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To the Graduate Council:

I am submitting herewith a thesis written by Brandon M. Harvey entitled "Perform + Function: A Proposal for a Healthy Public Housing Community." 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 Architecture, with a major in Architecture.

Larry David Fox, Phd, Major Professor

We have read this thesis and recommend its acceptance:

Michael Mark Schimmenti, George Dodds

Accepted for the Council:
Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

PERFORM! + FUNCTION:
A Proposal for a Healthy Public Housing Community in a Post Modernism Era

A THESIS PRESENTED FOR
THE MASTER'S OF ARCHITECTURE DEGREE
THE UNIVERSITY OF TENNESSEE, KNOXVILLE

BRANDON MARTEZ HARVEY
August 2012

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DEDICATION

I dedicate this thesis document to the beginning of a life long journey—seeking, evolving, and implementing the appropriate application of architectural design, urban planning, and community development—for the improvement of quality of life and human experience unto ALL humanity, which is a civil right.

ACKNOWLEDGEMENTS

Firstly, I thank God (my inspiration) for empowering me, and for giving me the gift, responsibility, and opportunity to pursue architecture

Thank you thesis committee for all of your guidance and patience, seeing me through to the beginning of a new chapter in my life—David Fox (major professor), Mark Schimmenti, Jennifer Akerman, and George Dodds

Also, I thank the CoAD's faculty and Administration—Liz, Vikki, Fran, Vanessa, Judy, Laurie, and Don

I especially thank my lovely wife, Marquinta Lee Harvey and newborn daughter, Levia Elise Harvey for their love, support, and for pushing me to go beyond the margins

I would like to acknowledge my Family, Friends, and boss, Mary C. Wilson for their love, prayers, and support

ABSTRACT

Architecture exists in Place, the integrated context of both the built and natural environments, including socio-economic, cultural, and political climates that influence our growth, development, and survival. As architecture necessitates around human purposes, it is important that architecture is built for and sited in an environment compatible for human well-being. My thesis focuses on human habitation and its immediate relationship with human health, assessing the performance and functionality of Place that have an impact on human health. Using public housing as the vehicle of my investigation, I will seek the appropriate application of architecture for the betterment of human health.

Addressing the issues of public housing presents a contentious challenge to an already complicated industry, concluding the low level of priority given to successful reformation of public housing. Nevertheless, research shows that residents of low-income public housing are more susceptible to and experience a disproportionate burden of health inequities by virtue of socioeconomic conditions, acute racism, exclusion, and poverty (Lee, 2002).

The residents of public housing communities experience an accumulation of poor Built Environment Factors (BEFs) such as substandard and unsanitary housing, air, noise, and water pollution, proximity to noxious facilities, and limited connectivity to diverse food options and med-health resources (Charles, 2002).

Environmental health researchers have found sufficient and suggestive evidence of association linked to BEFs of Place that negatively impact overall human health. Among these BEFs, many are appropriate to architectural planning and application towards the development of a healthy community. Using the implications of my research, I will develop a model for the advancement of healthy, sustainable communities that foster a high quality of overall health that is adaptable to diverse neighborhood contexts.

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PLACE AND HEALTH

Linking the Built Environment with Human Health

Health as defined by the World Health Organization (WHO) is “the state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (who.int). *Place* is our habitat, or the environment where we live, work, and play, and is comprised of the built environment, the natural environment, and includes the socio-economic and political climates, which all have some influence on human well-being. My thesis investigates the relationship between health and the built environment and is a critique of low-income urban communities at both the scales of the community and of the habitat (or housing unit), and their association with the overall well-being of its residents. Where we live defines *Place*, and is a major baseline determinant factoring into the subsequent health conditions of its residents.

When thinking of community, one automatically begins thinking about their neighborhood; the essence of its affluence, its residents, how clean and nice it is, the typology of housing, and the surrounding contexts that either improves or hampers the image of that neighborhood. This is called *sense of place*, or one’s psychological perception and interpretation of where they live. *Sense of place* is a subliminal characteristic of community and is experienced by both its residents and visitors. Moreover, a community is experienced physically, more specific to its buildings, roads, sidewalks, infrastructure, vegetation,

density, and programming. While my thesis focuses more on the physical aspects of a community, I have taken into account that there are psychosocial stresses that impact overall health and necessitate social planning strategies.

In the context of my thesis, home (single- or multi-family units) will be defined as the physical user habitat. It is virtually impossible to think about home without considering the type of community it is sited in. Placing emphasis on home, the first things that come to mind are its size, aesthetic definition, accessibility, interior spaces, the number of windows allowing natural light to filter into those spaces, and the amount of privacy one has transitioning from the front porch to the bedroom. Home is designated a place for human purposes, a place that gives us privacy and escape from the outside world; a place for peace, security, and daily recovery from the mental and physical stresses of work.

Homes are constructed of natural and anthropogenic (man-made) materials for the purpose of creating an aesthetically pleasing exterior and to perform the role as an envelope for thermal comfort and shelter from outdoor elements and include active mechanical systems to fulfill building metabolic functions. Its existence in a clean community within reasonable traveling distance to work, school, medical resources, diverse food options, and community space, having quality infrastructure and connectivity to the broader neighborhood context is to be desired. Unfortunately this level of performance and functionality does not exist in many neighborhood contexts, most commonly within public housing communities.

Most public housing communities are sited within the context of moderate to high density urban communities, exhibiting poor built environment conditions such as unsanitary and dilapidated housing; proximity to noxious facilities, substations, or noisy, high traffic areas; poor infrastructure; limited connectivity to broader neighborhood contexts, diverse food options, and med-health resources; and are most often poverty-stricken with high crime, poor education, and high unemployment. It is common to describe public housing communities as slum and blight, and is the most undesired places for human habitation in society. It is unfortunate that stigma of public housing communities are associated with its residents.

I chose low-income public housing as the vehicle of my investigation for the reason that the residents of these particular communities are the most susceptible population to experience health risks due to multiple and cumulative exposures associated with the built environment (euro.who.int). The link between *Place* and its influence on human health is the assessment of its built environment factors (BEFs) and their association with health conditions common among residents of low income public housing communities.

Built Environment Factors (BEFs)

Built Environment Factors or BEFs are the human-made (versus natural) resources and infrastructure designed to support human activity, such as buildings, roads, lighting, amenities, utilities, land use, and location (countyhealthrankins.org). The built environment of public housing communities are a

reflection of socioeconomic conditions, acute racism, exclusion, and poverty, which explains why its residents experience a disproportionate burden of health inequities (Lee, 2002).Environmental health researchers have found sufficient and suggestive evidence of association linked to BEFs that negatively impact overall human health (Charles, 2002). In order to delineate the conditions of the built environment having some impact on health, I have categorized those conditions into *Macro BEFs* and *Micro BEFs.*

Macro BEFs

Macro BEFs are specific to the scale of the greater neighborhood context and are relative to a neighborhoods aesthetic appeal, connectivity to broader neighborhood contexts (inclusion), the sustainability of the ecosystem and utility/ circulation infrastructures, ambient air quality, water quality, noise pollution, and exposures to asbestos, biological contaminants, and infectious sicknesses/ diseases due to overpopulation.

Macro BEFs that are specific to public housing communities include (and are not limited to): roads, sidewalks, and lighting; trees and other vegetation for shading, wind-calming, and natural air purification; proximity to industrial plants and other noxious facilities; greenspace promoting physical activity and human interaction, and for density control; proximity to landfills/ brownfields increasing exposures to contaminants, chemical pollutants, and harmful metals; dilapidated buildings/ structures; poor site visibility/ surveillance due to location; limited or poor connectivity to public transit; and limited or poor accessibility to diverse/ healthier food options and health/ sick-care facilities (Kopec, Chp.1).

Micro BEFs

From day-to-day, the human body at any point in time is doing one of two things: either working or in recovery. As work (including physical and mental labor) is a necessity to sustain a good quality of life, rest and recovery are equally important. Normal daily activities revolve around work-recovery cycles. It is important that home promotes an environment of recovery. However there are several minute factors that can be disruptive to our ability to rest and recover, such as poor indoor air quality, noise, poor thermal comfort, and even fatigue due to lack of utilities. These are called Micro BEFs.

Micro BEFs pertain to the home, and as relates to public housing, a major problem with the home is that it is not safe, sanitary, or compatible for human purposes. The Micro BEFs particular to public housing units include (and are not limited to): water/ utilities infrastructure; moisture control; indoor air quality; natural and artificial lighting; safety/ integrity of the structure; color; spatial organization; scale and proportion; control and access; tactile response and thermal comfort; noise control; and privacy.

BEFs Linked to Health Conditions

“The general majority of people spend 90 percent of their time indoors. Working people divide their time between recurring home-to-work and work-to-home cycles throughout the work week, while homemakers spend as much as 85 percent in their homes” (Turiel, p.3). Similarly to homemakers, the subpopulations of small children, retirees, the disabled and elderly persons spend comparable amounts of time indoors.

Both Macro and Micro BEFs are of great significance, contributing to the health and quality of life of the residents of public housing. It should be noted that the residents are exposed the Micro BEFs over longer periods of times, especially the abovementioned subpopulations, as it pertains to the number of hours spent inside the home versus those spent outdoors in the community. More importantly, the negative impacts of poor BEFs on the health of public housing residents occur over short and long durations of time (see figure 3).

Among the health conditions associated with the built environment of public housing, the more prominent of those conditions are hypertensive heart disease, depression, and upper respiratory diseases.

Asthma is among the top 15 health disparities in public housing communities, and research shows that asthma is more common among inner-city residents, especially low-income African-Americans who make up the majority of the public housing population (nhlbi.org). Asthma is a chronic disease that greatly affects the subpopulation of small children due to accumulative exposures to poor indoor air quality and poor ambient outdoor air quality. Many public housing units have an unmet need for home rehabilitation, which renders the residents exposed to poor moisture control (mold, mildew), decayed materials, and poor ventilation. There are even some public housing units that contain asbestos, which is causes lung disease such as mesothelioma and lung cancer.

Hypertensive heart disease, or high blood pressure, is also among the top 15 health disparities in public housing communities. Although hypertension is

commonly associated to African-Americans by race, links to the built environment are indicators for greater persistence in comparison to similar non-Hispanic Whites (jhsph.edu). Weight and diet are causes of high blood pressure, and can be linked to the availability of diverse, healthier food options, the availability of health and fitness facilities, and greenspace options that encourage cardio activity.

“Depression is defined as severe despondency and dejection accompanied by feelings of hopelessness and inadequacy, and a lack interest and life motivation” (jhsph.edu). The accumulation of both Micro and Macro BEFs exhibited in low-income public housing communities ultimately has a negative impact on mental stability, self-esteem, and overall mental health. The World Health Organization’s definition of wellness includes the state of mental health because it is suspended in life balance (who.int). Depression has been linked to suicide and decreased mental stability resulting in domestic violence and homicide.

Psychosocial factors are considered to be intangible BEFs that have an impact on mental health, such as physical-social boundaries (railroads, interstates, tall retaining walls), exclusion, poor economy and efficacy, and the general “public housing stigma” associated with its residents. Connectivity to broader and diverse neighborhood contexts through programming (in many cases) are absent, and that connection is not merely physical, but social.

See Table 1 for more examples of BEFs associated with health concerns

Implications Appropriate to Architectural Planning

There are numerous BEFs associated with public housing communities that have an impact on the physical and mental health of the residents, and addressing each one of those conditions requires great humanitarian efforts from multiple disciplines beyond architecture. My investigation of the relationship between the built environment and human health implies that the link is the assessment of BEFs and their association with health conditions.

Architecture can be used as an apparatus to improve health conditions adversely affected by poor BEFs, beginning at defining the parameters that are appropriate to architectural design and planning at both the scales of community and the home.

A MODEL FOR A HEALTHY COMMUNITY

In order to develop a model for a healthy community, I asked the question—what constitutes a healthy community? I referenced the World Health Organization's (WHO) definition of a healthy community and it stated "one that includes a clean, safe, high-quality environment and a sustainable ecosystem; the provision of basic needs; an optimum level of appropriate high-quality accessible health and sick-care services; and a diverse vital economy" (who.int).

Beyond WHO's definition of a healthy community, my response to the same question was that a healthy community needed to necessitate around human purposes, was to be user defined, and it needed to promote the overall wellness of every individual that would live in it. It needed to be accessible by vehicle and by foot, to be incorporated with natural features embedded within its site, was to include healthy, sustainable homes, incorporate greenspace to encourage physical activity and human interaction, have access to diverse food options and health-med resources, and needed to have a physical and social connection to surrounding neighborhood contexts.

I chose public housing as the vehicle of my investigation because its residents are the most susceptible population to experience egregious health disparities, and through addressing those conditions, that same criteria would then be applicable to broader neighborhood contexts. After reassessing the BEFs of public housing communities that have an impact on human health, I categorized twelve parameters that

were needed to define a healthy community (see figure 1).

After spelling out each of the parameters, I defined each of the parameters and how they would positively influence health, including life safety standards.

1. Circulation—includes parking and egress for vehicles, pedestrian egress through the community and to/ from the residential units, and roads wide enough for bicycle traffic

2. Connectivity—physical connections to the urban fabric (neighboring contexts) and spatial connections that encourages social interaction within and from outside of the site; includes accessibility to public transit, diverse and healthier food options, and to health-med services/ facilities

3. Healthy Habitat—using sustainable methods and design innovation, create aesthetically pleasing units that where well insulated for thermal comfort, would make good use of natural lighting through orientation and use of the appropriate amounts of glazing (windows), would incorporate passive systems for ventilation, would house a comfortable spatial arrangement that evoke tactile response, and have clearly defined public/ private spaces

4. Infrastructure—safe roads with traffic calming, sidewalks having limited intersections with vehicular traffic, good exterior lighting, with all the necessary utilities (sterile, clean water, electricity, communications, etc)

5. Location and Land Use—the community would need to be sited in an area away from noxious facilities, brownfields, or landfills; and located near residential, or mixed use zones compatible for human purposes

6. Greenspace—incorporated to encourage human interaction and physical activity; used to control density and to promote a viable ecosystem

7. Neighborhood Space—clearly defined space that is specific to the residents; socially suitable neighborhood space (Hester, p.10)

8. Public Space—clearly defined public space specific to the community and residents, allowable for visitors

9. Private Space—clearly defined private space specific to the community and residents

10. Focal Point—not merely a geometrical center, but rather a focal point created in the form of a space, or building as an amenity for the residents to enjoy

11. Aesthetic Appeal—create an aesthetically pleasing built environment through design, using construction methods and materials, including landscaping

12. Natural Boundaries—use of natural barriers (trees, water forms, etc) to define the boundaries of the community and to control land use planning

CASE STUDIES

The following case studies were two that I deemed applicable to the site that I selected as the vehicle of my investigation (see Austin Homes below).

Cleaborn Homes, Memphis, Tennessee, USA

Cleaborn Homes (was) a public housing project located Memphis, Tennessee, the city in which I am native, and I am familiar with the conditions of this as several other Memphis public housing sites.

Cleaborn Homes were originally constructed in 1955 in South Memphis, Tennessee. This public housing campus housed 460 families, housing thousands of people throughout its existence. Time and use transformed the 460 units into a problem, described by one of the local residents as “similar to the housing of a third world country” (landmarkandlengends.com). This community experienced high crime, the corrosive cycle of poverty, and public health issues leading to its’ inclusion on a list of Memphis public housing developments to be demolished, but one of few developments to be redeveloped through the HOPE VI, U.S. Department of Housing and Urban Development program.

The proposed modern mixed-income, community revitalization project was to include 400 new units, 80 senior apartments, a community center, green spaces, and to be integrally tied to surrounding

neighborhood contexts, schools, parks, and be included in a ten-year, $1 Billion redevelopment area that encompassed a 20-city block area south of Memphis' own FedEx Forum (downtown civic arena). The new community is very nice, but it is unfortunate that many of its former residents would not enjoy it.

The controversy that this particular project faced was that many of its residents were displaced to the eastward outskirts of inner city Memphis, where they were confronted with NIMBYISM, a school consolidation fight to separate the new kids from the kids that were presently attending some of the better schools, and the crime problems followed.

I was particularly interested in Cleaborn Homes as a case study because it was a truly materialized community of poor BEFs, directly associated with poor health conditions, high crime (including suicide, homicide, and regular domestic violence), and exhibiting an incompatible environment for human purposes. I take from this project that programming is very important, with a redevelopment plan that would sustain the community for years to come. While the redevelopment was successful, it was unsuccessful at meeting the needs of all its former residents (see figures 9-12).

Pan Gyo Complex, Social Housing, Seoul, South Korea

The Pan Gyo Complex, Social Housing project was of interest to me because of the similar geographical features of the site, comparable to the topographic features of the site I selected for my thesis (see Austin Homes below).

California-based MACK Architects designed and developed the Pan Gyo Complex, as winner of a Korean National Housing Competition. The complex was completed in 2006 and was designed as a catalyst for a new type of sustainable, low-density residential community. The new community is sited amidst a heavily wooded, terraced terrain having 102 units of housing. The goal was to create this community with the smallest ecological footprint possible, with terraced units having shared and private greenspace (inhabitat.com).

All of the housing units have southern exposure, optimizing use of solar energy and radiant heating, the taller buildings at the top of the terraced site block cold northern winds, the stack ventilation systems are integrated through its stairways, and the units jog the topographic rhythm, constituting the context of the architectural solution (inhabitat.com).

This case study helped guide me to a terraced-housing design solution for my site, which is almost entirely sloped (see figures 4-8).

AUSTIN HOMES

The site selected for my research is Austin Homes, a twenty-six building, multi-family public housing campus located one mile northeast of downtown Knoxville, Tennessee. The site is a total of 21 acres, expanding behind commercial development on Summit Hill Avenue to the south and spanning into light industrial development to the north (see figure 2).

HISTORY

Austin Homes was the first of three major public housing communities to be developed in Knoxville. The 30 building complex was designed in 1938 by Bauman and Bauman Architects and completed by 1941 (see figures 13 and 14). Being comprised of 200 dwelling units, Austin Homes experienced high turnover rates and has housed thousands.

At the time it was completed, there was a worldwide impulsive need for housing during and after World Wars I and II. The dictation of the design were the constraints of government regulations for the mass production of durable housing; compressed “brick boxes” with structural concrete floors and plastered concrete masonry block walls, and no aesthetic exterior. Although the original community was dense, with uber-formal architectural housing units, provisions were made for pedestrian-only paths, efficient accessible roads for automobiles, and some greenspace (KCDC archives). The community was

integrally connected to the surrounding communities and had a viable connection to nearby downtown.

CURRENT

By the early 1970s, there had not been any true transformation of the buildings. Through high turnovers and decades of wear, the community was steadily deteriorating. Crime was on the increase and the community exhibited a poor quality of life. The community was becoming corrosive to surrounding neighborhood contexts by decreasing property values, there was a lack of public amenities, the infrastructure was outdated, and the obsolete housing units were difficult to alter because of their construction (KCDC Archives).

By 1977, construction had begun on a new interstate route that separated the Austin Homes community from the viability and development of nearby downtown. By 2004 twenty-three of the residential buildings were deemed slum and a public nuisance, and have since been demolished. The remainder of this community is disassociated from the prominent street edge, situated near a large industrial district and experience's high crime, the corrosive cycle of poverty; and is in danger of gentrification (see figure 2).

Currently the site experiences high crime and poor built environment conditions, there are no nearby food/ health-med resources, and there is poor visibility to and from the prominent street edge. There are rumors that there is no intention to rebuild the

community, as it was thought to not have been the best use of land (KCDC Archives).

PROPOSAL FOR A HEALTHY PUBLIC HOUSING COMMUNITY

My proposal for a healthy public housing community hypothesizes that the development and enrichment thereof will yield healthier and happier residents, helping to eliminate the public housing stigma, and increasing the quality of life for residents that otherwise experience some of society's worse conditions. Through spelling out the parameters of redefining a healthier built environment, I will inform those parameters through planning and design. My philosophy is a healthy environment will foster healthier people, since a huge part of us is where we are from.

Responding to the conditions of the site, I propose three rows of terraced, semi-detached single-family housing units with private greenspace for gardening and a hedge wall between the entry of each unit and the sidewalk. I will plan for parallel parking on local streets that are designed for traffic calming. I will use trees, lawn, vegetation, and permeable hardscapes to distinguish pedestrian paths from vehicular paths (see figure 23).

Each unit will be designed with three bedrooms and two bathrooms, including utilities, mechanical, and storage; will feature an open floor plan for connection between the kitchen, dining, and living room; will

feature a vaulted ceiling with a solar chimney to encourage stack ventilation, and will optimize the use of natural lighting (see figure 22).

I will introduce a central spine for circulation from Summit Hill Avenue down through the site, arriving at a greenscaped destination, and will design well-defined paths for pedestrian circulation (see figure 23).

The focal point of the site will be a pond surrounded by pavilions, a dock, and a nearby children's playground. Adjacent to the pond will be a community house that will include a residential retail office, space for resident's association meetings, a clubhouse, and a fitness room.

The neighborhood space will be overlapped with public space through the programming of the new community center that will include an outdoor swimming pool, indoor gymnasiums and recreation/ fitness facilities, office space, classrooms for vocational/ job training and after-school/ summer programs, a cyber café, and a walk-in clinic.

At the south (main) entrance into the site from Summit Hill Avenue, I plan to include a fresh market with space for parking and an outdoor farmer's market and a transit hub accessible to the Austin Homes Community and the adjacent public housing communities to the south of Summit Hill Avenue.

Emphasis will be placed on master planning, with some design details pertaining to the residential units.

(See Appendix for Design Process)

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Table 1. BEFs associated with Health Conditions, *Examples*

BEFs	Health Risks	Associated Health Conditions
Construction	Hap-hazard/ Poor integrity	Injury/ Accidental death
Location near noxious facilities	Poor Ambient Air Quality	Upper respiratory disease, nausea
Indoor Air Quality	Mold/ Mildew/ Chemical Pollutants	Allergens, Bronchitis, Asthma, Lung Cancer, Skin irritation
Building Envelope-thermal comfort	Over-exposure to High ambient temperatures	Heat Stroke, fatigue, increase in heart rate and blood pressure
Natural Lighting	Needed for production of Vitamin D	Affects Circadian Rhythm, Sleep cycle
Accessibility-Healthier Foods	Poor Nutritional Nourishment	Obesity, and related illnesses; malnourishment
Building Envelope-Asbestos (materials)	Exposures to Asbestos	Lung cancer, mesothelioma, chronic breathing disorder
Greenspace	Need for cardio-activity	Obesity, Cardiovascular Diseases
Aging Water Infrastructure	Biological Water Contaminants	Infectious spread of waterborne diseases
Greenspace-Density Control		Exposure to spread of airborne diseases

Source: (Kopec, 2002)

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Mental Health in the Black Community
http://www.npr.org

Cleaborn Homes
http://www.landmarkandlegend.com

Pan Gyo Complex by MACK Architects
http://www.inhabitat.com

APPENDIX

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Figure 1. Healthy Community Model

Figure 2. Austin Homes, Aerial View 2012, Source: Google Maps

Figure 3. Accumulative Exposures Cycle Diagram

Figure 4. Pan Gyo Complex, View from Unit (Southward), source: inhabitat.com

Figure 5. Pan Gyo Complex, West Elevation, source: Inhabitat.com

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Figure 9. Cleaborn Homes, Courtyard, source: landmarkandlegend.com

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Figure 13. Austin Homes 1941, Aerial View, source: KCDC Archives

Figure 14. Austin Homes 1940 Construction, source: KCDC Archives

Figure 15. Austin Homes Site Analysis

① COMMUNITY CENTER
② SWIMMING POOL
③ FRESH MARKET
④ TRANSIT HUB
⑤ SATELITTE TRANSIT HUB
⑥ SINGLE FAMILY, SEMI-DETATCHED UNITS
⑦ COMMUNITY GARDENS
⑧ POND
⑨ PARK/ PLAYGROUND
⑩ AMPHITHEATER
⑪ PAVILLIONS
⑫ GREEN MAGNET ELEMENTARY SCHOOL
⑬ SECTION 8 HOUSING, THE VISTA

Figure 16. Master Plan, 1st Iteration

Figure 17. Summit Hill Avenue, 1st Iteration

Figure 18. Community Gardens, 1st Iteration

Figure 19. Plans and Section, 1st Iteration

Figure 20. Community Rendering, 1st Iteration

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Figure 22. Sectional Perspective, 1st Iteration

Figure 23. Master Plan, 2nd Iteration

Figure 24. Summit Hill Avenue Elevation, 2nd Iteration

Figure 25. Site Section, 2nd Iteration

Figure 26. Unit Floor Plans, 2nd Iteration

VITA

My name is Brandon Martez Harvey and I was born and raised in Memphis, Tennessee. I am now receiving my Masters of Architecture degree from the University of Tennessee, Knoxville, where I also obtained my Bachelors of Urban Studies degree. My wife, Marquinta Lee Harvey (UT Alum) and I will be celebrating five years of being happily married on September 1, 2012 and recently gave birth to our firstborn, daughter Levia Elise Harvey on February 16, 2012. I have been playing the drums for over 20 years, I love gospel and neo-soul music, I am a very talented artist, I love traveling, and the two most important things to me on earth are Family and Love.