



Constructing the Intangible

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Self-Directed Seminar

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Table of Contents

01: Framing	
<i>The Significance of Hope</i>	8
02: Supporting	
<i>Of Spiritual Value</i>	22
03: Forming	
<i>The Shaping of Sentiment</i>	32
04: Locating	
<i>A Community Disregarded</i>	62
05: Referencing	
<i>Specified Sources</i>	78

“An environment of ugliness, dilapidation, dirtiness, over-built space, and a lack of natural surroundings confirms the negative self-appraisal a person may have developed through other contacts with society. Self-esteem is the keystone to emotional well-being; a poor self appraisal, among other factors, determines how one treats his surroundings and how destructive he will be toward himself and others.”¹

A Spiritual Need

Over time, Architecture has become a commodity. First the privilege of kings, design then became a symbol of the elite, and then of the bourgeoisie that emerged in the eighteenth century, and is now a profession which seeks to address the needs of even the common man. With such expansion comes a new demand for efficiency, and so Architecture has been informed and reformed by the needs of a people in an equal opportunity society, constantly striving to make good design more economically practical. New demands arise from new conditions of economics, new principles of construction, and new materials and are addressed with new ideas for designing.² This progress of recent years is admirable, but in the aspiration to provide adequate shelter for a broad set of people, designers must not fail to address the most essential spiritual needs of that same population.



01: Framing

The Significance of Hope

Tribulation and adversity are inevitably integrated into every individual's existence. A single mother struggling to make a mortgage payment, a wealthy gentleman battling a rare form of cancer, a foreign diplomat attempting to negotiate a controversial treaty, and a small child trying to memorize the alphabet are all singularly aware of the fact that one cannot live without facing obstacles. Miguel Cervantes coined an infamous phrase in Don Quixote when he wrote, "where there is life, there is hope", implying that as long as one is living, one can keep hoping for a change of circumstances. It may be argued however, that the opposite is true; it is not our continued survival that lends us the boldness to hope. Rather, it is our hope that gives us cause to live.



Hope has been a universal concept for as long as man's existence has been recorded. In Greek mythology, Hope is personified in the goddess Elpis, depicted in all historic paintings as a young woman holding a flower in bloom.

In the legends of the Greek, Pandora was the first woman to be placed on earth. Hephaestus, god of craftsmanship, created her from water and soil. Aphrodite gave her beauty, Apollo gave her music, Hermes gave her persuasion, and so forth, until she was endowed with many talents gifted to her by all the gods, and was hence named Pandora, meaning "all gifted". Zeus ordered that Pandora be created after Prometheus stole fire from heaven to give to mankind. Pandora would be the price that mortals paid for their theft.

Pandora was put on earth with a jar that she had been instructed not to open. Impelled by her natural curiosity, she took the lid from the jar with her hands and all evil escaped from its depths and scattered

over the earth. Pandora hastened to close the jar, but only one thing remained, that which Zeus had held captive there, and which lay at the bottom of the earthen vessel, and that was Hope.³

Countless plagues and evils wander among men because of the curiosity of Pandora, and diseases come upon men by day and by night. Yet while Zeus allowed evil to cloak the world of men, in his wisdom he ensured that Elpis, or hope, remain among the people.

Elpis is one of the evils, often a promise of things that will never come to pass, yet she alone remains with mankind, because while she does not always fulfill her promises, they are what lend man the desire to continue to live in the face of all the other evils.⁴

"Hope is both the earliest and most indispensable virtue inherent in the state of being alive. If life is to be sustained hope must remain, even where confidence is wounded, and trust impaired."

-Erik H. Erikson

"³But we glory now in tribulations, knowing that tribulations worketh patience;

⁴And patience, experience; and experience, hope:

⁵And hope does not disappoint."

-Romans 5:3-5

The ancient ideas of hope have not been much altered by the passing of time. Hope is yet considered in some aspects to be detrimental. Sociologists suggest that hope can be more devastating than hopelessness in situations that cannot be altered for the better.⁵ However, even a prisoner sentenced to life without parole who has been forced to adjust to the idea of never moving beyond his given set of circumstances will begin to put his hope in his own strength, in the belief in a higher power, or in a life after death, because to live without the ability to hope in anything is to deprive oneself of spirit and strength. Martin Luther King Jr., in one of his most motivational speeches, claimed that, "If you lose hope, somehow you lose the vitality that keeps life moving, you lose that courage to be, that quality that helps you go on in spite of it all."⁶ In order to sustain the will to live, one must maintain the ability to hope.

Hope is essential to individuals from every background, culture, and walk of life. It is a universal

concept that not only spans geographical distances, but economic, social, and intellectual divisions as well.⁷ Hope is necessary to inspire every action that attempts to meet a goal, every faction that intends to make a difference, every livelihood that aspires to improve assets, and every individual that strives to better his circumstance.

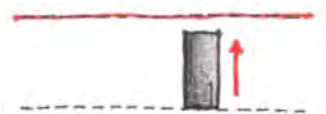
Hope is defined as the belief that what is wanted can be had or the desire for a particular thing coupled with the expectation that the desire will be fulfilled.⁵ Without the ability to trust that events will turn out positively and without the ability to look to the future with reasonable confidence, man loses the motivation to pursue his goals.

Although hope is necessary to every person, it is most essential to foster hope in those who feel their situation is hopeless. In almost every country around the world, there is a distinction between the rich and the poor, the privileged and the underprivileged. Towns are becoming increasingly

more segregated, education opportunities more unequal.⁷ Although attempts to alleviate the substantial differences between the lifestyles of the wealthy and the poor have been made, including class-integrated neighborhoods and community rehabilitation programs, the ability to alter an economic reality lies mostly with the person who exists in that reality. To inspire change, to motivate those who are underprivileged and to give purpose to those who have not found an essential place in society, hope must be cultivated in that individual to inspire a longing for something greater than his current circumstances and the motivation to attempt to achieve it for himself. While efforts of integration, awareness, and empathy are necessary to blur the economic boundaries evident in most places, hope and ambition are the most direct and reliable means of change.

Hope is processed in many different ways. In order to experience hope, an individual must be able to reasonably expect a change in his circumstances. The belief that a situation can be altered may be achieved in a number of ways.

Hope can be brought about through a sense of pride. People who can maintain a sense of pride are able to believe that they are worthy or deserving of improved conditions.

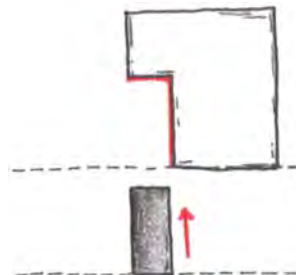


The individual can be motivated and expect a change of circumstance when he believes he deserves the change.

Hope through Pride

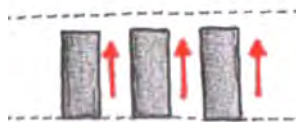
Hope can be gained through a feeling of purpose. Hopelessness often breeds feelings of uselessness and inadequacy⁸. Someone who knows that they are needed or wanted or that their unique skills are necessary to a group will continue to strive to make himself better. Hope can also be brought about through a sense of equality. A person who feels they

are disadvantaged from the beginning is more likely to lose hope than a person who feels he is given equal opportunity and put on even footing with his neighbor. If there is equality in treatment and circumstances, then the only thing preventing an individual from achieving their goal is the individual himself⁸.



The individual can be motivated and expect a change of circumstance when he believes others depend on his bringing about the change.

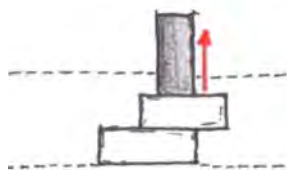
Hope through Purpose



The individual can be motivated and expect a change of circumstance when he believes the quality of his effort is the only disabling factor.

Hope through Equality

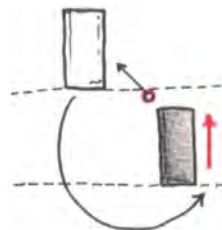
Long term goals, or dreams, generate hope, because if an individual is working toward a personal dream, or planning to have a certain set of affairs brought about, then that person can have hope for a better future. People can be given hope through compassion. A person who feels they have no means or capability of bettering their situation for themselves can gain encouragement by the willingness of someone else to step in and help.



Hope through Compassion

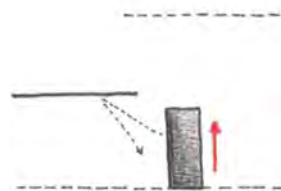
Hope can be brought about through observation. People who can see the lives of others who have come from a similar background and are prospering are more likely to hope for a better future for themselves.

The individual can be motivated and expect a change of circumstance when he believes others are willing to assist him when he lacks the resources to bring about the change himself.



Hope through Observation

The individual can be motivated and expect a change of circumstance when he is able to observe others like himself who have altered their situation in the same manner he wishes to.



Hope through Belief in the Divine

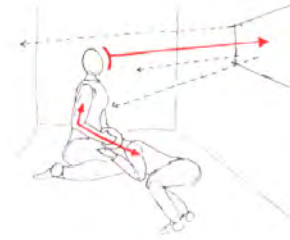
The individual can be motivated and endure circumstances even when there is no possibility of change if he is able to believe in a higher power capable of intervention or an after life offering better circumstances.

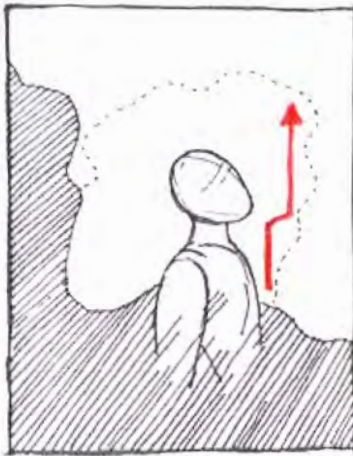
Hope can be brought about through a belief in the divine. A person who has nothing else to put their trust in can hope in a higher power. The idea of something larger and better than oneself gives people the ability to trust that even the most dire of circumstances can change, and that, if the circumstances they are facing in this life cannot be altered, then there is a life to come in which they will be given a new set of opportunities⁸.

Many of the emotions or experiences that can inspire hope in a person are as personal as the instance of hope itself. However, in recognizing the means by which hope is processed, one can endeavor to create circumstances or places that generate or cater to these experiences. Many different things can evoke emotions: a work of art, another individual, or an engaging location. Hope can be generated by other emotions, by promises, by changing circumstances, or by the physical manifestation of our perception of the emotion itself.

In many works of art, hope is depicted using light and color. Light is always perceived as positive and hopeful. Natural light, in particular, gives one a sense of something greater than oneself. Historically, temples and churches often used clerestory windows to filter natural light into a space without allowing the occupant to perceive the source, so that the light had a mysterious and ethereal quality, but lent a sanguine feeling to

Hope is often visually associated with light, particularly natural light, which is associated with peace, freedom, and a connection to the outdoors. In the painting below, two individuals are depicted in a cell, with the most prominent element used to communicate the concept of hope being the single window and the light shining on the upright individual. There is also significance in the connection of the two figures and the portrayal of companionship.





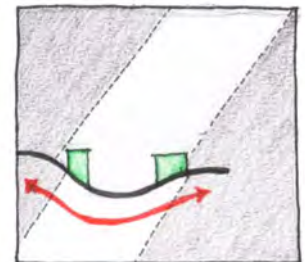
The painting to the right depicts feeling of hope by use of color, the illusion of movement and change, and by the figure's uplifted face. The figure also appears to be standing in darkness lifting it's face to the light and open space above. The concept of freedom is also associated closely with hope.

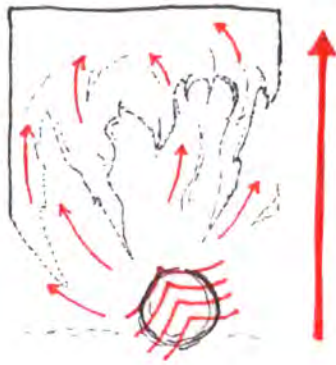




those who experienced it⁹. Likewise, colors have always been associated with feelings. Particularly in paintings and artistic representation of situations, various colors are used to evoke certain emotions in the viewers. Bright colors stir feelings of happiness and excitement, blues and grays indicate melancholy or contemplation, and warm colors produce feelings of contentment and safety. From feelings of safety, happiness and excitement people can develop feelings of hope and expectation. In most artistic representation, however, feelings of hope are evoked by soft, light pastels that do not overwhelm the viewer but speak of something gentle and positive.

The above painting depicts the tragic attack on a local population in Southern Thailand in a way that speaks of hope for the future: depicting the bullet holes covered in light and offset by elements of nature which symbolize peace. In addition, the most noticeable shape in the painting is one of a gentle and peaceful curve. Hope can often be found in a belief in something larger than oneself and can be realized through a connection with the natural environment, particularly living species.



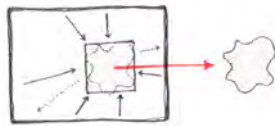


The painting to the right is a representation of the artist's interpretation of the concept of hope. While hope is an emotion which can be visually provoked in a number of ways, this painting relays the idea of hope through movement, color, and an upward focus.



"The capacity for hope is the most significant fact of life. It provides human beings with a sense of destination and the energy to get started."

-Norman Cousins

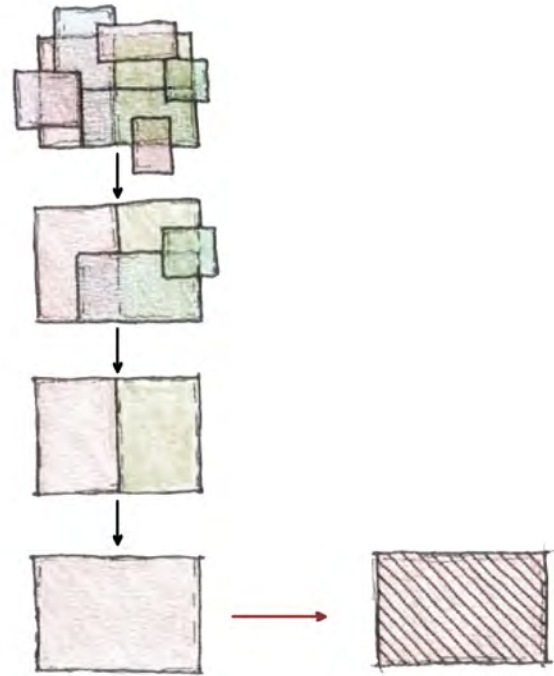


Architecture has the ability to shape the way people think and live. The space an individual occupies affects his attitude. The ability to hope affects a person's way of making decisions as well. Therefore, the building has an affect on its occupants not only while they are residing in it, but also when they leave it.

Because hope is an emotion that can be evoked by physical expression, Architecture has the ability to foster and sustain hope in humanity. Hope is a universal need that should be addressed in design with care equal to that given the physical needs of a client or community. Regardless of race, culture, economics or background, hope is necessary for the betterment of society as a whole and individuals in particular. A structure that can instigate feelings of expectation and desire in its occupants is an undeniably valuable enhancement to any region.

In his address to members of the American Institute of Architecture at a conference in Miami, Paolo Soleri, a well-known student of Frank Lloyd Wright and founder of Arcosanti declared "we architects are a privileged people. There is not another art that influences people so continually and indisputably. People live in the things which we create, and those things of course greatly affect the way that they live." Beyond providing for basic needs, Architecture has the ability to influence attitude and expectation.

Over time, Architecture has appropriately become a commodity. Once the symbol of the elite, it is now a profession that seeks to address the needs of even the common man. With such expansion comes a new demand for efficiency, and so Architecture has been informed and reformed by the needs of a people in an equal opportunity society, constantly striving to make good design more economically practical. New demands arise from new conditions of economics, new principles of construction, and new materials and are addressed with new ideas for designing. This progress of recent years is admirable, but in the aspiration to provide adequate shelter for a people, designers must not fail to address the most essential spiritual needs of those same inhabitants. A great importance should be placed using space and light to create environments that can generate feelings of peace, confidence, inspiration, and especially hope, which is the response essential to encourage an individual to continuously strive for better circumstances or persevere despite tribulations.



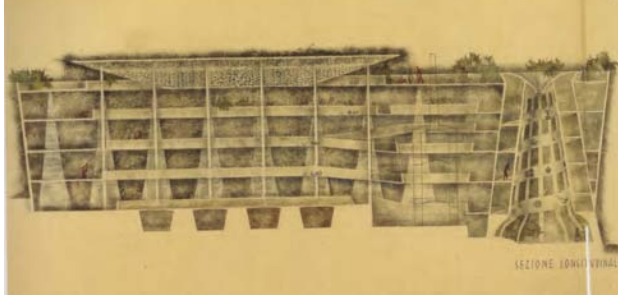


02: Supporting

Of Spiritual Value

“All architecture is shelter, all great architecture is the design of space that contains, cuddles, exalts, or stimulates the persons in that space.”

-Phillip Johnson, Architect



*Solimene Ceramics Factory
Vietra sul Mare
Designed by Paolo Soleri*

The ceramics factory is designed to be both a place of movement and rest, or production and of reflection¹⁰.

The interior of the ceramics factory is well lit with natural light filtered in from above. The space in the factory is arranged to allow for areas of high traffic and circulation, areas of efficiency and production, and areas of observation and reflection.

The ceramics factory was the beginning of Paolo Soleri's formation of the concept of ecology, or the unioning of man and ecological matter through Architecture.¹⁰

Paolo Soleri believed that all Architecture should be constructed in the image of man. According to an excerpt from one of his many writings, he believed "Arcology is architecture as materialization of the human environment, and ecology as the physical, biological and psychological

balance between a place's specific conditions and its being part of a whole. So complex in perspective, so healthy in its structure, so subtle and flexible in its infrastructure, and with such a drive to miniaturize that it substantially redefines the local ecology at a human scale, arcology is a mechanism made necessary by the process of interiorization of the world and the concept of mass energy--the matter becomes spirit."¹⁰





*Viet Village Urban Farm
New Orleans, Louisiana
Designed by Mossop and Michaels*

The Viet Village Urban Farm is a project designed to reestablish local farming efforts in the Louisiana area following Katrina. The east side of New Orleans was one of the most damaged areas of the city during the storm of 2005. In response to the devastation,

the community has organized around the idea of creating an urban farm and market as the center of the community¹¹. The farm is to be 28-acres and to be placed in the center of the community. The farm will be a combination of small-plot gardening for family consumption, larger commercial plots focused on providing food for local restaurants and grocery stores in New Orleans, and a livestock area for raising chickens and goats in the traditional Vietnamese way¹¹. A market is also being proposed on the site to provide an opportunity for individual farmers to supplement their income. Based on the history of the markets in the area before Katrina, as many as 3,000 people are expected to come to the site for a Saturday market, perhaps more on traditional festival days¹¹. In addition, vegetables and foods used in Vietnamese cuisine will be sold at the market.

The garden will provide a sense of community to one that has suffered greatly, and an opportunity for individuals to improve their economic status through gardening and the selling of produce.



- There are 8 main areas on the farm: 1. small plots that are located near the church and elderly housing across the street; 2. the market located at the back of the site due to a long-term agreement with the City of New Orleans; 3. commercial plots located near the livestock farm to shore back of house infrastructure and service roads;
- 1 Central Reservoir
 - 2 Community Pavilion
 - 3 Central Roadside / Linear Market
 - 4 Children's Play Area
 - 5 Pedestrian Entrance from Street
 - 6 Public Vehicular Entrance
 - 7 Secondary Reservoir / Parking Pond
 - 8 Market Buildings
 - 9 Rain Gardens for Market Runoff
 - 10 Grass/Pave Event Parking with Bio-retention
 - 11 Livestock Farm Operations / Composting
 - 12 Central Bio-Filtration Canal
 - 13 Commercial Lots
 - 14 Service Entrance



*Beardsley Community Garden
Knoxville, TN*

Beardsley Community Garden is located off Reynolds Street in Knoxville, TN behind a boys and girls club. The area was once occupied by a school, and is now being rehabilitated by the city.

Beardsley Farm was created by the Knox County Community Action Committee, and is a locally and federally funded. Beardsley Farm is also connected to the Community Action Committee's Green Thumb program, which provides garden space, seeds, and starter plants to 1,500 qualifying community families each year. Every family selected for the Green Thumb program receives eight tomato plants, six pepper plants, two herb plants, and an assortment of seeds.

Beardsley Community Farm was an extremely impressive endeavor. When first you come upon it, the farm looks minute and irrelevant, a one and a half acre plot of land bounded by a chain link fence and supplied by a small shed cluttered with



an assortment of tools and water coolers. Within a moment after arrival, however, the gate to the garden is opened and the visitor is ushered inside, told to sit or explore, and offered introductions by volunteers and employees.

The garden has done a great deal to alleviate crime in the area. The public space and availability to the neighborhood causes more people to meander through the clearing, and the nature of the garden suggests people may use it at any time. The increased activity has decreased the local crime by removing the convenience of an unoccupied, poorly lit area from the neighborhood. There are several composting bins, which broke down food donated by local restaurants, creating a soft soil that is used throughout the garden. There is also a water collection system that gathers excess rainwater from the roof of the barn and stores it for irrigation purposes. The garden is becoming increasingly well known, with knowledge of its benefits spreading by word of mouth.



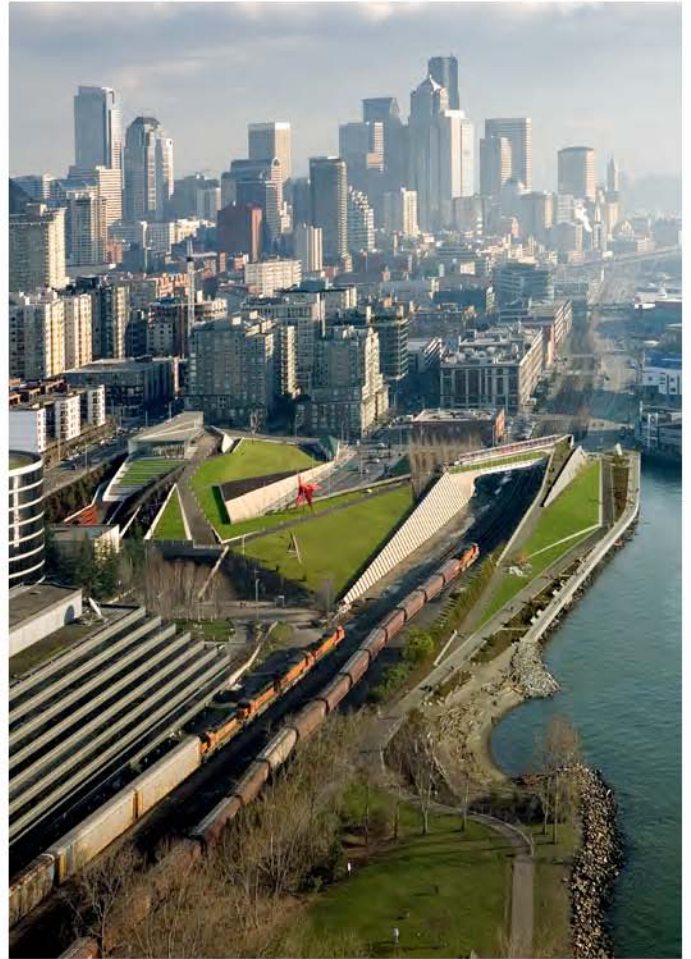
Olympic Sculpture Park
Seattle, Washington
Designed by Weiss/Manfredi

Envisioned as a new model for an urban sculpture park, the project is located on a industrial site at the water's edge. The design creates a continuous constructed landscape for art, forms an uninterrupted Z-shaped "green" platform, and descends 40 feet from the city to the water, capitalizing on views of the skyline and Elliot Bay and rising over the existing infrastructure to reconnect the urban core to the revitalized waterfront¹².

An exhibition pavilion has been erected to provide space for art, performances and educational programming. From this pavilion, the pedestrian route descends to the water, linking three new archetypal landscapes of the northwest: a dense temperate evergreen forest, a deciduous forest and a shoreline garden¹². The design not only brings

sculpture outside of the museum walls but brings the park itself into the landscape of the city. The park spans the gap between the river and the city edge, and visually connects multiple interstate and highway systems.







03: Forming

The Shaping of Sentiment

Hope is found in a place that offers inspiration, promise of change, seclusion, safety, connection, and the illusion of something greater than the one who occupies it. Hope and hopelessness represent states of mind reacting to opposite expectation¹³. The two are separate and unable to coexist, but are at their generation related to each other, both having antecedents or common roots of development. Both hope and hopelessness are reactions to environment, personal ability, interaction with others, and feelings of control.

According to an abstract on the theory of place attachment written by Professor Bruce Hull, when an individual enters a place, emotions are inevitably evoked by its size, its aesthetic value, and the opportunities it offers¹⁴. Place attachment impacts socially significant, economically tangible factors such as social interaction, sense of coherence and health, feelings of belonging and pride, public involvement, altruistic behaviors, vandalism, and stress. The place a person occupies and uses to complete daily tasks becomes significant not only for its utilitarian purposes, but for the spiritual reactions it invokes in the individual.



“And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul. And the Lord God planted a garden eastward in Eden; and there he put the man whom he had formed. And out of the ground made the Lord God to grow every tree that is pleasant to the sight, and good for food; and the tree of life also in the midst of the garden.”

In the Christian religion, the sacrifice of Jesus Christ is the most significant aspect. The death of Jesus symbolizes the pure love of God for His creation despite their flaws. The Bible claims that man and woman were created from the earth by God and placed in the Garden of Eden; a utopian place fashioned by God and flawlessly designed to the last detail.

Mankind, however, was commanded not to eat of one tree in the garden, and he made a choice to do so, creating a situation less than perfect with his decision and separating himself from the garden and his direct communication with his Creator. However, while God allowed the man and woman to suffer the consequences of their mistake, he equipped them for their circumstances and reminded them of their ability to persevere even in their lack. The Christian religion believes that God provided man with the ability to deal with the consequences of his own choices and allowed man the power of free will, but loved His creation too much to not provide a way to reestablish the

fellowship and connection He intended to share with it. For this to happen, for thousands of years of mistakes to be erased, required the willing sacrifice of one faultless person. Jesus Christ, then, represents in the Christian faith the desire of man's Creator to offer hope, to offer a way back into his grace, and, symbolically, back into Eden.

Throughout history, gardens have been used and viewed as a place of refuge, solidarity, provision, and hope. Zen gardens have been in existence in Japan since the 6th century, always created as a means of escaping external distractions and immersing oneself in peaceful contemplation. Zen gardens are places enriched by subtle color, texture, and the dynamic but peaceful play of plants against stone, wood and water, with all aspects being interrelated, layered with significant, and vital to the whole¹⁵.



Although less often seen in modern times, labyrinths were once a prominent part of ancient landscapes. The labyrinth was a representation of the journey of man into his own center and back out again into the world. Having only one path to lead the visitor into the center and out again, the labyrinth was created from natural elements to be used for prayer, meditation, and broadening the understanding of self¹⁵.



In present times, the need for this connection to nature is almost lost in the urban lifestyle and the quick pace and efficient mindset of the modern day man¹⁶. Yet city greening and urban gardens have recently begun to gain recognition as being vital parts of life. Plants are experienced both through participation and observation. Landscape can evoke feelings simply through visual connection. These feelings are dependent on how the observer processes what he sees but may include excitement, peace, captivation, boredom, pleasure or being overwhelmed. Urban greening affects not only those who are intimately connected to the plants and invested in their well-being but also any visitor or member of the community who has opportunity to experience the aesthetic appeal of the space. Gardening projects in impoverished neighborhoods have produced a continuing amelioration of healing in those regions and resulted in a safer, cleaner environment due to a stronger feel of community and a positive affect on the residents' self-esteem¹⁶. Community gardens are neighborhood open

spaces managed by and for the members of the community. Such gardens are typically divided into individual plots and planted with vegetables by landless gardeners. Community gardening builds and rejuvenates neighborhoods and develops human capital¹⁶. It brings people together in a context that enriches them and leads to positive interaction. For the most deprived members of a community the garden provides not only money, nutrition, and open space but also a sense of self-pride and self-worth.



An urban garden provides a place to connect with and experience nature. Hopelessness is often related to a spiritual or transcendent process and may be experienced more by those who have never identified or acknowledged a relationship with an external or internal spiritual power. Individuals lacking the ability to believe in a source greater than themselves often find that being forced to depend on their personal resources causes them to feel they are inadequately equipped to change their circumstances. A connection with nature enhances an individual's ability to trust that a force greater than that which they possess may allow for an outcome they are not capable of bringing about on their own¹³.

In the same way that a garden space can allow a person to feel he is part of a greater whole, so the simple act of observing nature can reassure him of the probability of change. A garden is always growing, changing, and producing, never yielding the same conditions of the previous day. According

to Karl Menninger, M.D., gardening “brings the individual close to the soil, close to Mother Nature, close to beauty, and close to the mystery of growth and development and the ever-changing nature of a living thing.”¹⁴

An urban garden provides a place for an individual to make goals for himself and bring them about. The garden may be used for nutrition, marketable produce, or aesthetic appeal, but any of these goals requires the gardener to put forth effort and complete a task to help himself. Hopelessness is often realized through an experiential process, wherein an individual is confronted by difficult events, unresolved issues, and unmet goals¹³. Increasing dependency and decreasing resources often enhance this feeling of hopelessness. A feeling of hope is developed in reaction to opposite circumstances, as when an individual finds they are capable of meeting a goal, working through a problem, and being capable of providing for themselves. Vegetation readily evidences the effort

put into it. A landscape that has been mulched or pruned immediately documents the labor input¹⁷. Particularly in urban areas, vegetation is an excellent opportunity for image expression and enables gardeners to use physical means of expressing values, concerns, priorities, and the socioeconomic status of themselves and their community¹. A garden contributes greatly to feelings of hope by lending its occupants self-confidence, pride, and the conviction that diligent pursuit of a goal yields is often recompensed.

Hope and hopelessness have been observed often as developing in a relational process. Hopelessness is generated through this process in reaction to an inability to trust other people¹³. A person who finds himself dealing with difficult circumstances and does not have relatives or friends who can be relied on for support is more likely to experience feelings of hopelessness than of hope. A community garden allows for and generates relationships between people of varying culture, background,

economic status, and beliefs in the community. Gardening creates a bond in a community and gives its members a common goal and purpose until long-term economic and social development can take place. Isolation and the lack of social connection have been proven to generate feelings of powerlessness. A person who lacks connection with other individuals is more likely to feel they are not capable of changing their circumstances, and is thus more likely to experience hopelessness than hope.

Horticulture has often been used as a means of crime prevention. Community greening has been proven to reduce vandalism, drug use, theft and other illegal activities¹. In addition, participation in urban environmental programs allows people to take control of their lives and have the opportunity to be valuable members of society. Urban greening has also influenced impoverished areas with vocational horticulture training programs that provide people the skill to accept entry-level positions in the horticultural industry.

Horticulture can also be used for therapeutic purposes. In recent years, gardening has been recognized as being an indispensable tool in areas of rehabilitation. Underlying the clinical descriptions of various psychological and social disorders are a multitude of problems or impairments, of which matters of relation and contact are predominant¹⁸.

Horticulture therapy helps to instill a clear concept of responsibility, improved communication skills, and better response to work obligations.

For mentally handicapped or people suffering from social disorders, gardening has been proven to teach perseverance and stamina, and to greatly improve the patient's ability to interact with others¹⁸. Participation in horticulture programs allows patients to develop new interests, provides an outlet for stress and tension, and helps engender a sense of personal boundaries for themselves and others around them.

Arguably most importantly, participation in a gardening program lends physically and mentally disabled patients a sense of pride and an irreplaceable concept of self-worth. Horticulture therapy is successful because the best task for a person with a disability is the one they connect and identify with¹⁸. In general they have rarely been content or seen themselves as identities in the past. Activity in the garden allows patients to realize that what they do and who they are matters, that when they perform a task, it would not have been completed without them.

A garden is humble and accessible. Though a place of worship may be visited to experience hope, or a place of inspiration or contemplation sought out in an effort to discover something one could put one's trust in, the community garden becomes a place one can experience every day. Hope is interwoven into the aspects of the program, and the use is practical as well as spiritual, and requires the effort of its visitors, so that experiencing the garden will become a ritual in which an individual participates each day.

Sustainability has at last become a discussion that cannot be sidestepped. Earth's population is at last realizing that to use resources which are not easily replenished in reckless ways outlines a shaky future. The idea of sustainability is closely tied to hope. To sustain is to preserve, to strengthen, to perpetuate what already exists.

Hope is created in a number of ways, from emotions and circumstances and opportunities. But hope as a spiritual experience is worthless if it cannot be maintained in practical environments.

Sustainable architecture is essential to ensure that the needs of humanity will be met in the future, in the same way that structure is essential to ensure that the basic needs of shelter and safety are met. However, as Architecture can touch more spiritual or deeper needs of those who occupy it, so sustainable architecture speaks of something more than necessity. Sustainable design is born from the desire to use what is naturally available and often

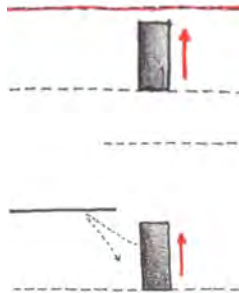
overlooked to create a structure which operates more efficiently. Sustainable design is the desire to preserve what is good. Sustainable design is the ability to find alternate means of meeting a need when the resources once relied upon are no longer available. Sustainable design is the ability to take what was in the past disregarded and use naturally available resources to create a more efficient building. Sustainable design is to use unconventional means to create something healthier, more efficient, and more economical while not using or using anything more than one has to.

Currently, The Leadership of Energy Efficient Design is the most widely recognized organization to set forth criteria for environmentally conscious architecture. LEED certifies buildings according to their ability to meet the criteria set forth by the organization. The Burlington area would greatly benefit from a sustainable structure. The LEED criteria is designed to promote efficiency and comfort for inhabitants, both of which are vital

considerations for the program proposed. Efficient structures have proven to increase property values. The program could show people how to not only be efficient and sustainable in their means of producing food, but also in their lifestyle. If the education component of the LEED criteria were met, the structure on the site could be used as a teaching tool as well, and could attract the attention of people outside the community, and increase awareness of the revitalization efforts of the Burlington area.

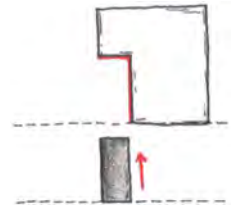
The Garden

The garden is a place of control and *pride*, wherein the participant's toil brings about positive results. The garden is a place of color and light and movement. The *connection to nature* reminds the occupant of a force greater than his own ability, but the character of the garden also allows the occupant to feel he has authority and the ability to dictate change.



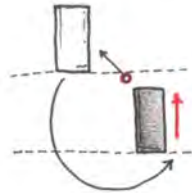
Teaching Kitchens

The kitchen is a place of learning and *purpose*, wherein community members are provided with a new skill which may enable them to secure a job or simply to better provide for their own needs.



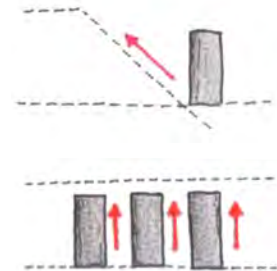
The Greenhouse

The greenhouse is a place of *observation*. The greenhouse allows occupants to carefully watch the changing and growth of many plant species. The greenhouse is a community plot unlike the individual gardens, which encourages social interaction and connection.



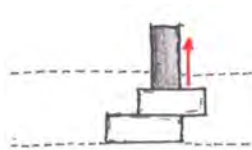
The Market

The market is a place of *equality* and *opportunity*. The market should eliminate a hierarchy of place, so that all participants feel they have an equal opportunity to sell their produce and gain economic rewards.



Excess Storage

The storage area is a place of *compassion*. Gardeners and community members are encouraged to bring their excess to the area. Canned goods, produce, and dried herbs are packaged and delivered to families or individuals in need of sustenance.



The Program

Gardens

<i>Individual Plots</i>	<i>100 sq. ft. each</i>
<i>Children's Butterfly Garden</i>	<i>700 sq. ft</i>
<i>Charity Gardens</i>	<i>400 sq. ft. each</i>

Teaching Kitchens 10, 500 sq. ft

Greenhouse 8,000sq. ft.

Market 11,000 sq. ft

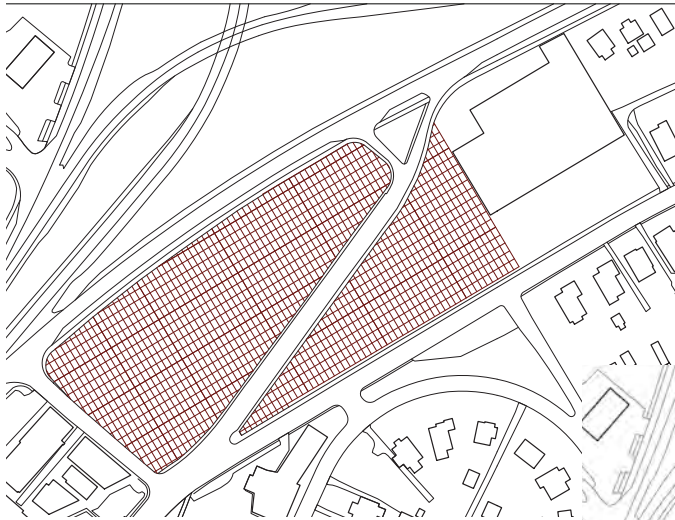
Storage

<i>Food Lockers</i>	<i>5,000 sq. ft.</i>
<i>Tool Storage</i>	<i>700 sq. ft</i>
<i>Seed Storage</i>	<i>500 sq. ft</i>
<i>Excess Storage</i>	<i>2,500 sq. ft.</i>

Auxiliary

<i>Administration</i>	<i>800 sq. ft.</i>
<i>Mechanical</i>	<i>500 sq. ft.</i>
<i>Restrooms</i>	<i>500 sq. ft net</i>

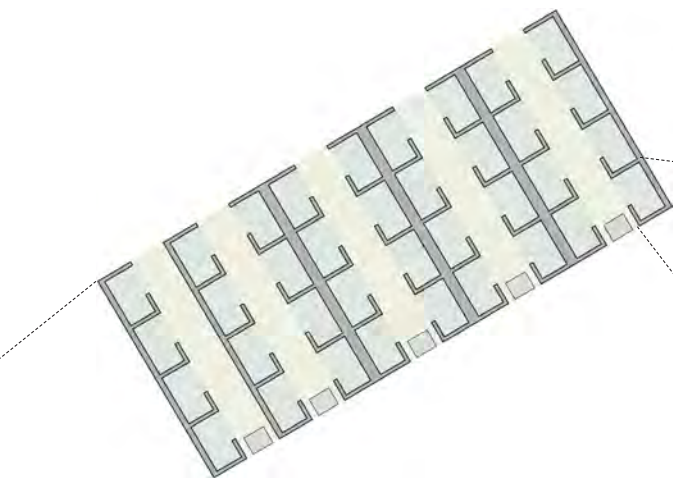
Total Interior Space 40, 000 sq. ft



An estimated 5.7 acres will be used for the proposed program. The selected site is depicted on the left with a 10'x15' grid overlay, representing the typical size of a single plot capable of serving a small family unit.

The garden will serve the local community and other participants and promote a sense of identity and pride. In doing so, the garden will become a community in itself, divided into interactive green spaces, private garden lots, and communal service space.





The garden will be subdivided into smaller communities separated by access routes and public gardens. These smaller groups will also serve as communities within themselves, with interactive space available between the individual gardens and communal service utilities.

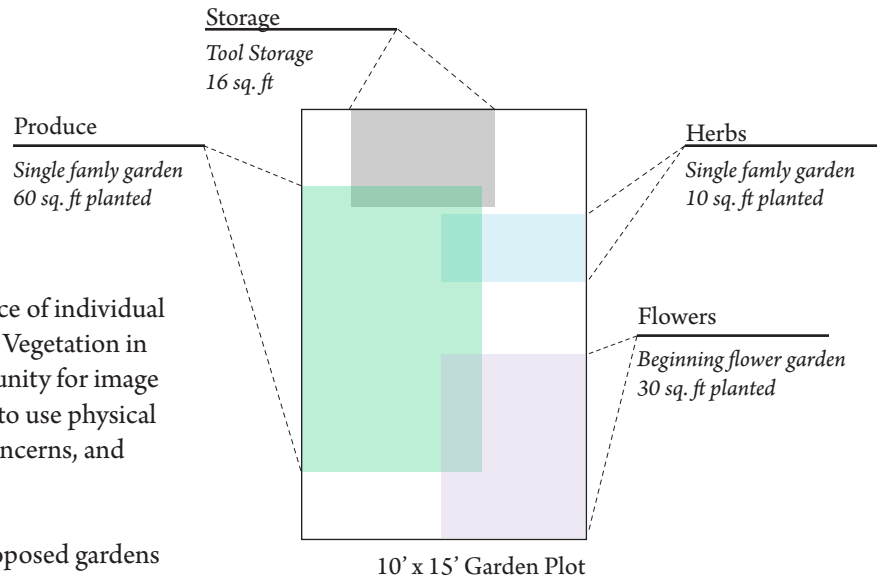
Each individual garden will have a more enclosed, private area and a space designed for interacting with neighbors. Storage and service space will also serve as barriers.

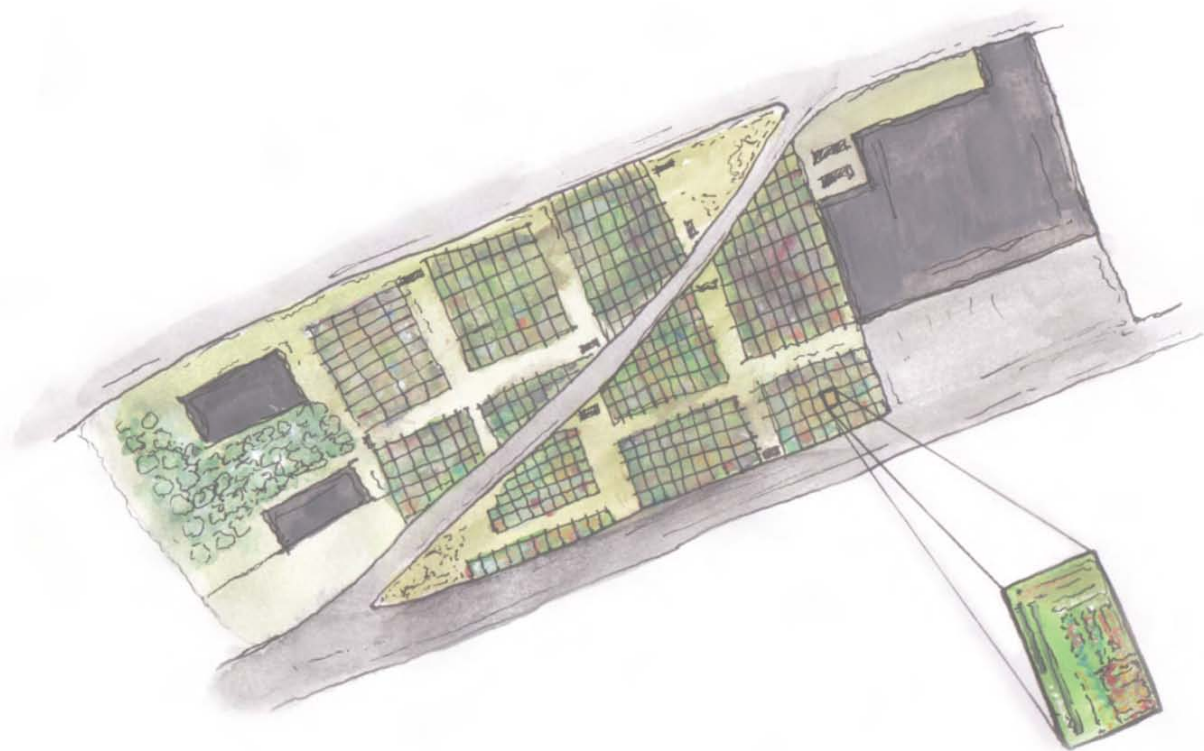


- Shared/ Interactive Space
- Private/Meditative Space
- Service Space

A community garden is both a place of individual expression and collective identity. Vegetation in urban areas is an excellent opportunity for image expression and enables gardeners to use physical means of expressing the values, concerns, and priorities.

The typical size of a plot in the proposed gardens is a ten foot by fifteen foot piece of land. This size plot can accommodate a single family easily. A family's produce can often be supplied by sixty square feet of planted produce. Additionally, the gardeners may choose to plant flowers for personal enjoyment or to sell in the marketplace. Each garden becomes a unique and personal expression of the individual, and the combination of the plots designed to express the values of each person begin to define the identity of the community as a whole.





SEASONAL PRODUCE

Winter Harvest

Apples
Belgian Endive
Bok Choy
Brussels Sprouts
Cherimoya
Chestnuts
Coconuts
Dates
Grapefruit
Kale
Leeks
Mushrooms
Oranges
Parsnips
Pear
Persimmons
Pummelo
Radicchio
Red Currents
Rutabagas
Sweet Potatoes
Tangerines
Turnips
Winter Squash
Yams

Spring Harvest

Artichokes
Asparagus
Broccoli
Chives
Collard Greens
English Peas
Fava Beans
Fennel
Green Beans
Honeydew
Mango
Morel Mushrooms
Mustard Greens
Pea Pods
Rhubarb
Snow Peas
Sorrel
Spinach
Spring Baby Lettuce
Strawberries
Sweet Corn
Sugar Snap Peas
Swiss Chard
Vidalia Onions
Watercress

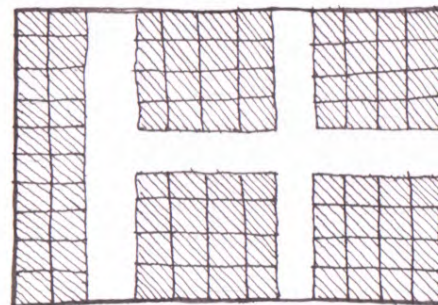
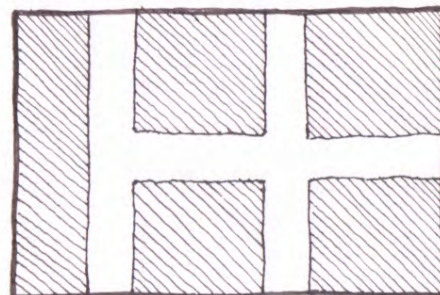
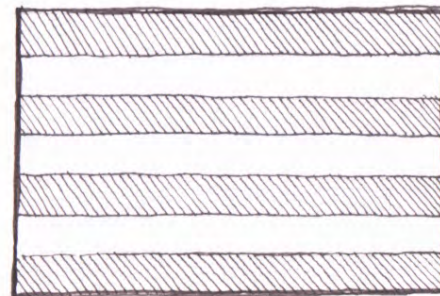
Summer Harvest

Beets
Bell Peppers
Blackberries
Blueberries
Casaba Melon
Crenshaw Melon
Cucumbers
Eggplant
Garlic
Grapes
Green Beans
Green Peas
Honeydew Melons
Kiwifruit
Lima Beans
Limes
Loganberries
Okra
Persian Melons
Plums
Radishes
Raspberries
Strawberries
Summer Squash
Tomatoes
Watermelon
Zucchini

Fall Harvest

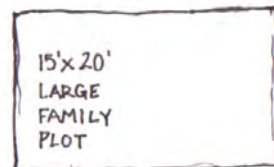
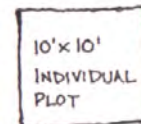
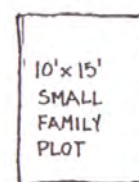
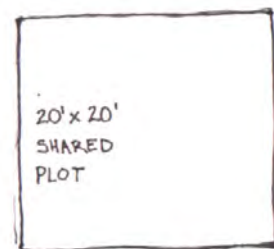
Acorn Squash
Belgian Endive
Bok Choy
Broccoli
Brussels Sprouts
Butternut Squash
Cauliflower
Celery Root
Cranberries
Diakon Radish
Garlic
Ginger
Grapes
Huckleberries
Kohlrabi
Mushrooms
Parsnips
Pear
Persimmons
Pommegranate
Pumpkin
Rutabagas
Sweet Potatoes
Swish Chard
Turnips
Winter Squash

The concept of square foot gardening was recently made popular by horticulturist Mel Bartholemew. In this method, the garden space is divided into beds that are easily accessible from multiple sides. Beds are recommended to be constructed on a four foot by four foot square, and the subdivided per foot. Different seeds are planted in each square. This method of gardening is intended to reduce the work load of maintaining the space, conserve water, eliminate weeding, improve accessibility, and conserve space.



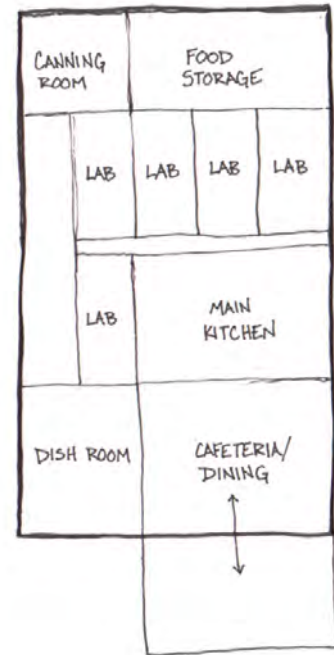
The majority of the plots available in the community garden would be 150 sq. ft in area, a 10'x 15' plot. This proposed size is enough area to supply produce and herbs for a small family unit.

To accomodate the needs of various other individuals, additional size plots should be available for use, including smaller plots for an individual growing produce or a small flower garden, larger plots which may be shared between two families or necessary to accomodate a large family unit, and raised beds for handicap accessibility.



The kitchen space is an essential part of the proposed program. Combined with the skills obtained through gardening and horticulture work, the ability to can, preserve, prepare and serve food will enable residents who are unemployed or living on welfare to pursue a job which requires specific qualifications.

To accomodate the purpose of the kitchen space, the program should include a room for canning and preserving goods, storage space for dry foods, a series of student lab kitchens, and a cafeteria allowing students to witness the results of their work and possibly make a profit. The cafeteria will also serve to bring in community members who do not wish to garden.



Space Use Requirements

Chemical Room
Walk-In Freezer
Walk-In Dairy Cooler
Walk-In Produce Cooler
Main Storeroom
Baking Room
Cooking Room
Student Labs
Canning Room

Special Storage

Plastics Storage
Reach-In Freezers
Reach-In Coolers
Alcohol Cabinet
Bakery Storage
Cleaning Chemical Storage
Dirty Dishes Area
Pans and Equipment Storage

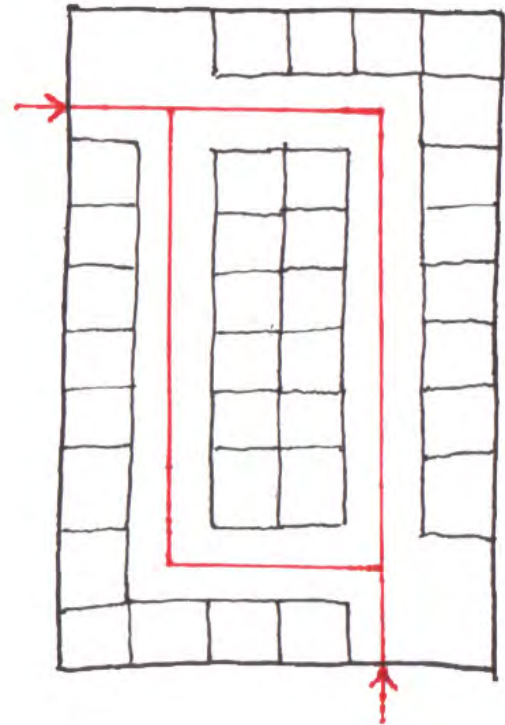
Kitchen Equipment

Bread Slicer
Prep Sinks
Bench Mixers
Blast Chiller
Steamers
Tilting Skillet
Cook and Hold Oven
Gas Range and Conventional Oven
Convection Oven
Hot Holding Cabinets
Slicer
Fryer
Broiler
Gas Range with Flat Top
Gas Range with Conventional Ovens
Combi Oven
Microwave Ovens
Steam Injected Deck Ovens
Floor Mixer
Single Compartment Dishmachine
Dirty Dishes Carts

The market will be designed with the intent of creating an equal opportunity environment.

Providing main entrances on two different axes of circulation prevents a hierarchy of order in the booths.

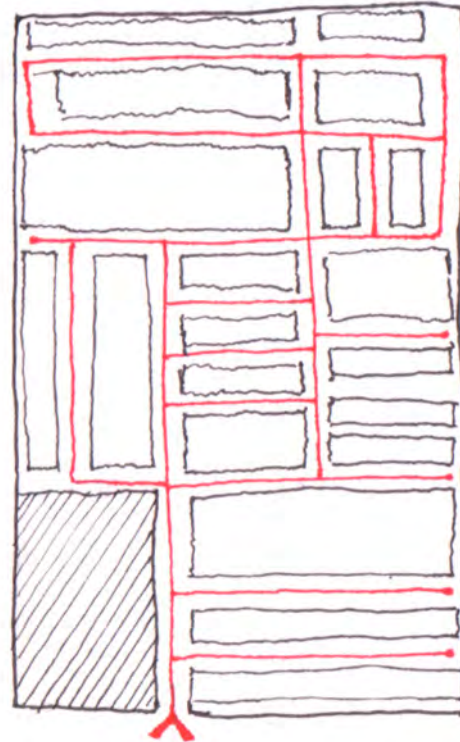
Booths should be permanently installed to retain the structure and the desired layout for to accomodate the market's intent. However, the booths should be standardized and rented to gardeners each week.



The greenhouse will be designed with the intent of allowing visitors to observe the daily growth and change of the plants. The greenhouse should be a place of light and color and movement. The structure should be designed for visual experience and interactive observation of the plant species being grown.

As hope requires the idea that change is possible, the greenhouse will foster hope by allowing gardeners, community members, and visitors to witness the constant change of nature.

The greenhouse should be designed in a manner which allows visitors to wander between the plants and creates aisles that are quiet and contemplative and filled with color.





04: Locating

A Community Disregarded

The need for hope is an undeniable and universal idea. Psychological evidence has shown that for any individual in any situation, a lack of hope is detrimental; it stifles the will and cripples the spirit. The context in which the idea of fostering hope is most beneficially manifest, then, is humanity.

The ideal setting to disclose the relevance of this concept is a place wherein feelings and circumstances generating hopelessness are more frequent and more profound than those which could serve to generate hope.



The economic segregation evidenced in the city of Knoxville provides an interesting context for the proposed program. One of the oldest cities in Tennessee, having been established in 1786, Knoxville has seen significant growth over past years due to its accessibility via an international waterway and three major interstates¹⁹. Home of the University of Tennessee's main campus, and enriched by a history tracing back to the Revolutionary War, the city appears to possess the potential to be a progressive city of equal opportunity. To the contrary, Knoxville is a city that may be easily divided into distinct territories that can be defined by their economic conditions. Knoxville is an ideal representation of Bell Hooks' idea that while racial segregation is a fading issue, class segregation is becoming an increasingly prominent one²⁰.

Burlington in East Knoxville is a distinctive old section of town just south of Chilhowee Park. When the area was first established in the early 1900s, Burlington was one of Knoxville's most thriving

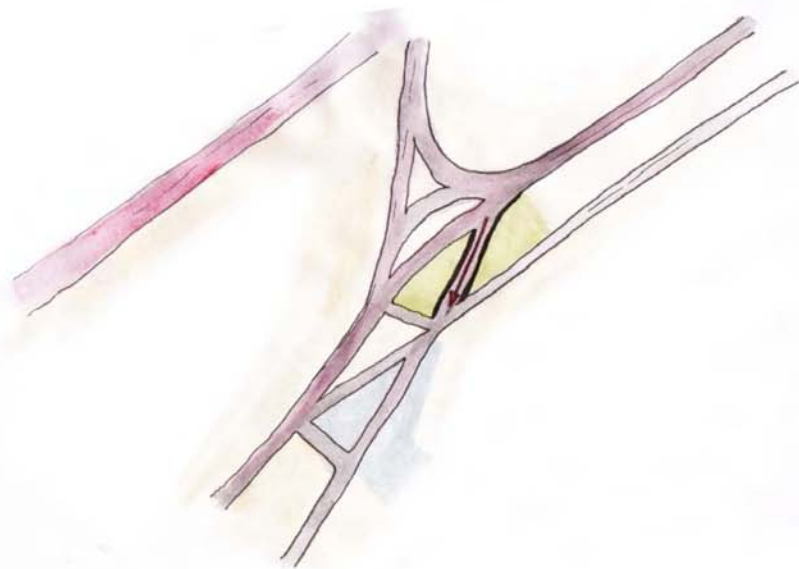
communities, representing for many the epitome of the American way of life¹⁹. Downtown Burlington began as a thriving community hub, with a variety of shops and services lining either side of a main boulevard. With the establishment of the interstate highway system in the 1960s, many thriving areas of Knoxville began to decline. Asheville Highway was developed in East Knoxville to appeal to interstate travelers and is now lined with convenient stores and fast food restaurants¹⁹. The privately owned businesses along Martin Luther King Boulevard suffered substantially, and the charming downtown that had been a source of pride and community connection failed to compete with the convenience of the Asheville Highway shops. Many of the buildings which once represented the heart of the community remain standing, but East Knoxville has long since lost its charm and appeal. Located on axis with the main street of the old downtown and at the intersection of two major roads in the community, the proposed 3.3-acre site on Holston drive is occupied by a warehouse type of structure

currently serving as a secondhand shop and community run market. Disregarding the building footprint, the site is currently covered with blacktop paving and serving as parking for the warehouse. As the program in the existing building attracts little attention and is rarely frequented by customers, the majority of the lot remains unused.

On the Northwest side of the lot, Martin Luther King Boulevard rises 12 feet and intersects with Asheville Highway. A fourteen-foot retaining wall is in existence on the northwest side of the lot.

Adjacent to the proposed site is an additional site currently serving as parking space and used only two afternoons each week as an open air market for the community to sell and exchange goods.

The Burlington area is a source of both great pride and great devastation. The community is in dire need of revitalization, the historic pieces needing recognition in order to encourage means of preservation. Yet the people of Burlington are unwilling to take charity. Accustomed to living off of welfare and occupying poorly maintained homes,

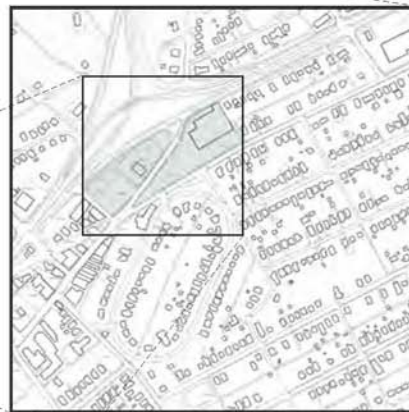


the community is unwelcoming and reclusive. The downtown Burlington site provides an opportunity to lend the community members a justified sense of accomplishment, worthiness, and confidence.

The proposed site offers an opportunity to generate hope in a neighborhood more given to hopelessness in two distinct ways. Firstly, to give hope and purpose to the people themselves. The community should have a place where its members can come to exert effort and reap the benefit of their labor. According to the economic data cited by the 2000 census for the Burlington community listen over ninety percent of the households as being below poverty level. The data taken also evidenced that of the employable population, almost fifty percent were unemployed. Statistics show that households relying on welfare to meet basic needs have high depression and anxiety rates. A community attribute which allows all residents the opportunity to put forth an effort and reap the benefit will inevitably aid in meeting the practical needs of a neighborhood which is experiencing significant lack and will lend

a feeling of pride and confidence to the community whole²¹.

In addition, hope will be demonstrated symbolically by the development of the selected site. The site will become a place of appeal that will bring attention to the abandoned downtown area of Burlington and encourage additional redevelopment along Martin Luther King Boulevard. In addition, the development of the site on Holston and the parking lot adjacent to it will create a visual connection between the fast paced Asheville highway and what was once the heart of the area, attracting more attention to Burlington. The revitalization of downtown and the rehabilitation and reuse of the building already in existence on the proposed site will evidence the possibility of a better way of life for the community as a whole.



Site Location Diagram

The plan developed by the East Knoxville community in 2002 makes the following suggestions for any new neighborhood commercial development:

"Maintain and strengthen existing quality neighborhood commercial where sites offer convenient services while not adversely affecting adjacent neighborhoods.

New development should be restricted to existing -commercial nodes unless area demand otherwise warrants a new site which meets the design criteria listed hereafter:

- Sites should be located at the intersection of streets*
- Sites should generally be no larger than 5 acres. Larger areas may be appropriate where warranted by surrounding growth and if adverse impacts are minimized.*
- Site development should incorporate landscaping and other types of buffer treatment, where possible, when adjacent to less intense uses.*
- Sites should be prohibited in low density residential core areas.*
- Sites should generally be developed in areas where demands for services are not being met.*
- Sites should be adjacent to non-residential uses."*



Nolli Diagram

Martin Luther King, Jr. Avenue Corridor Plan

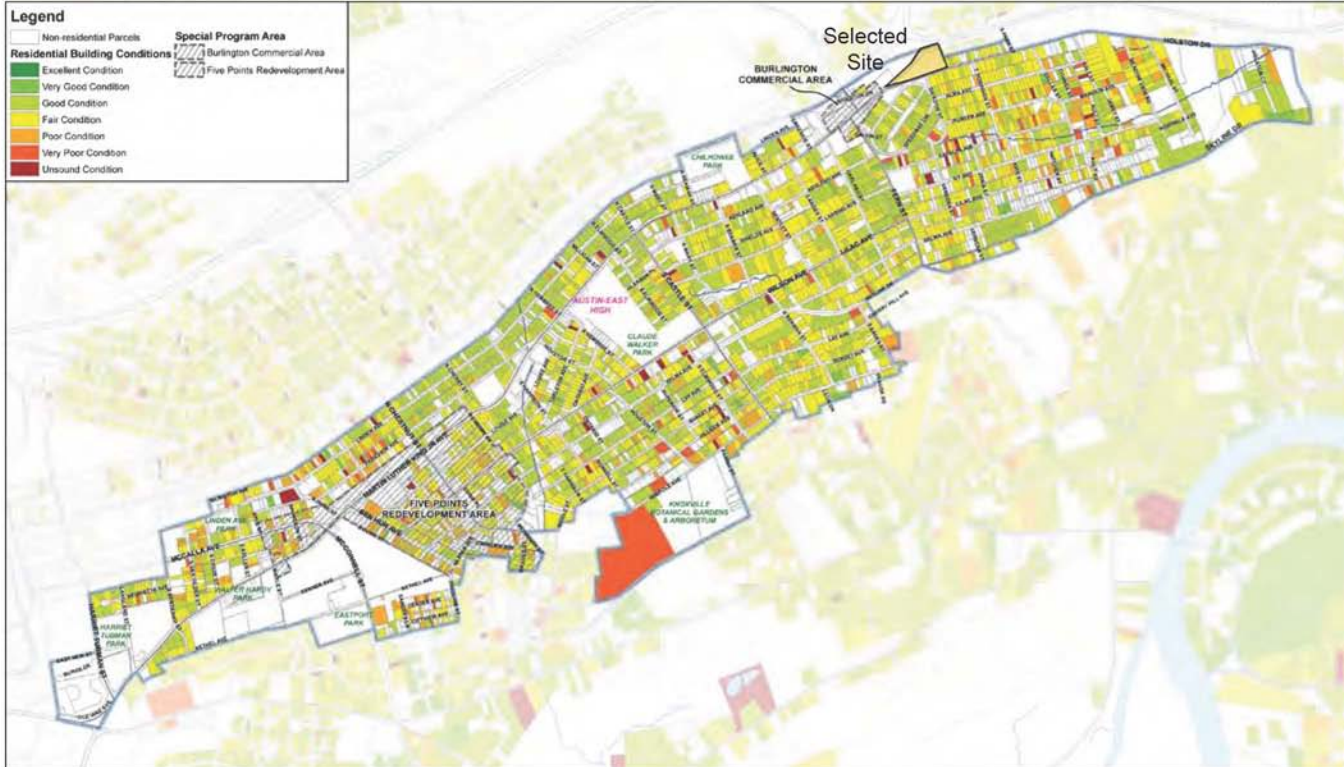
HOUSING CONDITIONS

1 inch equals 1200 feet
 0 1,200 2,400
 Approximate Scale in Feet
 Print Date: October 10, 2005



Legend

- Non-residential Parcels
- Residential Building Conditions**
 - Excellent Condition
 - Very Good Condition
 - Good Condition
 - Fair Condition
 - Poor Condition
 - Very Poor Condition
 - Unsound Condition
- Special Program Area**
 - Burlington Commercial Area
 - Five Points Redevelopment Area



The 2000 Census for the Burlington Community in Knoxville, TN

Total Population	8,269		
Male	3,765	Households with Poverty Status	3,241
Female	4,504	Employable Population	6,498
Median Age	38.55	Employed	3,358
White	1,946	Unemployed (working age)	3,140
Black	6,108	Average Commute Time to Work	26 min
Other	292	Population 18+ HS Diploma or GED	1,958
Total Housing Units	4,224	Population with any college degree	920
Total Households	3,592	Disabled (any age)	2,206
% of Vacancy	14.96%	Disabled (working age)	1,310
Owner Occupied Units	1,966	Disabled and Working	502
Renter Occupied Units	1,626	Age 16+ without access to a vehicle	548

*Data compiled from Census tracks 32, 20, and 19
Knox population growth since the Census is 10.95%*

The economic data received in the most recent census for the Burlington area in Knoxville is devastating. Of a total of 3,592 households in the area, 3,241 are listed as being of poverty status. These numbers indicate that over 90% of those living in the Burlington area are living in conditions of poverty.

Of the employable population, almost 50% are unemployed. This statistic may be attributed to any number of factors also shown by the census data: the fact that over 500 people of a working age do not have access to a vehicle, that over 2,000 of the areas 8,269 residents are listed as disabled, or that only 920 of those residents have a college degree. This means that a mere 14% of Burlington's working age population have attended any sort of post-high school educational institution.

Martin Luther King, Jr. Avenue Corridor Plan **VACANCY STATUS & PROGRAMMED HOUSING LOTS**

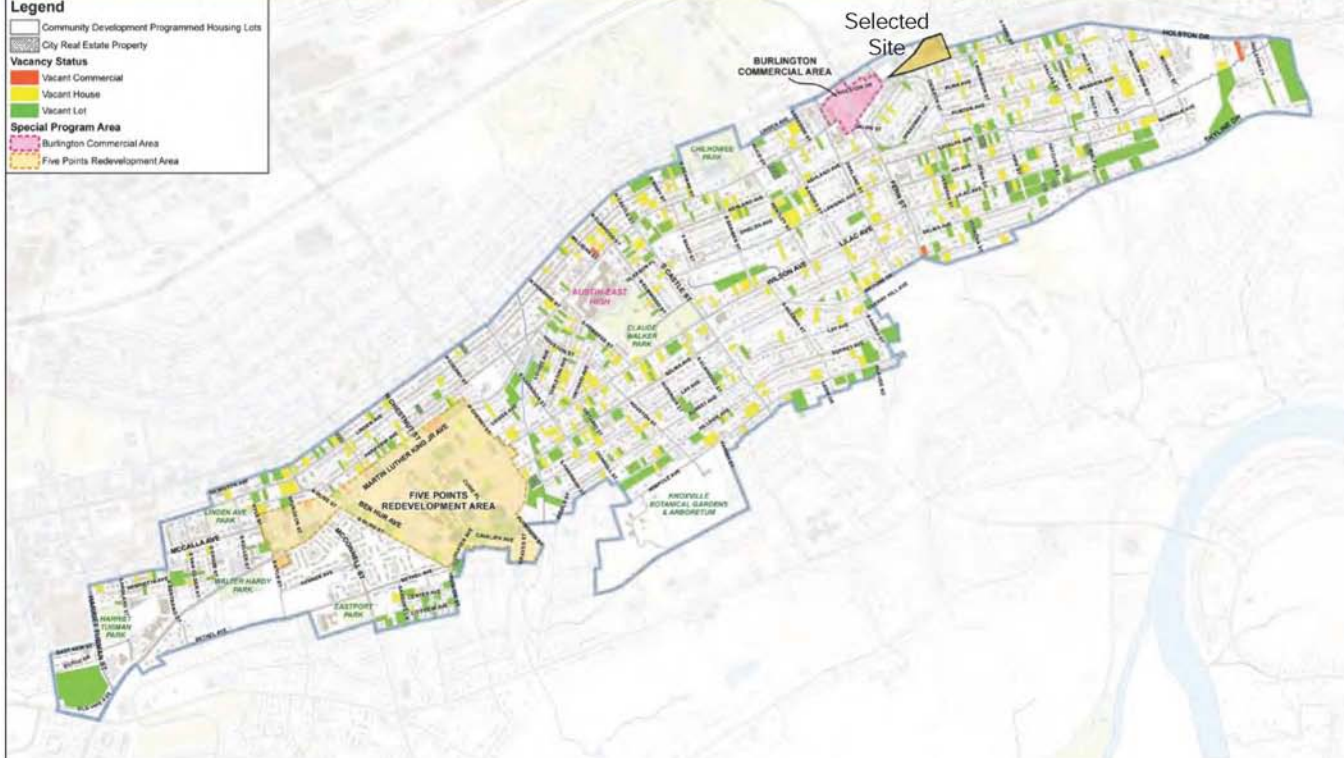
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 Approximate Scale in Feet
 Print Date: October 10, 2008



MPC
 METROPOLITAN
 PLANNING
 COMMISSION

Legend

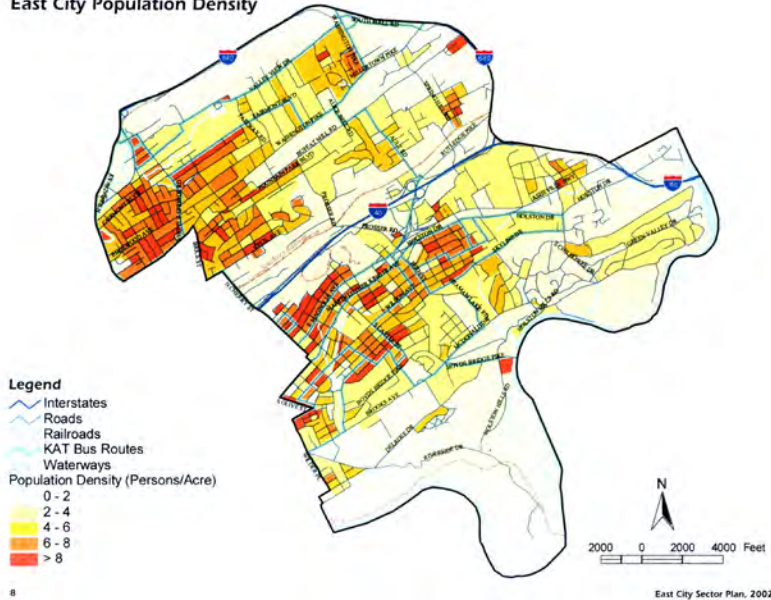
- Community Development Programmed Housing Lots
- City Real Estate Property
- Vacancy Status**
 - Vacant Commercial
 - Vacant House
 - Vacant Lot
- Special Program Area**
 - Burlington Commercial Area
 - Five Points Redevelopment Area



Vacant Lot

Vacant House

Map 2
East City Population Density



The data represented in these charts and graphs is current as of the year 2000. The diagram above shows that the area along Martin Luther King Blvd and Holston Drive, particularly directly across from the selected site where the two streets converge, is an area with a high population density, averaging six persons per acre.

Housing Characteristics

Household by Type	1990	2000
Total Households	11,005	11,282
Families	7,274	6,759
Married Couples	4,989	4,320
Single Parent Families w/children under 18	1,270	1,247
Male Headed	146	186
Female Headed	1,124	1,061
Non-family Households	3,731	4,523
HH w/individuals under 18 years	n/a	3,176
HH w/individuals 65 years and over	n/a	3,542
Average Household Size	2.30	2.23
Average Family Size	2.90	2.90
Total Housing Units	12,176	12,636
Owner Occupied	7,380	7,354
Renter Occupied	3,625	3,928
Seasonal Use	n/a	22
Vacant	1,171	1,354

The housing data for the year 2002 indicated that over 9% of all housing units available were vacant. This statistic is significant, because while more housing units could be built in an attempt to encourage growth in the area, an almost 10% vacancy indicates a more substantial need--that of appeal.



CORPORATE OWNED
COMMERCIAL



SELECTED SITE



PRIVATE OWNED
COMMERCIAL



RESIDENTIAL



The Burlington community has developed in a surprisingly cohesive manner. The area is now centered along Asheville highway, a prominent road which developed in response to the Interstate system when it became a primary means of travel. Asheville highway is lined with convenient stores and fast food restaurants. Small groups of locally owned businesses remain along the highway, but most of the retail is owned by corporations. Along Martin Luther King, Jr. Blvd, where the main street of the area once existed, many privately owned businesses are conducted from renovated residences. On the opposite side of MLK Blvd from Asheville highway, a dense residential area has developed.

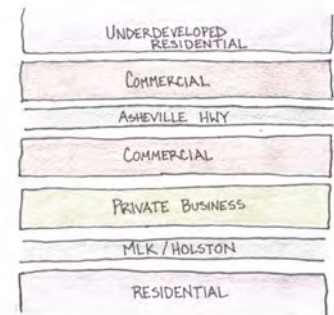
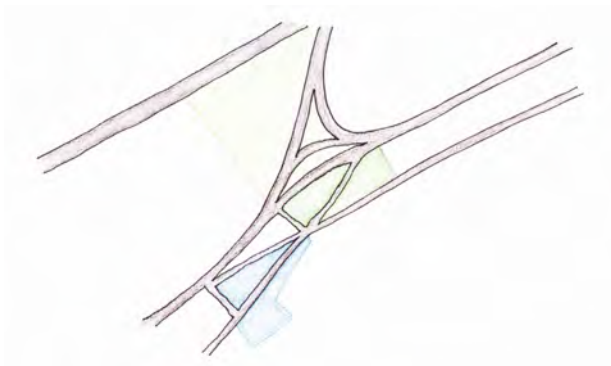
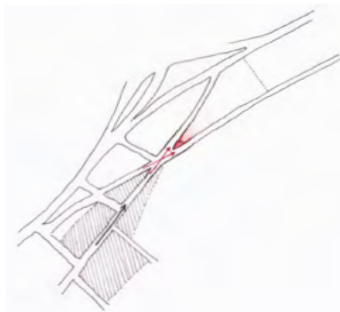


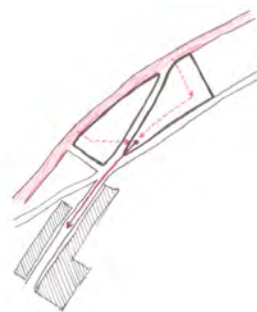
Diagram of Area Use



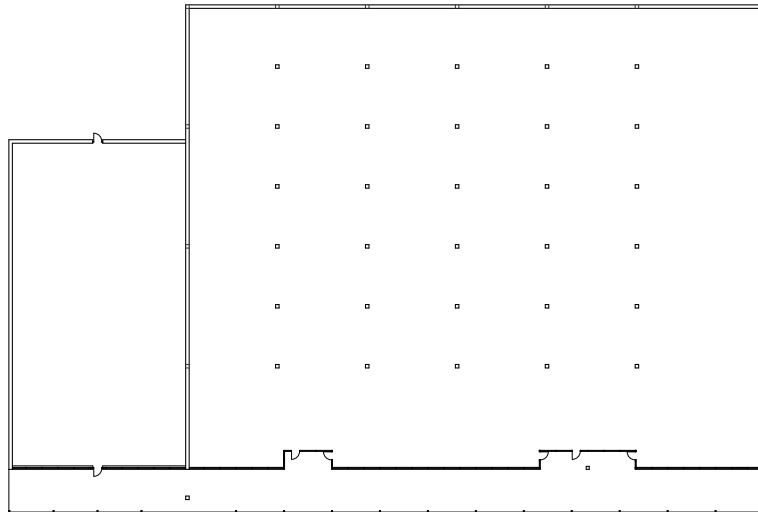
The Burlington area is still largely underdeveloped. The majority of the residential growth has occurred on the South side of Asheville Highway. There is little feeling of community, as the majority of the retail and public space is located along the busy road and designed to appeal to vehicular traffic rather than the neighborhood²². The site provides an opportunity to connect the neighborhood and historic Burlington area back to Asheville Highway and potentially to the Interstate.



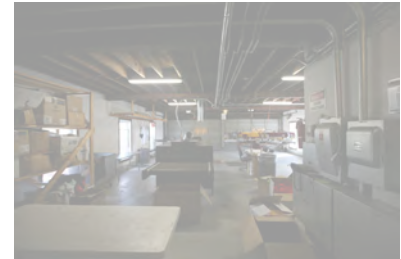
The corner of the selected site is framed by the intersection of Martin Luther king Blvd and Holston Drive and terminates the access of the historic downtown area.



The proposed site is visually connected both to Asheville Highway and to the poorly maintained downtown Burlington area. The site can become a bridge between the new and the old.



Plan of Existing Structure
Scale: 1' = 1/64"



The existing building should be rehabilitated and renovated to accommodate the program and provide aesthetic appeal. The process of developing a community landmark from a forgotten structure will be vital to achieving the goal of nurturing hope in the community.





05: Referencing

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