towns, photographing their architectural characteristics, low buildings with narrow eaves, white painted wooden siding and broad window and door frames. Jack was unsatisfied with his architectural staff's ability to envision an insightful floor plan and invited me to move over to his office and serve as chief design architect until completion of initial drawings. We wanted the building to look smaller than it was, with a friendly small-town feel. Our resulting design had three wings forming a partially enclosed atrium and a large lightwell but designed so that the size of the floor plan was not apparent from outside. Each wing became a 'neighborhood' and contained one community amenity welcoming residents in other neighborhood wings to visit. For example, one wing had the laundry, another a coffee bar and the third the hairdresser. Each of these social areas had a greenhouse roof on the south side. Visitors could relax in the sun indoors on bright cold winter days and enjoy living plants year around. The three neighborhoods were united in the community centre, a large lounge facing a great beehive shaped fireplace. On the opposite side of the fireplace were small hearths where friends or someone seeking privacy could enjoy the evening. Bedrooms in one wing surrounded the large lightwell in which the soil level was raised to window height, allowing residents to sit on the broad windowsill and grow plants. This project won the award for the best Provincial Elder's Home built that year. But when I visited in 2012 it had been demolished and replaced by a very ordinary apartment

building. This was my first experience designing themed architecture, something I would later enjoy doing in zoos and theme parks.



Figure 29. Rundell Lodge, my first architectural design project.

Red Deer Home for the Severely Disabled (now known as Michener Centre in Red Deer Alberta Canada). This was an important project during my stay in Calgary because it helped me focus on life experienced by people with severe physical and intellectual challenges and vulnerabilities. The director told us he believed environmental improvements could measurably improve a resident's wellbeing at least on stage. He described one resident, a grown woman in a permanent coma from birth, lacking both awareness and wakefulness. She could at least be wheeled out into a garden to bask in the sunlight on mild days. At the other end of the scale, residents able to leave the community could move to nearby halfway houses. Our project was to design a new recreation facility with an indoor swimming pool, gymnasium and exercise room. In cold countries like Canada, it is common to add such facilities onto existing buildings so users would not need to dress in warm clothing to venture outside. Having recently helped Jack Long design Rundell lodge to resemble a small-town building and realizing many Michener Centre residents were also from rural communities and if able may return to them. I realized that if residents were to advance in their coping capacities and build resilience and competence to increasingly take control of their lives they need to face and overcome sensible, achievable environmental challenges. Forty years later I formalized this concept for improving the choice, control and competence of zoo animals, later published in 2019 paper "Choice, Control and Computers. "The environmental expression of this idea at Michener Centre was to recommend the new recreation wing be located across a simulated small-town "Main Street" from the main building. I reasoned residents active enough to use such a building could go outdoors, cross a street (with almost no traffic) and enter a new building as safe preparation for possible advance to assisted living away from the Centre. Other special features I recommended were street props like traffic lights, crosswalk, bus stop, street trees and streetlights and park benches. Indoors I suggested large underwater viewing windows into the swimming pool for the snack room to help overcome fear of entering the water. We left Calgary before this project was designed in detail or built. I later learned my idea

of a separate building “across the street” had been realized, but the street was only a park walkway with no small-town pretenses. Michener Centre was closed in 2014 and residents dispersed to smaller and newer facilities. Looking back on lessons learned, Rundell Lodge and Michener Centre introduced me to empathy, respect, insights and knowledge needed to responsibly design inclusively for people of all types, ages and cultures and likewise of all species ages and conditions of animals in zoos and sanctuaries.

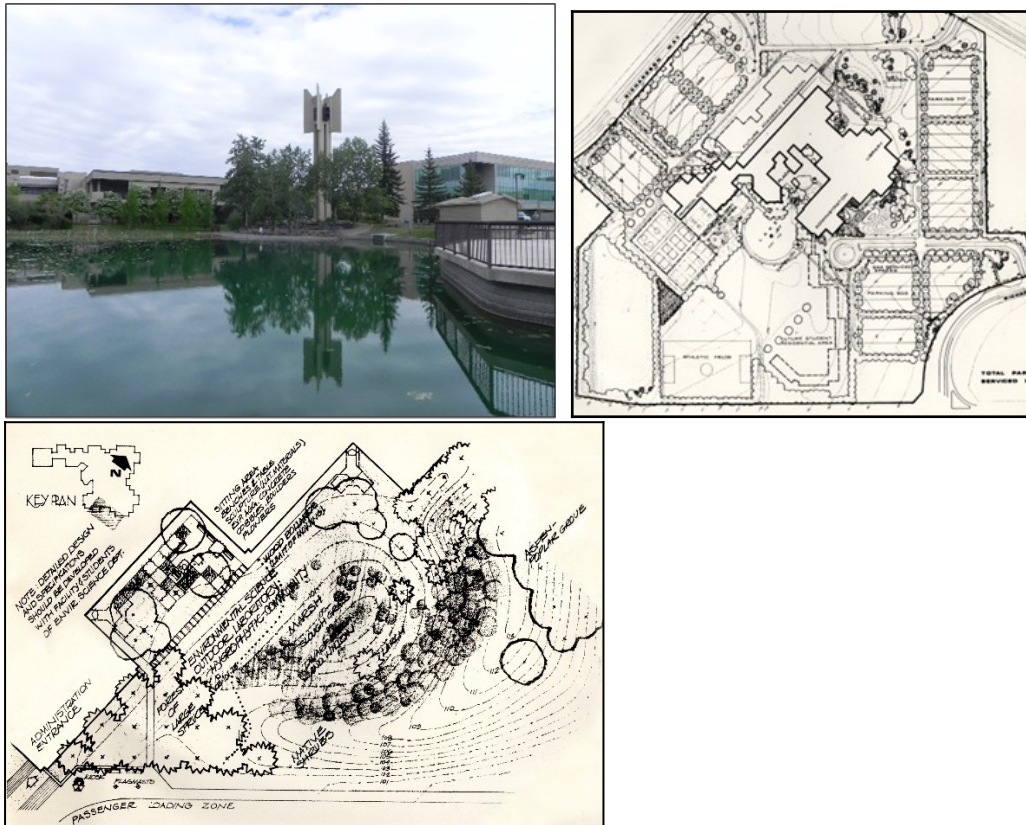


Figure 30. Upper left: view of circular lake I designed as a focal point for campus. Upper right: my overall campus plan. Lower: black spruce bog garden

Mt. Royal College. One major Calgary project was site planning for Mt Royal College. This work included locating the architects’ building on the site as well as parking areas, play fields and gardens. The architectural firm’s original plan had the building and parking areas aligned with the property lines. This gave little surrounding space for any plantings. My approach was to rotate the building 45 degrees, sheltering the building from parking with large planting areas. I also proposed establishing representative native ecosystems as gardens, an unheard-of idea in those days. These included 1) Prairie hillside (simulated stabilized dune formation) using remnant buffalo grass found onsite. 2) Poplar and white spruce woodland. 3) Black spruce bog built with faculty and students of their Environmental Sciences Department, transplanting appropriate species from the wild. When I visited the campus in 2012 the black spruce bog had been replaced with a newer building, but all other areas remained intact and well grown forty

years after planting. This is an early experience for me in ecosystem re-establishment. While planting native plant communities is justifiably popular today, I don't know of any other examples in North America over fifty years ago and certainly not in Canada.

Alberta Tar Sands Domed Town. In 1971 I was asked by creative architect and planner Mr. Arni Fullerton to collaborate in the design of a visionary domed town for one thousand residents to be established in northern Alberta as housing for workers and visitors associated with the proposed Tar Sands extraction program. At the time designing a domed town was an intellectually stimulating opportunity. Neither of us envisioned the environmental wasteland nor the carbon dioxide and other mass air pollution which has now resulted. Arni's plan was to develop ten communities in the area. Nine would be conventional stand-alone dwellings and a community center for more permanent residents. One community for both long-term residents and short-stay visitors would live under a great transparent dome. This vision was thirty years before the wonderful domed botanical habitats at the Eden Project in Cornwall, UK opened. I suggested an elliptical dome oriented on an east-west axis on a south facing slope to optimize solar penetration resulting from low winter sun angles. Greenhouses would be erected along the southern edge with growing fields below. Also, thirty years later, I later recreated this curving solar configuration for the Phipps Conservatory in Pittsburgh USA (please see Chapter 7).

The town would be configured on terraces, each house's roof being the front terrace for the house above. I called this the "Portofino model" imagining a Mediterranean climate alternative in Northern Alberta. All accommodations would receive direct winter sunlight as the sun's path arched parallel to the ellipse's curvature. The highest residences would be located above several levels of indoor parking, providing a layer of insulation from the cold northern exposure. The town government and evening entertainment precinct would be in the centre of the north side near the car park and isolated from residential terraces. The lower central area on the south side would have fields for sports and recreation overlooked by all residential units.

I invented a mythological storyline supporting this arrangement, as I have done on many projects. The northern cold was the common enemy, requiring the common response directed by local government and accessed by a single significant entry portal on the north. The southern side was life-giving and friendly and thus had many gates leading through green houses as climate-controlled vestibules to seasonally productive community gardens and crop fields below. The east gate represented renewal, where excess heat from the tar recovery operation provided heat and energy for the domed town. The west gate represented remembrance, leading to the community cemetery. The hope was that warm rising indoor air would support the lightweight transparent film roof without the need for massive physical support structures. Perhaps several pylons would support the roof during the few times when the difference between indoor and outdoor temperature was insufficient to fully inflate the roof. Later Arni Fullerton consulted with German Architect Frey Otto, design master for tensile roof structures. I

wrote a short story of speculative fiction, a future history, describing a day-in-the-dome experienced by both visitors and residents including wild birds residing in this speculative environment. As far as I know, nothing came of this conceptual town planning project.

Garden of Awareness. This project, while built using landscape features, was primarily focused on design for people and their abilities and interests. The Blyth Park Garden of Awareness in Bothell, Washington, was the last city park project I developed while with the Jones & Jones firm in 1982. We competed with another firm to design what was identified as a ‘garden for the blind’. Each team was assigned a blind advisor. The first thing our advisor told us was that “No self-respecting blind person would want to go to a ‘garden for the blind!’” They would want to go to the same parks as everyone else when it was planned to accommodate their needs. As a longtime advocate for “universal design”, I suggested we reframe the project as a “Garden of Awareness”, a sensory garden for everyone as an open area within the overall park.



Figure 31. Garden of Awareness concepts: Left, blindfolded orienteering, centre, scented herb contact, right, crawling on scented and textured groundcover.

We won the competition and both blind advisors joined our team as wonderful teachers and advocates. The garden was to be installed by a Boy Scout troop, so constructed features must be easy to build. Ideas I developed (illustrated above) included:

- An orienteering enclosure in which blindfolded visitors followed a sequence of sounds, touch/textures, and scents to reach their destination. A blind volunteer guide could be available to help them.
- Various scented and textured plantings to be explored by scent, touch, or sight.
- A crawling trail over scented and textured ground covers. Many other sensory explorations were developed as well, such as water activated gongs, wind activated chimes and plantings encouraging songbirds.

To communicate the arrangement of these ideas to our unsighted advisors and for the final group presentation, I presented a large master plan drawing which looked colorful but “normal” for visual people but was made of colored and textured cloth such as lace, corduroy, and velvet representing different functional zones. Small buttons located focal features so that visually impaired colleagues could also “read” this plan. This is an

example of using special communication methods to meet special communication needs. This project was built after I left the area, so I haven't seen it in use.

Battle Point Park, Bainbridge Island, Washington. In 1975 Jones & Jones were selected to master plan two parks on converted military sites on Bainbridge Island where we lived. I undertook the work with local architect John Rudolph. Park Director Larry Burris was energetic and supportive. The future Eagledale Park site was a small, 2.7 ha (6.7 acres), former Cold War anti-aircraft missile site. This plan was not built during my time there.

I remember Battle Point Park very well. It was a labor of love and took far more time than we were paid for. Again, this was a demonstration of using landscape to support the needs of people. This former naval radio station totaled 36.5 ha (90.3 acres) with a 250 meter (800') high steel radio tower and bombproof concrete transmitter building. The site was generally flat and open, and the project budget was far too small. To save money my plan was built in 1976 as a construction training exercise by the US Army 864th Fort Lewis Engineering Battalion who bivouacked on site. It was fitting that soldiers would work to convert a military site to peaceful purpose. Also importantly, they saved the park district an estimated \$100,000 (2.5 times more than the original construction budget). The young soldiers were learning to use heavy equipment, but their experienced Sargent insisted on achieving good quality. This seasoned Sargent and his soldiers were wonderfully dedicated to creating a legacy park. The Sargent told me he was about to retire after 25 years of military service and wanted to build one worthwhile and enduring project before he finished his career. One young soldier building a pond worked all night operating a huge excavator, knowing this equipment had to be returned the following day and unwilling to leave the work unfinished. John Rudolph and I often arrived in the evenings with cases of beer to show our personal appreciation for these hard-working lads.

A major feature of construction was unifying stormwater drainage swales directing water to two ponds. This required combining flow from both the northeast and northwest corners of the site. Soon after construction there was a massive rainstorm. These combined flows backed up, flooding an adjacent blackberry farm owned by a Japanese American family. There were many in this area. I quickly visited his farm to assess the damage. To my relief, he laughed, telling me his plants had suffered in a recent drought and now had a been very well watered!

Today the park provides three high quality softball diamonds, two soccer pitches, basketball courts, two ponds, a perimeter running track and a large central open space, the Great Lawn, as well as Park District maintenance shop and offices. This is the only park with formal athletic facilities I've designed, and it is very well used. Forty years after Battle Point Park opened, I was contacted by Park District Senior Planner Perry Barrett. He was updating the master plan and had the curtesy to locate me here in Australia to ask my opinion on his plans, which I happily approved. It is nice to be remembered.



Figure 32. Battle Point Park views. Photos: Joke Klien.

Gene Coulon Beach Park, Renton, Washington. David Towne, previously Seattle Parks Director responsible not only for our work with Woodland Park Zoo, but also many innovative Seattle public facilities such as Gasworks Park and the Seattle Aquarium, eventually joined Jones & Jones for a while. During this time his long relationship with other area park departments enabled us to win the design contract for a major new park in Renton Washington, on the southeast shore of Lake Washington. This 23 ha (57 acres) surplus industrial pier site included 1.7km (5400 feet) of lake shoreline.

My plan provided a popular boat launching ramp and park center with a 285m (almost 1000') long walkway over the lake accessing two floating picnic barges. We also built several hills (covering toxic waste) with scenic overlooks. One I called Weather Top was inspired by the Lord of the Rings novel. It was crowned by a circle of very large boulders. I am especially proud of the 200m (650') double row of Sierra Redwoods. I had them planted to give form to the central area. Now they are over 21m high (70') high. Johnpaul Jones designed the wonderful pavilions. Becca Hanson, David Roberts, and others developed construction documents and provided construction supervision. I last visited it in 2008. It is a very popular park today.



Figure 33. Left photo shows the central area with the line of Sierra redwoods in the background. Both photos show Johnpaul Jones' wonderful architectural skills.

Pro bono local community projects 2006-2019. I met Mr. Micheal de Oleveira, then Director of Healesville Sanctuary, during our visit in 1999. Soon after moving to Healesville, I contacted him again. He was now a nurseryman and horticulturalist, very involved in community improvements. I mentioned to Michael that I was willing to design local projects as pro bono community service. Here are three examples.

Healesville Labyrinth Park. Michael introduced me to the Eastern Mental Health Services group wishing to build a labyrinth in Healesville. I agreed to design it for them providing it became a labyrinth park and not just a single patterned pavement. My design respected the adjacent historic railway by featuring recycled railway rails, ties and hardware, and paint colors in construction. Since the central labyrinth is circular, I used it as something of a seasonal observatory. Timber railway tie gate posts marked the cardinal directions as well as the angles of sunset and sunrise during the vernal and autumnal equinoxes. The design was enlivened by wonderful ceramic tile illustrations by area artist Ms. Veronica Holland and artistically composed assemblies of tiles made by local children and families. Yarra Ranges Council supplied Aus\$240,000 in funding and I supervised construction. The project opened in 2007.

At this time a local Aboriginal group was building a “Belonging Place” across the town in Queen’s Park. I suggested an annual “reconciliation walk” by adherents from both groups be organized to walk between these two spiritual centers with picnics following. Today, sixteen years later, Labyrinth Park has matured nicely and is well maintained by the Council, but little used by the public. However, the Friends of Healesville Labyrinth organize annual winter solstice celebrations in the Labyrinth, and the Reconciliation Walk still occurs between the Labyrinth and Belonging Place on the Vernal equinox.

ECOSS Environmental Park 2006-2014. Micheal de Oleveira also introduced me to a group starting an environmental park in an old 7.4 ha (18.3 acre) poultry operation now owned by Yarra Ranges Council in nearby Warburton Valley. I was joined in this volunteer advisory service by Mr. Keith Jesse, experienced in the design and operation of environmental centers, and Mr. Graeme George, permaculture, and local ecology guru. The goal was to build, operate and teach organic and restorative agricultural practices. I helped led workshops to formulate their vision, prepared their 2009 master plan and update it in 2022. I also designed their water harvesting dam (built in 2012) and developed many architectural plans for converting the two old chicken house steel structures for meetings and classrooms. These plans were followed in concept, but not in detail. Conservative engineers from the Shire Council didn’t agree with our reuse and recycle philosophy, which didn’t meet their one-size-fit-all standards. Nevertheless, ECOSS is still highly active and popular with the local green and arts community after eighteen years (see images below).

Healesville Hospital Wellness Garden - 2019. While visiting the local Healesville Hospital for medical tests I noticed an area outside their lounge and nurses’ station with wonderful mountain views. I suggested to Head Nurse Christine Wittkopp that they should build a wellness garden there and I volunteered to design it for them. Christine

became my principal collaborator and is an amazing community activator and fundraiser. Healesville Hospital is part of the Eastern Health network, and they became my very collaborative clients. Mr. Ivan Tarrant, their project manager, was experienced and effective. Michael de Oliveira, my friend, and colleague, helped to organize the planting donations. Programmed Property Services were collaborative and did excellent work installing the project.

Wellness gardens are designed to relieve stress for patients, their families and hospital staff. Losing agency, control of your actions, situations and even your prospects is stressful. You lose all agency during hospital visits. Hospital staff may have more control, but their work environment is extremely demanding at times. Research shows that contact with nature reduces stress, contact with family members reduces stress and the simple action of stepping outside, turning you back on the locus of stress and moving your body can be enriching, especially if interesting distractions are provided. The wellness garden provides a wide variety of situations, social places, private places, sun, shade and rain protection, tight secure introspective places, and spaces with prospects of distant mountains. The acoustic environment of wind blowing, water flowing or bubbling, birds singing, insects buzzing is important as is the olfactory setting with fragrant flowers and pungent-leaved herbs. Seasonally changing floral and leaf colors create enthusiastic and joyful areas and somber, restful areas. A special feature I added was a wide variety of potted herbs organized by the of the Mediterranean, East and Central Asian and Aboriginal cuisines. These herbs were grown and provided by permaculture specialist Mr. Graeme George. A wellness garden is a sensory garden.

Art is also important. I arranged for a lovely, spirited, and dreamlike painting by Ms. Veronica Holland called 'Garden Dreaming' and an Aboriginal painting by Ms. Jo Voce, Eastern Health Aboriginal Hospital Liaison Officer and Wurundjeri Woman who also organized drawings by Wurundjeri children.

In keeping with my other community projects, the wellness garden was constructed from recycled materials such as bricks and timbers and all plants and planting were donated. Total construction cost was Aus\$90,000. All this funding was donated, half from Eastern Health Foundation and half by local donors of funds, materials, and labor. The large rose arbor and many plantings were donated as memorials to diseased loved ones who had been cared for at this hospital. The garden is thriving today, lovingly cared for by a volunteer in memory of his wife. Hospital staff especially appreciate the garden during their breaks



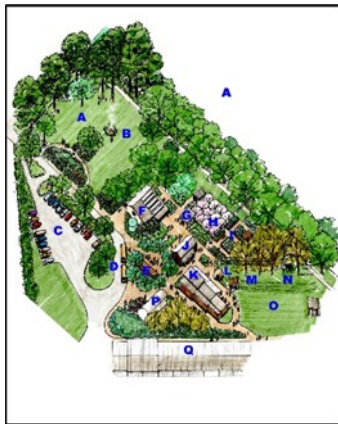
Heal our past
Build our future

I AM
Healing Walk at
H'ville Labyrinth
Railway Park, Healesville

FREE COMMUNITY DAY
Sunday 19th March
ALL WELCOME 2017

12 NOON
Welcome to Country
Free Bush Tucker BBQ
Brett Lee Concert at
Belonging Place
next to HICSA 1A Badger Creek Rd

CLD • GAP • COUNCIL



Upper Yarra Community Environment Park
Our Vision is to create sustainable solutions for the Upper Yarra Region.

Our Vision is to create sustainable solutions for the Upper Yarra Region. This vision is based on the following principles:

- Encouraging community participation
- Addressing social and water security and well-being
- Encouraging green technology
- Encouraging sustainable housing for all ages
- Encouraging financial investment and low maintenance
- Maximising building opportunities and resource
- Fostering restoration
- Encouraging local food production and healthy
- Encouraging local food production and healthy

Village Area Concept Plans

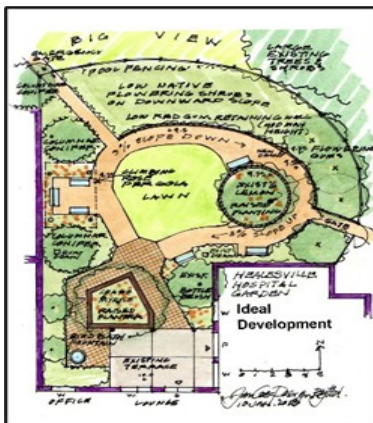




Figure 34. Upper left: my sketch for the Healesville Labyrinth Garden. Upper right: announcement for the ongoing Reconciliation Walk between the European labyrinth and the Aboriginal Being Place I suggested in 2006. Second row: master plans I prepared for the ECOSS Environmental Centre. Third, fourth and fifth rows: Healesville Hospital. Third row: plan and perspective drawings. Fourth row: photo of completed garden and volunteers doing the planting with Michael de Oliveira (at garden cart). Fifth row: rose arbor and painting by Veronica Holland. Aboriginal artwork: small panels by children, a large panel and Aboriginal community contact by Jo Voce and platypus bench by Rob Bast.

