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The Willie J. Spencer Eco-Retirement Village

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To the Graduate Council:

I am submitting herewith a thesis written by Laura Leah Ogle entitled "The Willie J. Spencer Eco-Retirement Village." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science in Planning, with a major in Planning.

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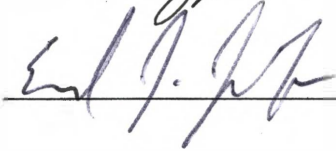(Original signatures are on file with official student records.)
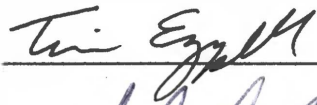
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THE WILLIE J. SPENCER ECO-RETIREMENT VILLAGE

A Thesis
Presented for the
Master of Science in Planning
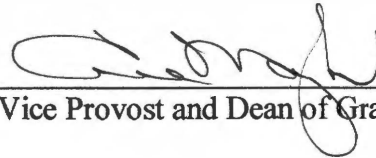Degree
The University of Tennessee, Knoxville

Laura Leah Ogle
December 2003

Dedication

This thesis is dedicated to my family. This thesis is in honor of two of my heroes; my Grandmother, Willie J "Bill" Ogle, who inspired the idea for this thesis, and my Grandfather, rest in peace, William Ellis Ogle. To my Mother, Wanette Bolen, who made me everything I am and continues to amaze me with her undying love and support (and is the best "shrink" in the world). To my Father, rest in peace, Phillip Ellis Ogle, whose footsteps I am proud to follow by obtaining a Master of Science in Planning. To my brother, Stephen Spencer Ogle, who impresses me with his brilliant mind, sense of humor and his dedication to the value of hard work, and whom I attempt to emulate by following his lead of striving to be a better person each and every day. To my twin sister, Leslie Lynn Ogle, whom I greatly admire, and who is my constant companion (and giggle-buddy) and serves as my mirror, which makes me a better and stronger person every day. To my stepson, Andrew, whose dedication to his studies and his exceptional academic achievement inspires me (and for bringing me hot tea and hugs on those late study nights). And, with all my admiration, to my husband and (self-proclaimed) biggest fan, Stewart Wade Graham, who impresses and inspires me in every way a person can, and whose patience, support, and love sees me through and sustains me.

Acknowledgments

Abstract

The purpose of this project was to synthesize two ideas; the dire need for innovative elder-care environments, and eco-villages. The project investigates the elderly population dilemmas facing the nation, the current systems in elder care, and some of the innovations emerging in this area. The findings are daunting. The elder population is growing exponentially, and the current systems, many in jeopardy, barely accommodate existing needs. Accommodating existing needs is only part of the problem. The needs of the elderly must be provided for in an innovative, loving, caring, and nurturing environment.

The study goes on to investigate eco-villages. Eco-villages are an old idea that has re-emerged in the past ten years or so. They are becoming popular alternative living environments for many seeking to live in an ecological and environmentally sensitive manner. Part of the eco-village concept is a *communal working village*. In other words, all the members of the village participate in the operation and function of the village. Everyone pitches in to garden, cook, build – anything that needs to be done for the village to function and produce a self-sufficient economy.

By examining the reality of the elder-care dilemma, and combining it with the concept of an eco-village, the project proposes a solution, which is an eco-retirement village. One of the major components of this idea is for enough people, village residents and volunteers, to donate enough time and work towards the operation of the village to offset the costs,

iv

allowing low-income elders an alternative to nursing homes. Time and work donated to the village are "banked" as hours that can go towards monthly rents/fees for residents to live there.

Synthesizing these two ideas revealed some viable possibilities and presented some obstacles. A more intensive study would need to be conducted to determine if society would embrace these alternative ideas, and if the "banking hours" system would be enough to offset the costs of operating the village and providing for the members and staff.

Table of Contents

1.0 Introduction

This paper presents the concept and design for an environmentally-based retirement community. The community merges two concepts – sustainability and an alternative living environment. Though the focus is for the elderly, "it takes a village," to quote Hillary Rodham Clinton. Meaning (in this particular context) it takes a community made up of children, young adults, adults and a variety of family structures to accomplish the mission put forth in this project. The community embraces a "green" design by utilizing renewable and alternative energy and by implementing ecologically sound agricultural and building practices. It also provides an alternative working-village concept, which enables residents to contribute to the operation and function of the village. By doing so, members accumulate hours worked at the village, and then those hours are reciprocated to the residents in the form of shelter, care and amenities provided by the village.

The elderly population is growing and so is the need for affordable care and living facilities. The huge "baby boom" generation is reaching retirement age; science and technology are keeping people alive much longer, and people are taking a more proactive role in their health and physical fitness (American Association of Retired Persons, 2002). Meanwhile, prescription drugs, doctors' care and living centers are becoming more and more expensive (MetLife Survey, 2002). Federal and state programs are being cut, and many fear these programs are in jeopardy. Furthermore, many nursing homes have been reported for abuses, unclean facilities and inadequate care. As our population becomes older, it is imperative that we find new ways of caring for our elders. We must enable

ourselves and our elders to challenge the status quo of the current systems. We must

provide alternatives for those who don't have the financial means to survive in their old

age. We must find ways to ensure happy, healthy and thriving environments for our elders

to live in, and we must bridge the gap between youth, adults and elders. Our elders should

be revered, looked to for their wisdom, and they should be valued as the assets that they

are. When we do this, and we must, we create a better society for everyone.

This paper presents information on the growing elder population, the need for elder-care

alternatives and some of the alternatives emerging with regards to elder care. The

background and concepts of eco-villages are explored, and the design of the Willie J.

Spencer Eco-Retirement Village is outlined. The village places a strong emphasis on

education, volunteer programs and marketing. Furthermore, the paper goes on to describe

the economy of the village, such as food production and tourism. The financial

sustainability of the project is discussed, and finally, some scenarios are described to show

hypothetical examples of how the village works. The paper concludes by addressing some

possible problems and barriers with the concepts of the project.

2.0 Literature Review

2.1 The Longevity Revolution

During the 20th century the number of persons in the United States over age 65 has jumped by a factor of eleven (U.S. Census Bureau). The U.S. Census Bureau projects the elderly population will more than double between now and the year 2050 to 80 million. By that time, as many as one in five Americans could be elderly. Most of the growth will likely occur between the years 2010 and 2030, when the "baby boom" generation enters this population group (U. S. Census Bureau).

According to the MetLife Assisted Living Survey conducted in 2002, many factors contribute to the increase in longevity. Medical advances and healthier living habits have resulted in an increase in the over-65 population. The survey notes that the number of people 75 to 84 years old increased 23 percent since 1990 and those over age 85 increased 38 percent. Furthermore, by the year 2020, approximately 58 percent of baby boomers will be between the ages of 65 and 74, also noted in the survey. Sadly, as this population segment continues to boom, so does the price of elder care.

The average cost of a private room in a nursing home is $181.24 per day, according to the MetLife survey. The average cost of home care is $18 per hour, which amounts to $432 per day if 24-hour care is required. Assisted living centers are becoming preferred options for many and average $2,159 per month, or $25,908 per year (MetLife Survey, 2002).

3

Many of those from the "baby boom" generation have created successful lives for themselves that will enable them to afford more expensive care, such as retirement resorts, retirement communities and assisted living facilities. The *real median income* for the "baby boomers" is 35 to 53 percent higher than their parents (U.S. Census, 2002). However, assets dwindle quickly once income ceases. Where do they go when the money is gone? Medicare does not cover assisted living and only covers nursing homes once the elder qualifies as "impoverished." What happens to the majority of people who cannot afford the luxury of resort living or assisted living? The *median money income* of retirement age adults in the United States is $23,152 (U.S. Census). The average cost of an assisted living center in the United States is $25,908 per year. Therefore, in less than one year they qualify as "impoverished" and can enter a nursing home on Medicare's tab. Most residents in nursing homes require more intense levels of care than those in assisted living centers. However, many are placed in nursing homes because their financial straits, not the level of care needed, dictate that decision. What they find waiting for them in nursing homes is often to their detriment, not to their well being.

2.2 Imperative & Innovative Alternatives

There were 5,283 nursing homes cited for abuse violations, according to a review of state inspection records requested by Rep. Henry Waxman, D-Calif. These homes were cited for nearly 9,000 abuse violations from January 1999 to January 2001 (CBS News, 2001). More and more horror stories of abuse in nursing homes have surfaced. Atrocities committed against elderly residents in nursing homes include such things as choking,

4

punching, kicking and sexual abuse. The incidents of abuse violations rose from 5.9 percent in 1996 to 16 percent in 2000 (CBS News, 2001).

"Nursing homes are on the critical list," says Dr. Bill Thomas, a physician specializing in geriatrics and a crusader determined to revolutionize nursing home care (Public Broadcasting System, 2002). In an interview on the Public Broadcasting System (PBS), Dr. Thomas goes on to call nursing homes a "relic that will cease to exist." Dr. Thomas has developed the "Eden Alternative." His basic concept is to change the way we approach care for our elders. He believes we have taken an "assembly-line approach" to elder care. Furthermore, he believes that we have to decisively move away from the concept of "long-term care industry." Dr. Thomas says that long-term care for our elders is not an industry, and by making it an industry we have perverted the real value in elder care. He says in the interview that we must move away from elder care as a big business and business opportunity. Following is a quote from the PBS interview with Dr. Thomas:

> The nursing home takes good, good, loving, caring people
> and plugs them into an institutional factory-like
> arrangement. And that's no good. So what I want is an
> alternative to the nursing home, an alternative to the
> institution. And the best alternative I can think of is a
> garden. I believe that every elder should have a chance to
> live in a garden. I believe that, when we make a place that's

worthy of our elders, we make a place that enriches all our

lives, caregiver, family member and elder alike. So the

answer the Eden Alternative provides is a reinterpretation of

the environment elders live in, from an institution to a

garden. That's why we call it the Eden Alternative.

Dr. Thomas combines four main components for the Eden Alternative. First, he states that

the organization must treat the staff the way they want the staff to treat the elders. He

believes that many of the staff in these facilities are treated badly and then expected to

treat the elders differently. Secondly, Dr. Thomas wants to bring decision making back to

the elders, so that they have a voice in their daily routine. He believes this is crucial in

bringing meaning back into their lives. Thirdly, he stresses the importance of changing the

environment in which they live. This is accomplished by adding lots of plants, gardens,

animals, children or anything that makes the environment enriching and peaceful. Finally,

he believes there must be a commitment to ongoing human growth. Dr. Thomas states that

any person, no matter how frail or feeble, can grow.

Some other innovations are taking place in caring for our elders. The National Council on

the Aging partnered with Pfizer Inc. and began the Innovations in Independent Living

Program. In an effort to enable older people to live independently in their homes, the

collaboration awarded $25,000 each to five innovative programs selected from across the

United States (see Appendix Table 1).

Businesses are also developing innovations in elder-related benefits for employees. In the United States 22.4 million households (almost one-fourth of the population) were involved in the care of an aging parent in 1996 (American Association of Retired Persons and the National Alliance for Caregiving). They estimate that 42 percent of all employers in 2002 will provide some form of elder care. Within the next few years, the demand for dependent elder care benefits is expected to be greater than child-care benefits (AARP). Some of the types of benefits provided by companies are resource and referral guides, flexible hours, elder day-care, paid leave, transportation subsidies and various benefit packages for elder care issues.

One particularly innovative idea comes from Elmhurst, Illinois. Five companies have teamed up to form the American Business Collaboration for Quality Dependent Care. They gave $85,000 to Metropolitan Family Services of Wheaton, Illinois to help fund a facility similar to one they operate in West Chicago (Milligan, 1999). The project is a respite care center for elder dependents of their employees. It's a five-bedroom facility that looks very much like a home (Milligan, 1999). The center serves as a place for the elder dependents to stay temporarily when employees need to go on work-related travel, take a vacation or simply take some time off from the exhaustive work of caring for an aging parent.

Some other options emerging for elders are co-housing, foster care and adoption programs (Teaster and Roberto, 1999). Co-housing gives two or more elders an opportunity to share the costs of a household, caregiver and other needs. It also provides them with a home-like environment and the emotional support from the others living in the home. Foster care is an individual or family providing supervision and personal care for the elder, similar to foster homes for children. Adoption programs are not living arrangements. These programs simply enable a person to provide certain needs to an elderly person that they take responsibility for through an organization who sponsors volunteer adoption programs. Provisions come in the form of food, money, gifts or companionship. Similarly, the Native Americans embrace an elder program based on the spirit of the Giveaway Circle. This is a tradition among Native Americans to give the best that we have to give. These gifts may be of time, talents or food and clothing.

Though some innovations are emerging with regards to our elder predicament, millions are, and will be, faced with difficult decisions with limited options for themselves and/or their loved ones. Social awareness of the elder crisis in America is increasing, not only through studies and attempts at policy change, but through grass-root initiatives from millions of people whose lives are affected.

However, a severe gap still exists between mainstream society and our elders. As elders become mainstream society, the tables will inevitably turn. Dr. Bill Thomas, during his PBS interview, eloquently puts forth an imperative and innovative statement:

8

We need to change the way we think about and care for our

elders, because by not honoring our elders we damage

ourselves. We damage the very fabric of our communities

and our society and our families. We do damage to people of

all ages when we fail to honor and care for the frailest and

most chronically ill among us. It's a bad habit, which leads to

bad things in other parts of our society.

We need to be concrete about it. If we want to improve life

for everybody in our society, one of the very best places to

begin is changing how we think about, care for and honor

our elders. That thread, if you trace it all the way back, is

woven through the whole context of our social life, our

families, our churches, our communities. If we can master

the art of caring for our elders, we can make a better society

for everybody to live in.

2.3 Eco-Villages

Though the concept of eco-villages has existed for millennia, Robert Gilman first

introduced the term "eco-village" in the journal he edited entitled *YES! A Journal of

Positive Futures* in the Spring of 1996 (Mare, 2000). Though originally, people lived in

9

communities such as eco-villages out of necessity and the nature of existence, today they are "intentional communities." The Intentional Communities website defines Intentional Community as "an inclusive term for eco-villages, co-housing, residential land trusts, communes, student co-ops, urban housing cooperatives and other related projects and dreams..." (Intentional Communities, 2003). Eco-Villages are created by a group of people who have a common desire to live in a supportive social environment with a low-impact way of life. They create this low-impact lifestyle by implementing ecological design, permaculture, alternative energy and a variety of community-building activities (Snell, 2003). The Global Eco-Village Network website states that eco-villages typically build on various combinations of three dimensions-social/community, ecological and cultural/spiritual. The Global Eco-Village Network puts forth the following definition:

> Eco-villages are urban or rural communities of people, who
> strive to integrate a supportive social environment with a
> low-impact way of life. To achieve this, they integrate
> various aspects of ecological design, permaculture,
> ecological building, green production, alternative energy,
> community building practices, and much more.

Many modern-day eco-villages have emerged from the early 1970's through the 1990's and are continuing into the 21st century. The Fellowship of International Communities has

published a Communities Directory, which lists over 600 eco-villages established throughout the world.

Most eco-villages, and other types of intentional communities, are typically comprised of people with a common philosophy, lifestyle or activity. They also typically represent and accommodate a range of demographics (Snell, 2003). In research conducted for this project, no eco-villages have been found that cater specifically to the elderly. According to Mark Snell with the Australian Conservation Foundation, there are some communities and resorts specifically for the elderly that are self-managed and/or self-funded. Also, there are some communities that incorporate bylaws in an attempt to enforce environmentally sympathetic practices. However, none of these fit the true definition of eco-village, according to Snell.

Eco-villages provide a place for people to live, work and play, while learning and maintaining environmentally healthy and productive lifestyles. Members of eco-villages work for the common good of the village, as well as their own households. Economies of eco-villages vary, but all have some sort of business that produces income. Typically these businesses include things such as gardening, food production and arts and crafts, all done in an ecologically-sensitive manner. Many eco-villages also incorporate tourism and education into their economic activity. They offer "outsiders" a chance to come stay at the village and get hands-on experience of how an eco-village operates and to learn about sustainability and environmental living.

Eco-villages, by their very nature, are sustainable. Sustainability refers to its ability to maintain and perpetuate itself through the cooperation of its members. Sustainability also refers to the environmental, low-impact living accomplished through the eco-village. The goal of a sustainable community is to meet its basic needs in a way that can be continued in the future and does so without destroying the natural environment (Hart, 1999).

3.0 Spencer Eco-Retirement Village

In a Guide to Sustainable Community Indicators, Maureen Hart states that sustainability has to do with three basic terms: sustain, develop, and community. Sustain means to continue without lessening, to nourish and allow to flourish. Develop means to improve or bring to a more advanced state. A community is simply a group of people who live and interact in the same geographic area (Hart, 1999). Bringing all these components together to develop a village that reflects care for the environment and care for the people – old and young alike – is the focus and goal of the Willie J. Spencer Eco-Retirement Village (Spencer Eco-Retirement Village for short, or SERV).

3.1 Village Design

This chapter on the design of the village incorporates many elements. The size and location are discussed, as well as the concepts of "green-design" practices. Housing, village society and healthcare are described, along with a list of proposed facilities and amenities. Furthermore, the organizational structure is outlined, and the chapter concludes with the energy and agricultural designs the village proposes.

3.1.1 Size & Logistics

The ideal size for SERV is approximately 140 acres with substantial amounts of forest and farm land. Though the number of residents would start small and grow over time, the maximum number of people in the village is approximately 400. The ideal location is in Virginia or North Carolina, adjacent to a national forest and in close proximity to the Blue

Ridge Parkway. The 140 acres is large enough to contain a wildlife and forest preserve along with the village. This also gives enough space for trails, livestock and tourist events. The acreage will contain a water source such as a creek, river or lake.

Virginia and North Carolina are selected as potential locations because they both have national forests, and the Blue Ridge Parkway runs through them. They are also accessible to major interstates and highway systems. Virginia and North Carolina also have mild climates, which provide many months of warm weather. These states are becoming popular retirement locations, especially for the "baby boom" generation. In their annual *Baby Boomer Report*, Del Webb states that North Carolina and Virginia are in the top-five list of states that retirees wish to relocate. One popular characteristic noted in the survey is beaches, and Virginia and North Carolina are both coastal states. Though Virginia and North Carolina are chosen as ideal locations for this particular project, the concepts of the eco-retirement village could be implemented anywhere. The concepts are the important elements, not so much the location. The same basic concepts and ideas are just as feasible in a rural setting or an urban center. If zoning is an issue, this model falls under a *planned urban development*. However, the interest of communities and their willingness to participate in the center's program are important factors to be considered in locating the centers (Ogle, 1966).

The land for SERV will need to be close to a major urban area, which can provide emergency services such as fire protection, ambulance and hospital care. The close

14

proximity to an urban area will also provide the village with community involvement and collaboration, which is imperative to the success of the village. The city can provide amenities that are not available within the village such as movie theaters and shopping malls.

3.1.2 Green Design Practices

The village's design goals are to preserve as much forest as possible and utilize "green" building practices. The Northwest Regional Sustainable Building Action Plan defines green building techniques as "designing, constructing and operating buildings and landscapes to incorporate energy efficiency, water conservation, waste minimization, pollution prevention, resource-efficient materials, and indoor environmental quality in all phases of a building's life." Arlington County Virginia's Department of Environmental Services outlines what a green home is and some of its components. They define a green home as "a healthy, comfortable, cost-efficient home that reduces energy and water usage and protects the environment." They list the following components of a green home to include:

- Specific construction practices to minimize and recycle construction waste
- Careful insulation practices
- Nontoxic interior finishes (low VOC paint, sealants, and carpeting)
- Components made from renewable resources (such as cork or bamboo floors, wheat-board cabinetry)
- Recycled content components (such as glass tiles, recycled-content countertops)

15

- Energy efficient appliances (Energy Star rated refrigerator, dishwasher, water heater, etc.)

- Photovoltaic (solar) panels

- Water efficient appliances and landscape irrigation (front loading clothes washers and moisture sensing irrigation systems)

- Storm water collection (rain barrels or larger cisterns)

- Careful placement of shade trees

- Careful placement of windows to maximize interior light and ventilation

The village will utilize these definitions and components as a basis for its planning and design and incorporate as many green building techniques and practices as possible.

3.1.3 Village Housing & Society

Housing is a mix of single-family and multi-family dwellings. The homes are grouped into four clusters, all surrounding a lake and open space. Each cluster has its own community garden and community kitchen. The housing units are built using a variety of green design and building techniques.

Multi-family homes at the village are small in design, housing no more than eight families. All homes have small footprints with an emphasis on low maintenance and livability instead of quantity of space. The homes utilize alternative and/or renewable energy sources such as solar energy. The homes are also built with a variety of materials. Some of

the dwellings are more traditional structures, such as wood, brick and stone. The more traditional buildings are for the eldest residents, which require higher levels of care and need medical equipment in their homes. Other homes are more rugged, such as cabins and adobe-type structures, and some are built with alternative building materials such as mud and thatch. The extremely alternative structures are mainly used for tourists, certain village facilities and educational functions. However, younger residents, who are willing and able, and staff live in these dwellings as well.

SERV encourages and promotes a society that is diverse and tolerant. All ethnic, religious and age groups are welcome. The village attempts to achieve this through its marketing efforts, its mission and in the people who work at the village and represent the village. (Though the village *is a place* for the elderly, that *makes it a place* for everyone). Again, one of the goals of SERV is to connect the younger generations with our elders and attempt to change society's paradigms. By embracing all ages and family structures, SERV becomes a vital community for our elders, as well as for all who live there. The younger residents not only live the lives they want but help our elders live the lives they want and deserve.

3.1.4 Healthcare Services

Healthcare is provided to the residents by the village and from outside sources. The village recruits doctors, nurses and dentists to live and work at the village. If a licensed healthcare provider moves into the village and opens a practice, they are exempt from monthly rent

or fees and do not need to bank hours, as long as they are providing care to the residents. There is a medical center in the village that is its own separate entity and is also a non-profit organization. SERV also recruits doctors, nurses, dentists and physical therapists from local communities to volunteer their services.

3.1.5 Facilities & Amenities

Besides housing for the residents, staff and visitors, other facilities are designed and built with the same green-design focus, including a visitor's center with administrative offices, a lodge, entertainment facilities and places for worship. A complete list of facilities and amenities is listed below. These will be built in phases determined by monetary feasibility and priority of need. The homes and facilities are designed and placed so that they are logistically suited to the small-community feel of the village. It's important that they are all placed in close proximity so as to promote intimacy that encourages social interaction, and so that any destination can be accessed by foot, bikes or small electric vehicles.

Proposed Facilities

- village lodge (central gathering place for residents and visitors for dining, entertainment, special events, etc.)
- visitor's center with administrative offices
- administrator's residence with village office space
- medical center

- library (computer lab and internet cafe)

- cultural/hobby center (music hall, art studio, arts and crafts, etc.)

- health and fitness center (gym, spa, pool, beauty salon, etc.)

- sports center (basketball court, tennis courts, open space for outdoor activities such as shuffle board, bacci ball, etc.)

- amphitheater

- restaurant and cafe

- pet care center

- child and elder day-care center

- church (and other places of worship)

- post office

- community kitchen

Other elements of the village include trails for hiking and horseback riding(stables), gardens, parks, agricultural areas, wind mills, water collection tanks, retention ponds and a roadway and pedestrian system (see Appendix Figure 1).

3.1.6 Organizational Structure

The eco-retirement village is a non-profit organization designed to serve the public. As described in an earlier section, there is no personal ownership of homes, facilities or businesses within the village. SERV promotes a mission of shared ownership and shared living among the people and the environment. The village does put forth a series of rules,

regulations and governance. The rules and regulations are straightforward and deal with fundamental issues, such as forbidding criminal activity. There is a self-governing system at SERV. There is a village association comprised of village residents, family members of residents, and staff. An association president, vice president, treasurer and secretary are elected for limited terms. This body deals with community issues and desires and reports to the village governing body. SERV also has a governing body comprised of an executive team in charge of making all the critical and vital decisions for the village.

3.2 Sustainable Infrastructure

The village utilizes alternative and renewable energy practices wherever possible, and where there is no threat to the safety of the residents (some residents would require electric medical equipment in their homes, for example). Electricity is provided to the village by the local municipality to serve (or supplement) certain facilities and for emergency and back-up purposes. Emergency back-up generators are also at the ready. Telephone and cable service is provided to the village as well.

This section outlines the ecological and environmental design practices used for the village's infrastructure. The village's designs for energy, transportation, and agriculture are all discussed. Finally, there is an information technology system at the village, which is also discussed in this chapter.

3.2.1 Energy Design

Alternative and renewable energy sources used at SERV include solar energy, micro-hydro electric energy, wind power, and biomass. Solar energy is the conversion of solar radiation into energy. The village utilizes passive solar energy, solar water heating and photovoltaic (solar electric) energy. Passive solar energy is simply using the sun as efficiently as possible by location and orientation of buildings. Solar water heating is achieved by installing solar panels on the roofs to absorb solar radiation. Photovoltaic cells are used to convert the solar radiation into electricity. Micro-hydro uses the energy produced by flowing water to make electricity. Small turbines and generators produce energy from water sources as small as a stream. Wind farms at the village harnesses wind to generate electricity by using turbine technology. By burning a variety of grasses, wood, debris and waste materials, biomass uses the energy produced by the heat to generate power to heat buildings. The village grows some of the grasses, but also serves as a collection point for neighboring communities and cities to bring debris and waste materials for burning.

SERV has an energy plan, which outlines the percent of energy produced currently and its growth expectancy. There is a one-year, five-year and ten-year energy plan. Initially the village produces less than half of its own energy. The energy plan calls for continuous increases in sufficiency over the life of the project. It outlines the expected increase in percentage of energy produced per year, so that there is continuous and exponential

achievement. SERV strives to achieve higher percentages in a shorter time frame than the plan puts forth, as resources and technology permit.

3.2.2 Transportation Design

The road system maintains pervious surfaces as much as possible. The roads, however, are designed to accommodate emergency response vehicles only. No other vehicles are allowed inside the village, except for emergency purposes. A main parking area is located at the entrance to the village, and transportation is provided into the village by an electric shuttle bus or horse-drawn vehicles. Once inside the village, visitors and residents utilize electric vehicles or bicycles. The village provides some electric scooters and small electric cars for residents who cannot afford their own and accommodations are made for visitors. Tourists rent the electric vehicles, bicycles or horses.

The road design is wide enough to accommodate a bicycle path. The bicycle path is designated by a painted line to show the path boundary and bike-use indicator signs painted inside the bike path. An eight-foot-wide pedestrian path is located on both sides of the roadway. The pedestrian path is also constructed out of pervious materials such as wood chips or pebbles. The pedestrian path follows the roadway but also veers off to other destinations within the village, such as the amphitheater, gardens, lake and trail system.

3.3 Agricultural Design

Agriculture at the village uses a permaculture design system. This is a system that encompasses both permanent agriculture and permanent culture (Wasser, 1994). Permaculture is based on care for the earth, care for the people and attention to reinvesting all surplus to support the first two (Wasser, 1994). Permaculture practices utilize every part of anything that is grown with strict care for the environment. To achieve this, the village's agriculture design incorporates organic farming practices and hydroponic gardening.

Organic gardening applies to the production of produce, grains, meat, dairy, eggs, flowers and processed food products. Organic farming management relies on developing biological diversity in the field to disrupt pest organism and the purposeful maintenance and replenishment of the soil. Synthetic pesticide, fertilizers or striping the soil are not allowed in organic farming (Organic Farming Research Foundation, 2003).

Hydroponics is the practice of growing plants without soil. Plants grow in water instead. Light, temperature, water, CO_2, oxygen, pH and nutrients can all be controlled by the grower. This offers the advantage of growing throughout the year, without worry of climate constraints. It is also a very controlled growing environment that can be economical, productive and environmentally sound.

The organic farming, hydropoincs and greenhouses produce vegetables, herbs, fruits, flowers and grasses (grasses are for the biomass energy system). Food items are produced for village consumption and resale to the public. These items include vegetables, jams, baked goods and more. Cows, goats and chickens live at the village and provide milk, cheese, butter and eggs for consumption and resale as well. These items are sold through community fund-raising programs, at the village store, and during the special events hosted by the village. There is also a trout farm at the village to provide food and sport for residents and tourists.

SERV produces just less than half of its food, both for consumption and resale, and purchases the rest. SERV strives to purchase its food from local farmers and vendors and from those who practice similar agricultural practices as the village.

3.4 Information Technology

The village utilizes state-of-the-art technology. Broadband connects the village to each other, through an intranet, and to the world via the internet. Broadband provides the village the capability to have real-time health monitoring and cameras. The cameras are located throughout the village in public spaces and in residents' homes if they request it. Cameras are fed back to a computer, which is constantly monitored. This is for safety reasons, so if someone falls or has an emergency the response time is as quick as possible.

4.0 Collaboration with Other Communities

One critical goal of SERV is to involve outside communities in the social and educational aspects of the village. Knowledge is power, and we must seek to obtain both if we are going to be a cohesive, loving and supportive society of people – not young or old, just people. It's imperative that the village serves as a forum for interaction, understanding and empathy between mainstream society and our elders. Our elders have much to give – much wisdom and love to share. By bringing children, tourists and organizations into the village for educational and special events, the village sets the stage for bridging the gap that exists and strives to create sharing and love in the place of fear and isolation. Our elders are a tremendous asset to our society and, particularly, our children. As our society becomes inundated with the elder population, we will begin to understand that they are not a liability, but serve as our guides to a place in which all of us will inevitably find ourselves and our loved ones.

4.1 Education & Volunteer Programs

The Willie J. Spencer Eco-Retirement Village has a strong dedication to education. This is accomplished through two areas of focus: hosting special events and working with the school systems. The special events provide a forum to bring people into the village to learn about certain topics in a fun and interactive exchange. By working with the schools, kindergarten through college, the goal is to begin to bridge a gap between youth and elders and provide the chance for school children to work and learn in an environment of caring and giving.

SERV hosts a variety of educational events. Seasonal events occur in the winter, spring, summer and fall, and have a seasonal focus. For example, the fall event may be on organic farming of pumpkins. Visitors learn the history of pumpkins in our society, its health benefits and various foods produced from the pumpkin. The event has many other highlights such as music, arts and crafts, food and other festivities. All of the special events provide the opportunity for the village to recruit volunteers, raise awareness on various topics and raise money for the operation of the village. Other special event, such as arts and crafts and concerts, are held between the four main events and are also based on education. The tourism element of the village is based on environmental living and learning and is discussed in a later chapter.

The second area of focus on education is a collaboration with the school systems. For children in kindergarten through high school, the village offers field trips and a volunteer program. The field trips bring children into the village for a day of work, play and learning. The focus is on the concept of the eco-village and ecology. It also enables the young and elder to interact. The volunteer program encourages the children to participate in the "Adopt an Elder" campaign. In this program, children select a particular elder resident to "adopt." By adopting the elder, the child makes regular visits to the village to care for their elder. Care can be in the form of gifts, companionship and working at the village on the elder's behalf (one major component of SERV is the concept of "banking hours," which is explained in detail in a later chapter).

For college students SERV has a class-credit program. Students in particular fields of study earn college credit hours by working at the village. Similarly, they can also work on behalf of an elder to "bank hours" for an elder resident of the village (again, this concept is explained in a later chapter). Along with college students in the United States, SERV has a work/study abroad program for college students and youth in other countries. College students can travel to America to live and work at the village for college credit, to earn hours for a resident elder (as mentioned earlier) or just for the experience and opportunity this program provides.

Another volunteer program is "Serve at SERV." This program recruits people to come work at the village. There are endless possibilities of jobs that can be done. For example, volunteers can work in the kitchen, on the farm or in the day-care. They can teach fitness classes, art classes or music. This program serves many functions. First, it enables SERV to keep operating costs as low as possible by using volunteers to help with the function and operation of the village. Second, it enables volunteers to work to earn hours for elders. Volunteers can choose a particular village elder to bank hours for, or there is a "most critical" list that the village maintains. This is a waiting list of sorts for those elders most impoverished or those who need more care and medical attention than others. Hours worked by or for the elder residents go towards a "bank" of hours each resident accumulates to help pay for them to live at the village (see section 6.3.1). Third, volunteers can earn these "banked" hours for themselves, if they are intending to move into the village in the future. If they don't, the hours are either given to an elder of their

choice, which they select at the beginning when they sign up for the volunteer program, or the hours are given to those elders on the "most critical" list. Volunteering is a vital theme, spirit and focus at SERV. It is imperative to the basic concept of the village and to its functionality and growth. Therefore, recruiting volunteers and marketing the village are key components and ongoing, relentless endeavors at the village.

4.2 Marketing & Outreach

The marketing strategy for SERV is comprised of three main goals of equal importance. First, it is critical to convey the concept of the eco-village and the concept of banking hours. Second, tourism and special events are promoted, since they are a source of income and serve as a tool for achieving the other goals encompassed in the overall marketing strategy. Third, strong marketing and outreach efforts are dedicated to recruiting volunteers, since they are so imperative to the existence of the village. Initially, marketing is done "in-house" and on a small scale. As resources and money allow, SERV can collaborate with outside firms and develop a larger-scale marketing scheme.

Conveying the concept of the eco-village and banking hours is vital since it is an uncommon way of living with the potential for great misinterpretation. To get this message out to the public, the marketing strategy calls for print and radio ads and word-of mouth advertising. Since the concept can take a significant amount of explaining, workshops and seminars are critical. It is also important to have a strong collaboration with the community at large. This will provide a forum for questions and answers with a

knowledgeable village representative. To promote tourism and special events, many of the same methods will be used. However, workshops and seminars and certain community collaboration efforts would not be utilized. The marketing strategy, across the board, is to achieve a balance between cost, the audience needed to be reached, and the best vehicle to carry the intended message. The awareness campaign to recruit volunteers focuses heavily on collaboration with the community. The basic thought here is, "if you want volunteers, go to where the volunteers are." The SERV website markets and promotes all aspects of the village and is the first marketing tool to be created. A table charts out the goals, objectives and different methods used to accomplish the marketing strategy (see Appendix Table 2).

5.0 Economy

There are three small industries that make up SERV's economy. The village produces a variety of goods that are sold to contribute to the village's operating capital. Tourism plays a major role in SERV's economy and its ability to make money. Finally, a day-care center is located at the village for both children and elders. This not only brings in money, but provides yet another connection between the village and the community.

5.1 The Village Store

With the organic farm, greenhouses and gardens, there is enough production for both village consumption and sale. A village store is located on the premises and sells a variety of food products, such as vegetables, jams, pies, breads and cheeses. Demonstrations are held on food production techniques at the store and at special events (making cheese and butter for example). A variety of arts and crafts are produced at the village as well and are sold in the village store. Local communities also donate items for sale.

5.2 Tourism

Tourism at the village consists of day trips and overnight stays. Special rustic cabins are located in the village for tourists to rent. The tourists come to work and learn about the village and ecology. They also interact with the residents. Visitors can work in the gardens, learn about hydro-electric energy, do arts and crafts, hike, horseback ride, use the spa, sports complex and other facilities. Events are hosted for tourists as well, such as cooking classes, tree and wildflower identification hikes, arts and crafts and many more.

Visitors pay extra fees for things such as horseback riding, fishing the trout farm, dining or spa services. There is a restaurant and small café at the village where residents and visitors can pay to dine. SERV heavily advertises the restaurant, along with all tourist activities, to outside communities.

5.3 Day-Care Center

The day-care center at the village is for both children and elders. Elders who live at home, or other facilities, can come spend the day at SERV. Children services range from full day-care for toddlers to after-school programs for older children. Elder residents at SERV help with the day-care by playing with children and offering companionship to other elders. This program also functions as respite care for elders who live with family members. When family members need to be out of town, or need assistance, their elder family member can stay as long as needed. The charges for day-care, elder care and respite care vary, but all add to the economy of the village.

6.0 Financial Sustainability

This section on financial sustainability focuses on three aspects of the financial life of SERV. The first is SERV's start-up capital and how that is approached. Operating capital is the second aspect and focuses on what the ongoing costs of the village are and how those are maintained. The last aspect of financial sustainability at the village is that of human capital, which is one of the cornerstones of the project.

6.1 Start-Up Capital

In financing the village, appropriations from local government, contributions from philanthropic organizations, voluntary agencies, and private foundations are important sources of funds. (Ogle, 1966). Also, individual citizens, as well as local industries and businesses are often willing to underwrite certain costs (Ogle, 1966). Grants and loans are utilized as well. There are many grants available for environmental projects and those pertaining to the elderly. Also, there are many faith-based groups who fund such projects. Donations and fund-raising activities will be utilized as well. Loans are paid back with money earned from residential rents and monies accumulated from the economy of the village, as discussed in chapter four. Some of the many grants available for environmental community projects are listed below:

- Sonoran Institute
- North America Commission for Environmental Cooperation
- Lindbergh Foundation

- Energy Foundation

- Environmental Protection Grants

- The U.S. Department of Energy

- Housing and Urban Development

- Beldon Fund

- Rockefeller Brothers Fund

- Surdna Foundation

- Jesse Smith Noyes Foundation

- Greenville Foundation

- MacArthur Foundation

6.2 Operating Capital

Operating capital is needed to pay for ongoing costs at the village. Supplemental food items, supplemental energy, staff pay, office and home supplies and maintenance are just some of the many operational costs the village will incur. These costs are offset by the human capital, the economies of the village, yearly grants and donations. The residents also pay a monthly rent to live at the village. Each resident goes through a needs assessment before coming to live at SERV. The village promotes and recruits village members from all income levels. Though one of SERV's main purposes is to provide housing for low-income and impoverished families, it is also important to appeal to higher-income groups to offset the costs. What you pay each month is based on your current and future assets. If you have more you pay more, and this is reevaluated as financial situations

change over time. It is a cyclical approach to financing a project. For example, a high-income resident moves in and pays more each month than a low-income resident. As time goes on, the high-income resident's assets dwindle and now that resident pays less and less. In the mean time, new high-income residents have moved in and are now paying higher monthly rents. There are also certain fees for amenities at the village for residents who can afford them, such as special trips, classes and spa treatments.

6.3 Human Capital

The village relies extensively on human capital. Human capital comes in the form of volunteers (discussed earlier), the devoted staff of the village and the residents. Staff members are carefully selected and must believe in the concepts of the village, such as environmental living and strong devotion to the elders. The staff can reside at the village or commute from home. Residents and non-residents bank hours by working at the village. These banked hours go towards paying for their shelter and care.

6.3.1 Banking Hours at SERV

The concept of banking hours is the epicenter of SERV. This is the idea that the project is based upon. It's basically "earning your keep." For every hour worked at the village, time is "banked" into a personal account that accumulates to provide a resident with shelter, care and all the amenities that come with SERV. However, as mentioned above, this is supplemented with a monthly rent/fee as dictated by one's personal financial situation.

SERV does not provide a homeless shelter, so everyone who wishes to live at SERV must pay some (reasonable) amount of monthly rent/fees.

Anyone can bank hours for anyone elset– residents, non-residents or staff. For instance, a non-resident could accumulate hours for their mother, who is currently living at home with the intention of moving into the village at a later date. The main purpose of volunteers is to work at SERV to accumulate hours for residents. The residents themselves, of course, contribute any way they can. The residents that are less able are on a "critical list," which the village uses to make sure volunteers work on their behalf. In addition, residents have family members who work on their behalf.

Different jobs at the village are weighted differently in accumulating the banked hours. For example, someone who is only capable of spending two hours a day with the children at the day-care center would not accumulate the same banked hours as someone providing nursing care. Residents do not have to do the same job; a resident could work in the day-care one day, the garden the next and cook in the kitchen the next. Jobs at the village are put into categories based on expertise and skill levels. These different categories are given different amounts of banked hours assigned to them. Similar to the "real world," different jobs earn different pay. The relative value of work provided is determined by the village governing body. The varying hours earned for varying tasks performed encourages residents to live and work to the best of their ability and skill, which is in the best interest of the entire village as well. To determine how the worked hours translate into banked

hours, a formula is determined so that one hour of work is equal to the net cost of having that person live at the village (i.e. shelter, care and amenities).

Banked hours are assigned varying, nominal cash values. They are also assigned transfer values. Therefore, if a resident decides to leave or passes away, the hours can be cashed out or donated back to the village. The transfer value is higher than the cash value to encourage donating hours back to the village.

Prospective residents go through a series of assessments before becoming a member of the village. A doctor and social worker determine if they are proper candidates to live and work at the village. The village administrator assesses their financial status and does a background check on the individual. Once they are determined a village candidate, a contract is written for that individual. The contract outlines what tasks they are able to perform and how many hours per week are to be worked. This is also determined through the assessment with the staff doctor and a social worker. The contract also outlines the monthly rent the resident is able to pay. All residents and their contracts are reviewed periodically for changes or renegotiation, pending new assessments. If a resident decides to move outside the village or passes away, their hours may be transferred to either a family member living in the village, or to a resident on the "critical list." The contract also outlines rules and regulations that residents must abide by. These include, among others, honoring the terms of the contract and not participating in criminal activity.

7.0 Scenarios

7.1 Mother & Daughter

A 60-year-old woman has an 85-year-old mother. Her mother lives alone and is finding it more and more difficult to handle day-to-day living by herself. Even with the almost constant help from her daughter, grandchildren, church and neighbors, it is becoming dangerous for her to be alone and do simple tasks. Remembering her medicine, getting dressed and undressed, cooking meals, getting the mail from the box and maintaining hygiene are all tasks that are becoming increasingly difficult.

The daughter stays awake nights and wonders what to do. Her mother has almost no money, and she certainly doesn't have any either. She knows her mother will inevitably end up in a nursing home. The daughter has a friend whose father went into a nursing home, and the stories were horrific! She can't bare the thought of putting her mother in a "home." She had seen some really nice assisted living centers, but there's no way they can afford it! It seems so hopeless, and she feels she has nowhere to turn. Should she move in with her mother? But then, how will she care for her mother as time goes by and the situation worsens?

The daughter hears about the Willie J. Spencer Eco-Retirement Village. It's a place where you can live and "earn your keep." After a financial and needs assessment, it's determined what portion you pay and what portion you give by working for the operation of the village. The daughter knew she was in great health and could do anything from cooking and cleaning to gardening. She was also a nurse, which would enable her to provide care for residents. Her mother was a retired teacher. She taught art and could teach art again, since they brought in local school children for various events. She could also sell her paintings in the annual arts and crafts fair the village hosts or in the arts and crafts shop at the village. The village has many cottage industries and is set up to accommodate such endeavors. All this adds to their "bank" of hours, which goes towards their "rent" to live at the village. The mother and daughter move into the village. They choose a detached

37

unit to share, since the daughter knows she can take care of her mother for a while, especially with the support network at the village. She also knows that when her mother gets to a more progressed state of need that they can move to an attached unit, which provides more supervision and companionship.

The two earn their keep by nursing, cooking, gardening, teaching art and reading to children that come to visit. They spend their leisure time gardening, teaching art, reading to the children that come to visit and *spending time* with their new family of friends and workers at the Willie J. Spencer Eco-Retirement Village.

7.2 A Family's Dilemma

William and Sarah were three months shy of celebrating their 50th wedding anniversary when William passed away. Sarah is now living alone. She has been amazingly self-sufficient, but also has help from friends and family. Within a very short period of time, she begins to have memory problems, and it is dangerous for her to live alone. Sarah's family decides to move her closer to where they live, so they can take better care of her. She has a savings account the enables her to live in a very nice assisted living center. After a couple years, the money is dwindling. The family makes the difficult decision to sell the family home so that she can stay in the assisted living center. The home only generates enough money to keep her at the center for another year or so. Then, the family will have no choice but to put her in a nursing home. Medicare will pay for the nursing home once her assets are less than $2,000.

She doesn't really need nursing-home care. She just needs help with dressing, hygiene and other daily activities. The family is terrified that she will quickly deteriorate in a nursing home. They had a previous experience with a nursing home when Sarah had to spend some time at one for rehabilitation. She was not cared for properly; they didn't even bathe her. The family tries to figure an alternativee– there is no way any of them could bring her home to live with them, since she needs almost constant supervision.

Then, they hear about SERV. They take Sarah in for an entry assessment. Due to her age, ability and financial situation, she is eligible to be placed on the "most critical" list. Therefore, her monthly fees are small enough for the family to afford, and volunteers bank hours on her behalf. The family members also donate some time at the village in order to bank hours on her behalf. Sarah lives out her life in an environment that is warm and loving with a strong sense of community support. She is able to spend time with her family, youth visitors and other elders.

8.0 Addressing Potential Problems

Though the concepts and general ideas of SERV are sound, many elements have to come together for a project like this to become a reality. In a society that values ownership, material goods and personal space, it may be difficult for people to embrace the communal-style living this project suggests. Similarly, if people perceive this notion as *communal,* it could be damaging to the success of the project. Many in America have the idea that communal living is either communistic, or has to do with "hippies" and drug use. It would be a huge marketing undertaking to make sure public opinion and perceptions were reflective of what the village truly stands for and the lifestyle it encourages. Would enough people be open to the idea of an alternative living environment, and would there be enough residents and volunteers for the village to operate? Another concern is having the right social mix at the village. The village could not function if there are too many feeble elders and not enough young and able people to do the work the village would require to operate.

Some societal issues could pose problems for the project as well. Since some jobs at the village earn more banked hours than others, a class differentiation could occur causing disputes and possible segregation between groups. Some historical models share some of the basic concepts of SERV, such as monasteries, convents, utopian societies and communes. An in-depth study of these models would be extremely beneficial in determining dispute resolution, division of labor and segregation issues.

Another major concern is financing. Would there be enough grant and loan monies to build the village? Though the plan for the project is to grow incrementally, there would still be significant start-up costs. Similarly, there would be significant operating costs. Would the village generate enough money to sustain the village even if there were not enough people working and earning hours? And, would the work contributed by residents and volunteers be enough to offset the operating costs? There is also the issue of enforcement. Who makes sure everyone is doing what they are suppose to be doing, and how do they enforce that? It's also quite an undertaking to keep track of all the contracts and banked hours. A substantial amount of manpower would be needed to set up and maintain a *bank system* with accounts for each person. A solution, perhaps, could be a sophisticated software program that could be developed to keep track of all this.

A complete business plan would need to be developed to make these concepts concrete and viable. There is some difficulty in determining a formula that works, i.e. x number of hours worked= x number of hours banked. And, how many hours are assigned to the different job categories? A specific study would need to be performed of various reward models and theories to determine a banking-hour formula that would both motivate community participants to become involved and strive to bank hours, as well as to meet the long-term needs of the community's operations and sustainability.

9.0 Conclusion

Though several obstacles and concerns exist, most have good possibilities of being overcome. Many eco-villages exist, and many more are being created. People are more and more interested in conservation and environmental issues. Technology continues to advance for alternative and renewable energy. The U.S. Department of Energy devotes huge amounts of resources to this area. Even recently, the first hybrid car has hit the market. Many cities are utilizing biomass and natural gas vehicles, and recycling is as common as garbage collection.

As the population becomes older, society will have to make changes with regards to elder care. The current system simply won't work. Dr. Bill Thomas put it this way in his PBS interview:

> The baby boomer generation is coming. And the irresistible force of
> the baby boomers is about to collide with the unmovable object of
> the nursing home. And there's going to be explosive changes that
> come from the collision. The boomers will not leave one stone upon
> another. They will completely wipe out the nursing home we
> remember from the 20th century. What will be in its place? Well,
> best way I think of understanding this is, when the baby boomers
> were kids there were three flavors of ice cream, and that was it.
> And when they got done with ice cream, there's a thousand flavors
> of ice cream. Well, right now there's just a few flavors ofdong-term

care for the elderly. When they get done, there will a thousand flavors. And that's the way it should be.

As mind sets and movements change in society, so will the ideas of how we will live into our old age. Americans are renowned for pulling together in a crisis. They, all of a sudden, forget themselves and risk their own lives to give incredible things to their neighbors in need. The next natural disaster causing the American spirit to take over will be the elder-care crisis. Then, we will all learn to *SERV* our elders.

> *In beauty may I walk.*
> *All day long may I walk.*
> *Through the returning seasons may I walk.*
>
> *Beautifully will I possess again.*
> *Beautiful birds...*
> *Beautiful joyful birds...*
> *On the trail marked with pollen may I walk.*
>
> *With grasshoppers about my feet may I walk.*
> *With dew about my feet may I walk.*
>
> *With beauty before me, behind me, above me,*
> *all around me...may I walk.*
>
> *In old age wandering on a trail of beauty lively, may I walk.*
>
> *It is finished in beauty*
> *It is finished in beauty.*
>
> *– Navajo*

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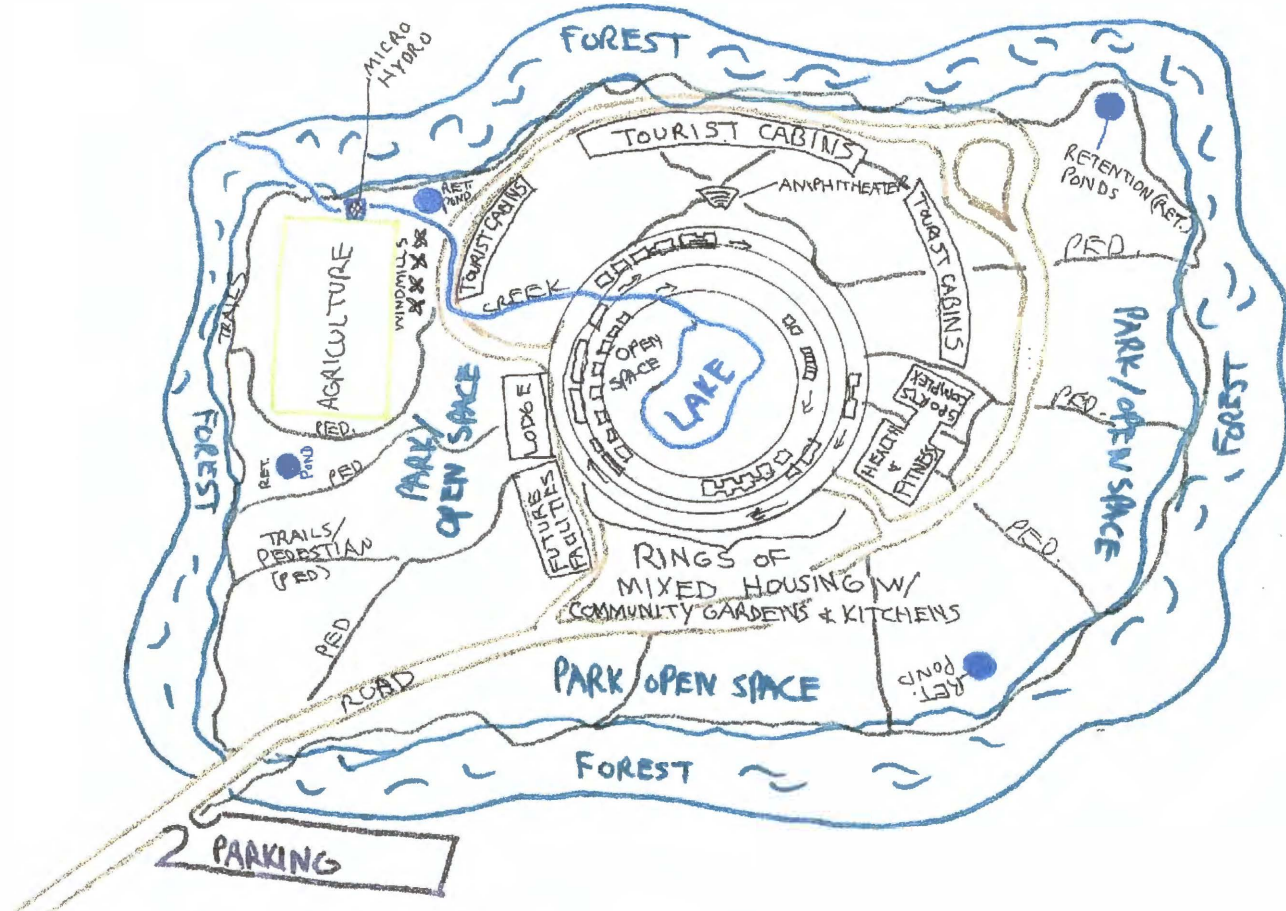
APPENDIX

Figure 1. Village Conceptual Design

*CONCEPTUAL – NOT TO SCALE
Note: Arrows inside housing rings indicate continuation of
housing units throughout the rings.

Table 1. *Innovations in Independent Living* **Awards**

Recipient	Program	Description
Jewish Family and Career Services of Atlanta	*Caregiver Cooperative*	This cooperative will utilize large-scale buying power to negotiate better rates for in-home services and products.
Wisconsin Geriatric Education Center at Marquette University in Milwaukee	*Caregiver Cards*	Cards, which contain personal care tips and advice for caregivers, will be given to caregivers in their native languages of Russian, Hmong and Spanish.
Radio Station WMKV 89.3 of Cincinnati, OH.	*Family Caregiver Hour*	WMKV is a non-profit, award-winning radio station for elders. They will sponsor a call-in show to provide caregivers with a support network and professional advice.
Jewish Family Service of Los Angeles	*Dementia Proof Home Assessment Tool*	This tool will be created for caregivers to dementia-proof their homes. The program will install safety devices such as special locks on doors and safety rails in bath tubs.
The Pennsylvania Initiative on Assistive Technology at Temple University, Philadelphia	*Assistive Technology Program for Caregivers*	This program aims to acquaint caregivers and recipients with assistive technology. They help recipients by introducing them to products, letting them test the products and help them learn to use the products.

Source: Senior World Online obtained via http://www.seniorworld.com

Table 2. Marketing Strategy

Goal	Objective	Methods						
		Website	Print Ads	Radio	Tours of SERV	Word-of-Mouth Advertising	Attend Workshops, Seminars & Conferences	Conduct Workshops & Seminars
Convey Concepts	Recruit New Residents	✓	✓	✓	✓	✓	✓	✓
Tourism	Heighten Attendance	✓	✓	✓		✓		
Awareness Campaign	Recruit Volunteers	✓	✓		✓		✓	✓

Goal	Objective	COLLABORATION WITH COMMUNITY							
		Chamber of Commerce	Volunteer Organizations	Non-Profit Organizations	Hospitals & Nursing Homes	Community Leaders & Businesses	Schools	Other Eco-villages	Other Retirement Communities
Convey Concepts	Recruit New Residents	✓	✓	✓	✓				✓
Tourism	Heighten Attendance	✓	✓			✓	✓	✓	
Awareness Campaign	Recruit Volunteers	✓	✓	✓	✓	✓	✓	✓	✓

Vita

Laura Leah Ogle-Graham was born in Atlanta, Georgia on November, 18th 1965. She attended elementary school in Knoxville, Tennessee, where she lived until age 15. She attended high school in Hickory, North Carolina, and subsequently attended two years of college at Appalachian State University in Boone, North Carolina. She returned to Knoxville, Tennessee in 1986 where she attended the University of Tennessee, Knoxville. In 1989 she received her Bachelor of Science with honors in Communications with a major in Advertising. She worked in the advertising/marketing field for 11 years in Florida, South Carolina and North Carolina, before returning to Knoxville to pursue her graduate studies. She obtained her Master of Science in Urban and Regional Planning in December 2003. She has several years experience in urban and regional planning, and is currently pursuing a career with a concentration in environmental planning and design.