

# WHAT'S THE BIG IDEA?: LIVING TINY IN ATHENS, GEORGIA

by

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(Under the Direction of Lilia Gomez-Lanier)

## ABSTRACT

Informed by a recent interest in “authentic living” that has its origins in 19<sup>th</sup> century transcendentalism, the Tiny House Movement assumes that by reducing the spatial footprint of a home, one also reduces the carbon footprint and increases affordability. However, tiny homes present a number of problems in practice from the personal (privacy and accessibility issues) to the public (zoning violations, as well as cost-prohibitive barriers to entry for low-income earners). Using Christopher Alexander’s pattern language as a conceptual framework, this study aims to address the gap between theory and practice of the Tiny House Movement by proposing a new design that integrates the most salient characteristics of a tiny house into a small, traditionally-constructed house. Focusing on interior spaces, the goal is to create a prototype that preserves the ideals of the Tiny House Movement, but is more accessible to low-income earners within the researcher’s local community.

INDEX WORDS: tiny home, Tiny House Movement, small house movement, sustainable

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## **CHAPTER 1**

### **INTRODUCTION**

The “Tiny House Movement” has been gaining popularity in the public consciousness in recent years. Informed by a general interest in “minimizing,” “de-cluttering,” and “downsizing” that has its origins in the 19th century romanticism of Thoreau and Emerson (Morrison, 2014; Anson, 2014). Further developed by the 20<sup>th</sup> century minimalist credo that “less is more,” the main assumption of the tiny house movement is that homeowners can reduce the environmental impact and increase affordability by reducing their spatial footprint. Proponents of the movement have also been optimistic about the potential for tiny houses to address a number of housing issues. In fact, tiny homes have been proposed as a solution for mobile housing for busy travelers (Shahani, 2015), temporary housing and guesthomes (Hunter, 2015; Robinson, 2016), housing for the homeless (Priesnitz, 2014; Johnson, 2016), and as a general solution for housing in urban areas that host large populations in limited space (Priesnitz, 2014; Maghribi, Wakatsuki, and Deferio, 2015). Although the definition of tiny differs from person to person, even within the movement itself (Anson, 2014; Murphy, 2014), for the purposes of this study, I do not restrict the definition of tiny exclusively to the dimensions of a travel trailer—a base of 8 feet wide with a length of 16-20 feet (Murphy, 2014, p. 54)—and chooses instead to adopt the broad definition of any house, mobile or stationary, under 800 feet (Anson, 2014).

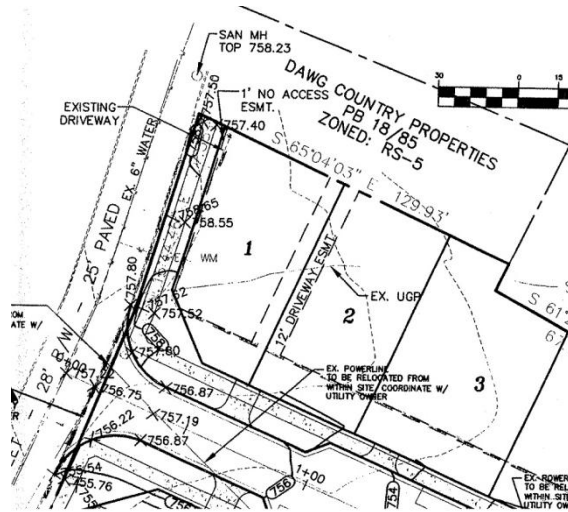
Issues of limited space, dense populations, and housing affordability all intersect in Athens, Georgia. At 121 square miles, the city-county of Athens-Clarke County is geographically the smallest in Georgia (Athens Clarke Country By-the-Numbers, 2016). Athens is also home to the University of Georgia, the second-largest university system in Georgia that

boasts a student population of over 34,000 (Athens Clarke County By-the-Numbers, 2016). Coupled with this limited space and dense population is that—even discounting the student population—Athens-Clarke County is one of the poorest in the state, with over 36% of the population living below the poverty line (Athens Clarke County By-the-Numbers, 2016). Despite this, the city has experienced ever-increasing property values and rental costs, to such a degree that rental assistance programs “haven’t kept pace with the demand or the need” for affordable housing in the city (Dr. Kimberly Skobba, as cited in Perry, 2015, p. 8).

Local non-profit organizations such as the Athens Land Trust are working to alleviate these problems. Through their affordable housing program, low-to-moderate income earners are able to own their homes outright, with the added benefit that each house constructed by the Athens Land Trust is EarthCraft-certified. EarthCraft is a third-party verification organization that certifies the environmental-friendliness of all buildings that meet their requirements. In order to be EarthCraft-certified, a home must adhere to the standards set forth by EarthCraft regarding certain “sustainability measures,” such as the use of “resource-efficient building materials,” energy-efficient appliances, and above-average indoor air quality (EarthCraft House, 2016).

The Athens Land Trust has constructed several residential neighborhoods throughout Athens, with the goal of providing sustainable housing for low-to-moderate income owners. One of the neighborhoods currently under construction is the Cottages at Cannontown, located in a low-income area of northeast Athens, along Cannon Drive. As of the time of this research project, plans have been developed for each of the 15 lots in the neighborhood except for one. This one remaining lot, a small corner lot at the entrance of the neighborhood, has long posed a design conundrum to the Athens Land Trust (Figure 1). While the lot must contain a residential building, it is too small to contain a house the size of its neighbors, which range from about 1300 to 1500 square feet. Although it is also a little larger than the typical tiny home (to be considered “tiny,” a home is usually 800 square feet or less), there may be lessons from the Tiny House

Movement that can be incorporated into this home in order to maximize the functionality within the confines of such a relatively limited space. Local interest in the tiny house movement is certainly strong (Perry, 2015), despite prohibitive zoning and building code regulations that would prevent the development of a “true” tiny home, mobile or otherwise—which indicates that a “tiny hybrid” may be the best solution.



**Figure 1. Site plan of Cannon Drive, featuring the unoccupied lot (Lot 1) (Courtesy of Athens Land Trust).**



**Figure 2. Photo of the unoccupied lot (author’s personal photo).**

## **OBJECTIVES**

The objectives of this study were:

1. To create a floor plan and furnishings plan for a prototype that is based on the characteristics of the tiny home, and addresses the need to provide sustainable housing for the low-to-moderate income populations of Athens, Georgia.
2. To explore local interest surrounding the Tiny House Movement and its feasibility as a long-term sustainable housing solution for Athens, Georgia.
3. To add to the existing body of knowledge regarding the Tiny House Movement.

These objectives give rise to the hypothesis of this study, which is that a stationary, “tiny house hybrid” can be an appropriate and sustainable housing solution for low-income earners in areas of dense populations and limited space (such as Athens, Georgia), who wish to own their own homes.

## **ASSUMPTIONS AND LIMITATIONS**

As with any proposed design solution, the results and findings of this study are by no means meant to be taken as a “one-size-fits-all” housing solution, for Athens-Clarke County or elsewhere. Within architecture and interior design, there is always more than one effective solution for any design problem.

Architecture and interior design research generally follows a constructivist epistemology, which assumes that people understand the world and construct meaning within their realities through the lens of their own experiences. Past experiences, personal biases, and cultural customs of a designer certainly influence the outcome of a design project; therefore, it is generally accepted in the design world that there is never just one solution to a problem. In fact,

two designers working with the same client can arrive at two completely different designs that address the design challenge with equal effectiveness, based on how they each generate meaning from the client's directions.

Also, because the particular design generated from this study is for a particular neighborhood in a particular region of the country, it may not be able to be generalized to other areas. The area being considered for placement of this home is one that is located in a relatively flat topography, with a temperate climate that doesn't vacillate between extremes of temperature.

The greatest limitation imposed on this project is the construction timeline of the Athens Land Trust. Their current goal is to begin construction on the undeveloped lot by the fall of 2016 (approximately 10 months from the initial proposal of this research), which places limitations on the amount of time the researcher has available to complete the design portion of this study.

### **SUBJECTIVITIES**

The researcher is currently a graduate student at University of Georgia, in Athens, Georgia. The Department of Textiles, Merchandising, and Interiors has aided the Athens Land Trust in previous projects. The researcher has previously worked with the Athens Land Trust during the summer of 2015, during which she worked as an unpaid intern and first became acquainted with the Cannon Drive neighborhood and the small undeveloped lot there.

The researcher has never lived in a tiny home herself, and grew up as a member of a 3-person family in suburban homes that were between 2,000-3,000 square feet—a much greater area than the 800 square feet or less of the typical tiny home. Thus, there exists the potential that the researcher harbors unconscious biases about the definition of what constitutes “adequate” living space, the desirability of single-family home ownership over other forms of residence (such as renting an apartment, townhome, or duplex), and aesthetic preferences for certain construction

methods. Also, these preferences may give rise to personal opinions of the feasibility of the Tiny House Movement as a long-term sustainable housing solution.

### **RATIONALE**

The toll that human activity has taken on the planet has become increasingly apparent, and in recent years, the question of how to deal with the finiteness of the earth's resources has become a fixture in the public arena. Growing public awareness over how human action negatively impacts the environment has led many industries to examine and modify their practices accordingly, and the housing industry is no exception.

In his 2007 book, *Sustainable Residential Development*, architect Avi Friedman paints an alarming picture of the state of the United States residential industry. He notes that the residential industry is the third-highest energy-consuming industry, only bested by the industrial and transportation industries. Compounded by the constant growth in the square-footage of the average home, this negative environmental impact shows no signs of slowing without reforms in the way that the industry approaches its practices (Friedman, 2007, p. 2). Consider that a 1700-square-foot home requires one acre of forest to construct, and that for every 2000-square-foot home, 8000 pounds of construction waste is generated (Friedman, 2007, p. 2). Many homes in the Southern United States even surpass this; data from the U.S. Census indicates that the average area of a newly-built home in the Southeast was 2711 square feet in 2014 (U.S. Census Bureau Survey of Construction, 2015). Multiplied by the more than 620,000 homes that are built annually in the United States (U.S. Census Bureau Survey of Construction, 2015), the amount of destruction to forest resources alone (to say nothing of the energy consumption required to maintain these homes once they are built) takes a severe toll on the environment that could lead to irreversible environmental damage in the long term if it continues unabated (Friedman, 2007, p. 2).



Interdisciplinary efforts to support sustainable living have the potential to effect lasting change on the residential industry's practices. For example, in 2008, the American Society of Interior Designers (ASID) and the U.S. Green Building Council (USGBC) jointly began REGREEN, a residential remodeling program that offers professionals an opportunity to be educated and gain certification in green practices. Along with the program, they also published a list of residential remodeling guidelines for those interested in building sustainably (Appendix B). Sustainability in interior design has been an ongoing issue, and in light of recent attention to issues of environmental friendliness, sustainability, and green living, architects and designers have turned renewed attention onto how the built residential environment contributes to homeowners' practices of sustainable living. ASID and the USGBC assert that "[t]he built environment has a profound impact on our natural environment, economy, health, and productivity" (ASID & USGBC, 2008). Housing clearly has a role to play in sustaining a healthy environment, and with the country recovering from a recent housing crisis as well, now is an especially relevant time to prioritize green living spaces that are also affordable.

In their 2014 comprehensive review of the residential industry, Memari, et al., also draw an apt analogy of "design professionals" being "stakeholders" in the field of residential sustainability (3). However, in an accompanying figure, a diagram is shown with a multitude of occupations comprising the body of stakeholders, with interior designers being noticeably absent (Memari, Huelman, Iulo, Laquatra, Martin, McCoy, Nahmens, and Williamson, 2014, p. 4). This demonstrated lack of awareness by other disciplines limits the ability of interior designers to be publicly acknowledged as full players on the stage of sustainability. Interior designers certainly play a large role in the development of interior spaces, and a project like this one may help to address their lack of visibility to other related residential occupations, such as architects, engineers, homebuilders, and general contractors.

Due to the very recent emergence of the Tiny House Movement, there have been relatively few academic discussions surrounding tiny homes and their alleged feasibility as a long-term sustainable housing solution (Anson, 2014). They have been widely covered in other media including periodical articles, narratives, blogs, and television shows, but examinations of the movement from an academic perspective are few and far between. This thesis hopes to break ground on a local level by more thoroughly investigating the motivations behind the movement and its current state of development. Although the laws of Athens-Clarke County do not currently (as of the time of this project) allow for the building of tiny homes as primary residences, perhaps there are still lessons to be learned from tiny house construction—such as introducing small, multi-functional and environmentally-friendly spaces on the microscale level within the home—that can be applied to the building of smaller homes.

This thesis is also significant because the “tiny hybrid” will be presented to the Athens Land Trust for consideration as a design solution for the vacant Cannontown lot. If chosen, this study will have led to a tangible result that will hopefully introduce an opportunity to further examine the impact and implications of the Tiny House Movement in the area, and its potential benefits to lower-income populations in the area as well.

## CHAPTER 2

### REVIEW OF LITERATURE

#### DECONSTRUCTIONISM IN ARCHITECTURE AND THE TINY HOUSE MOVEMENT

Architect and architectural theorist Christopher Alexander introduced the idea of a “pattern language” during the 1970s as an alternative to what he saw as a lifeless, inorganic, and derivative way of building. He often expressed the need for buildings to be “alive,” and how it is impossible for a building to embody aliveness “unless they are made by all the people in society, and unless these people share a common pattern language, and unless this pattern language is alive itself” (Alexander, 1977, p. x). With such a premise, he makes two bold statements: 1.) that the layman can and should have a direct stake in designing their built environments, and 2.) that there exists a universal process, the pattern language, by which anyone can build a functional space. Both *The Timeless Way of Building* (1979) and *A Pattern Language* (1977) are dedicated to fully explaining these theories, which provide a conceptual framework for this study.

Alexander defines each pattern as an “entit[y]...[that] describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem” (Alexander 1972, p. x). In total, he lists 253 patterns, tackling design issues ordered from the very general (patterns 1-3 are entitled “Independent Regions,” “The Distribution of Towns,” and “City Country Fingers” respectively) to the very specific (the last few patterns include titles such as “Ornament,” “Different Chairs,” and “Things From Your Life”) (Alexander, 1972, pp. xix-xxxiv). These patterns are meant to serve as a loose guide through the building process, and the “pattern language” itself is defined as how one chooses and then relates their

various chosen patterns together during the course of a project. By using this approach, anyone can use the patterns as fundamental building blocks, although each individual project may take on a different pattern language depending on how one chooses to link each element. This approach allows for a structured and yet versatile approach to building that can be used by anyone, from the architect or engineer to the layman wanting to build his own home.

In *The Timeless Way of Building*, Alexander insists that a formal architectural or engineering education is not required to build a space that is pleasing and functional. Arguing that “[t]he power to make buildings beautiful lies in each of us already,” it is clear that Alexander is a proponent of taking the process of building out of the rigidly structured and codified hands of the professional architect, and into the hands of those who have a direct stake in the spaces that will be used (Alexander 1979, p. 14). He states, “A building or a town is given its character, essentially, by those events which keep on happening there most often” (Alexander 1979, p. 66); so who better to design a space than the people who have a direct stake in the future occupation and use of the space, those who have the most direct understanding of what events will occur in the space?

This deconstructionist view is embraced in the tiny house community, as many followers build their own homes without the aid of builders or architects. Alexander’s assertion that building can be an intuitive process for any individual—as long as that individual has an understanding of the patterns that occur in a space and their interdependence—comes to life in Dee Williams’ 2014 memoir of building her own tiny home, *The Big Tiny*, almost 40 years after Alexander initially introduced his ideas of the pattern language.

Dee Williams was a Hazardous Waste Inspector for the state of Oregon when she decided to undertake the building of her tiny home. Despite her lack of formal training or previous knowledge of architectural theory, she inadvertently adopted a version of Christopher

Alexander's "pattern language" by considering her daily activities, how they are enacted in space, and how the design of her future home needs to accommodate those activities:

I started examining the way I draped clothes over the chair in my bedroom as I undressed at night, and how I automatically reached for the light switch just below shoulder height on the right, no matter what room or building I entered. I noticed how much space I needed to chop an onion or make a peanut butter sandwich, the height of my existing kitchen counters, the cabinets and chairs. I measured the height of the toilet, the depth of my closet, and the amount of room my torso consumed when I sat up in bed. (Williams 2014, pp. 109-110)

Not only does Williams take notice of her bodily patterns and the space they require, but also developed an awareness of how the built environment accommodated those patterns. Understanding "the connections between what things were...and how they were connected to me" gave Williams the information she needed to plan her tiny house from scratch and ensure that she would be able to function as well in it as she did in her full-sized home (Williams, 2014, p. 111). When she noticed "how the height of the bathtub made it easy to get in and out of the shower," or "the way the [door]handle...was low enough to grasp even when my arms were full of groceries," she realized that her ability to make those connections also gave her the ability to "[see] the world in a new way" (Williams 2014, p. 111). This is precisely the type of interrelation that needs to occur between "patterns of events which repeat themselves" and the space within which they "are always anchored," in order to ensure that the building project will be functional and appropriate for its occupants (Alexander, 1979, p. 69).

Alexander also often refers to competing interests that must be balanced within a space in order to best satisfy the needs of its occupants—for example, reconciling privacy and community access, or the need to be able to complete more than one type of activity within a certain space.

During her tiny home build, Williams also identified and adeptly balanced these competing interests, and thus employed yet another Alexanderian principle of home building: in order to be functional, a space must be constructed to most effectively balance one's often-conflicting preferences. She admits that images of the life she aspired to filled her head as she "argued with [herself] about what should or shouldn't be included in the little house" (Williams, 2014, p. 112).

On one hand, Williams desired a lifestyle emulating the type of sophisticated minimalism exhibited by some of her friends while camping. She wanted the same "glamping" (a portmanteau of "glamour" and "camping") lifestyle for herself, in which the unpleasant elements of camping—the bugs, pests, and "and endless supply of gritty sand"—were counteracted with little luxuries such as a "makeshift porch" constructed of grass mats, and a nice tablecloth for candle-lit picnic tables for meals (Williams, 2014, p. 112). On the other hand, she recognized that the three burners, oven, refrigerator, freezer, and full food-prep area required to support this shabby-chic lifestyle were completely incompatible with her real-life talents and patterned routine. "I had to be brutally honest with myself," she writes, "I rarely used my existing four-burner stove and oven,...a mismatch for my particular flair, which was opening up soup cans and pouring the contents into a waiting pot" (Williams, 2014, p. 113).

Williams then used her innate understanding of the principles of pattern language to reconcile her conflicting desires: the desire for apparent luxury, versus the desire to continue a low-maintenance lifestyle suited to her current talents. Ultimately, she decided to outfit her kitchen space with a one-burner stove, which then left room for her to incorporate an antique sink with a "beautiful hand-thrown bowl" that she salvaged from the crawl-space of her 1920s house (p. 113). Thus, she was able to make an environment that was both aesthetically pleasing to her while still being suitable for the activities that she planned to conduct.

## SUSTAINABILITY AND ITS ROLE IN INTERIOR DESIGN

As Susan Winchip points out in her textbook *Sustainable Design for Interior Environments*, many “erroneously believe that sustainability is a new name for green or environmental design” (Winchip, 2011, p. 4). Instead of adopting the narrow definition that only addresses the environmental impact of design, she advocates a holistic definition that encompasses environmental, social, and economic considerations.

The idea of expanding the concept of sustainability beyond the environmental was first introduced during the 1987 United Nations World Commission on Environment and Development, in a publication entitled *Our Common World*. The commission put forth a definition of sustainability, commonly known as the Brundtland Report, which is fully contained in Appendix A. The Brundtland Report notes that a truly sustainable project must “[meet] present needs without compromising the ability of future generations to meet their own needs.... Development involves a progressive transformation of economy and society.... Even the narrow notion of physical sustainability implies a concern for social equity between generations...” (Appendix A). Thus, the premise is made clear that sustainability is not just a discrete environmental practice that serves short-term goals, but something that paves the way for positive change over the long-term, and that allows future generations to live in a physically healthy environment that also promotes social and economic equity.

This concept of sustainability and sustainable development can be applied across multiple disciplines, including in the design world. For a more design-specific definition, Eastern Michigan Interior Design professor, Dr. Louise Jones—in her textbook *Environmentally Responsible Design*—states that sustainable development in design “implies a macro perspective, with enhancement of the global environment and protection of the world’s ecosystems as the underpinning for design decisions” (Jones, 2008, p. xi). She, like Susan Winchip, makes the important distinction that the “micro” perspective of green design is only one aspect of

sustainable practice. In order to be fully sustainable, a home must conserve its resources, function as an environmentally healthful space for its inhabitants, and also remain ecologically-conscious of its surrounding physical environment while accommodating the surrounding social and economic environment. This broad perspective is also referred to as “the triple bottom line, specifically the relationships between the environment and the economy, with a focus on social equity” (Memari et al., 2014, p. 9).

#### **i. Environmental Considerations**

Recent US Environmental Protection Agency (EPA) reports cite health concerns over indoor pollutants, which “may be two to five times higher than outdoor levels” (cited in Lee, Allen, and Kim, 2013, p. 1); furthermore, the origins of these indoor pollutants can be linked to “harmful gases or particles emitted from building materials, that is, flooring, paints and coatings, adhesives and sealants, wall coverings, and wood products” (Lee et al., 2013, p. 1). This is a clear example of the need for interior designers to heighten their awareness and participation in matters relating to residential sustainability. Interior designers are responsible for selecting materials and finishes (the “paints and coatings, adhesives and sealants, [and] wall coverings” referred to in Lee’s study), and therefore have a direct influence on which toxins may or may not ultimately be introduced into their spaces. Volatile Organic Compounds (VOCs) are a major concern for many paints, varnishes, and finishes, and are most likely the “harmful gases or particles” to which Lee refers. The term VOC refers to a wide variety of carbon-containing chemicals (hence the “organic”) that easily evaporate or sublime into their surrounding environments (hence the “volatile”), even at room temperature and normal atmospheric pressure (Costelloe-Kuhn, 2016, p. 1). VOCs can pose a major health hazard, and can lead to nausea, dizziness, and headaches; irritation of the eyes, nose, and throat; and some VOCs, most notably formaldehyde, have been found to be carcinogenic.



In addition to the indoor pollutants referred to by Lee, et al., chemicals such as chlorofluorocarbons (CFCs)—known to deplete the ozone layer—are also emitted by appliances such as refrigerators and air conditioners. Not only are CFCs a concern with these appliances; excessive and unnecessary energy consumption by air-conditioning units and other appliances can also lead to negative environmental impact and deplete resources. According to a 2005 report released by Natural Resources Canada, an air conditioner can consume the same amount of energy in one season as a standard refrigerator does in a year (Friedman, 2007, p. 2). Combine that with the general increase in household consumption of energy for other electrical appliances, water, and gas that is used for heating (and petroleum gas used in suburban cars), and there is a massive area of improvement that interior designers are certainly poised to tackle through ecologically responsible design decisions. For example, the decision to specify energy-efficient appliances certified by a third-party verifier such as EnergyStar, or designing fenestration (windows and their placement) to minimize the amount of heat trapped from the sun's light, are both within the purview of the interior designer.

## ii. Economic considerations

Naturally, one can assume that a smaller space costs less to build. A by-the-numbers look at a few of the spaces studied for this thesis confirms that tiny homes can reduce a homeowner's overall expenditures significantly. The last row represents the Tumbleweed Tiny House company, based in Colorado, which was the first commercial producer of tiny homes.

**Table 1. Cost Comparison of Tiny Homes**

Home	Location	Square Feet	Cost to Build
aatinyhouse (April Anson)	Oregon	120 sq ft	\$20,000
Mary Murphy	Vermont	82 sq ft	\$5,000
The Big Tiny (Dee Williams)	Oregon	84 sq ft	\$10,000
Tumbleweed Tiny House Company	Colorado	117-131 sq ft	\$57,000-\$61,000

**Note:** The average cost of a U.S. home in 2014 was \$306,900 (U.S. Census Bureau Survey of Construction, 2014).

Outright costs are lower, as are the cost of heating, cooling, and energy. For example, Mary Murphy states that her tiny home only cost \$15 to heat during its first Vermont winter—the cost of a space heater (Murphy, 2014, p. 56).

### **iii. Social Considerations**

When it comes to social sustainability, one must consider community context. How does a home work with other homes in its neighborhood, and how does a neighborhood relate to the surrounding community? What kind of amenities are within convenient distance, and do these amenities appropriately serve the neighborhoods within which they are located? The answers to these questions are heavily dependent on the specific make-up of each community.

Because of their small size, relatively low cost of construction and maintenance, and (in many cases) portability, tiny homes have been proposed as a solution for a versatile array of housing problems in a number of different environments. As diverse as the environments they find themselves in and the clientele they can serve, tiny homes are also aesthetically diverse. Tokyo resident Minoru Ota’s concrete-clad cubic “micro-house” fits seamlessly into the urban landscape of Tokyo (Maghribi et al., 2015), while Mary Murphy’s rustic wooden home on wheels complements the rural Vermont landscape she calls home (Murphy, 2014).

Tiny homes can provide temporary housing—as in the case of Harvard School of Design’s experimental tiny homes for rent as guesthouses for travelers visiting the Boston area (Hunter, 2015; Robinson, 2016)—transitional housing for those looking to save money for a larger property, or mobile studios for frequent business travelers (Shahani, 2014); or even permanent housing for some looking to shed the cost of living in and maintaining a traditional larger home (Williams, 2014). In rural environments, tiny homes can provide shelter and

mobility for those who wish to pursue an alternative lifestyle and live “off-the-grid” (Murphy, 2014). In urban environments, tiny homes can house dense populations in limited space.

For example, in areas like Tokyo, Japan—which is home to approximately 6,000 people per square kilometer— “micro-houses” have become more common over the past 20 years (Maghribi et al., 2015). With the price of land surpassing \$1,000 per square foot as of 2015, residents wishing to own their own homes must often build on extremely small lots, some built on footprints as small as 26 or 30 square meters, which is about the size of two parking spaces (Maghribi et al., 2015). Japanese architect Denso Sugiura notes the rise in demand for micro-houses has coincided with the growing number of working families, who wish to move their households closer to city offices, and states that he has designed 135 micro houses in the past 20 years (Maghribi et al., 2015).

Although micro homes have taken root in Tokyo over the past couple of decades, the consideration of tiny homes as a housing solution in urban areas of the United States is a much more recent development. In 2012, an experimental tiny house village, called Boneyard Studios, was built in Washington, D.C., to demonstrate the potential for tiny homes on wheels to provide a creative solution for urban infill (Priesnitz, 2014, p. 14).

Another use for the urban tiny house is as a solution to local homelessness. In January of 2016, Seattle opened the doors to its first tiny house village for the homeless. The 14 houses each take up an 8 foot-by-12 foot footprint, and cost \$2,200 each (Johnson, 2016). Similar villages in Austin, Texas; Olympia, Washington; Eugene, Oregon, were all funded by the efforts of local non-profits or churches (Priesnitz, 2014).

The case studies in the following section more closely examine some of these examples.

## CASE STUDIES

### i. **Kyosho jutaku: Microhomes in Tokyo, Japan**

*Kyosho jutaku* is the Japanese term for “micro-home.” The Japanese are no strangers to living small; for decades, the Japanese have packed its dense population into small living quarters. In the 1970s, the then-head of the European Commission, Sir Roy Denman, famously (or infamously) remarked that Japan was “a nation of workaholics who live in what Westerners regard as little more than rabbit hutches” (Buchan, 2006, p. 1). Because they have been building tiny for so long, the Japanese are quite advanced in their space-saving techniques and the ability to artfully craft tiny homes that serve the needs of their inhabitants.

Japanese architects have had to be especially innovative to design micro-homes, some of which are constructed on plots of land the size of a single parking space (Craft, 2010; Lah, 2010). These tiny homes are far from an irregular oddity, but have become the “new normal” according to professionals; Tokyo-based architect Junichi Sugiyama states that, as of 2010, micro-homes constitute about 70 percent of his architectural firm’s business (Lah, 2010).

In order to successfully construct a home in such tight quarters, architects must draw from an arsenal of visual tricks, space-saving techniques, and creative storage solutions. Multi-functional spaces are a key component to any micro-home: kitchens can double as dining areas, or a bedroom can also be a recreational space (Maghribi et al., 2015). Eliminating interior walls and hallways visually opens spaces to multiple uses, as do innovative features such as furniture that can fold into walls (Craft, 2010). Incorporating as much natural daylight as possible also contributes to making a small space feel more open, and in multiple instances these micro-homes are designed with very intentional fenestration: “south-facing, large windows [to] create the illusion of space” (Lah, 2010); “[w]indows, in a variety of shapes and sizes,... scattered across a wall, or concealed near the base” (Craft, 2010); a sky light to allow light to reach each story, in

which the “[f]loors are bare concrete with gaps on both sides” (Maghribi et al., 2014); or even a home covered in “a translucent skin, in order to exploit all available natural light” (Craft, 2010). Just as unconventional (by Western standards) are the eye-catching shapes of these homes, due to the materials used. With fiber-reinforced plastic, pre-cast and Ferro concrete, glass cubes, and thin steel membranes, the micro-homes of Japan are able to take on a variety of creative shapes to match their unusual interiors. Transparent furniture and smaller-sized appliances conserve needed space, and hidden cabinets and the nooks and crannies formed by small staircases become storage solutions (Lah, 2010).

## **Summary**

Because Japan has had a decades-long history of tiny living, the Japanese have had ample time to discover creative solutions to the design conundrums faced by building in such limited space. As the United States begins to embrace the idea of living tiny, perhaps there are lessons to be learned from the innovative use of space planning, materials, and construction encountered in Japan.

### **ii. Boneyard Studios Village: Washington D.C.**

Boneyard Studios, founded by Lee Pera, Brian Levy, and Jay Austin, began as a collection of four tiny homes built upon a small undeveloped alley lot in northeastern Washington, D.C. The lot, which measures only one-eleventh of an acre, was purchased by Levy in 2012 in order to introduce Washington, D.C. to the phenomenon of the tiny home, as “an experiment in simplicity, and sustainability, and creative urban infill” (Boneyard Studios, 2016).

With its emphasis on community, cooperation, and collaboration, Boneyard Studios demonstrates the importance of social sustainability in the tiny house movement. Although each of the homes measures less than 220 square feet, each was built as a collaborative effort. As a self-proclaimed “tiny house community” (Boneyard Studios, 2016), the village also features

communal amenities such as an organic garden—which boasts 16 fruit trees, ten 4-by-8 plots for vegetables, as well as various herbs and flowers –along with a 250 gallon cistern to irrigate it (Laylin, 2013).

Boneyard Studios' community-mindedness is also highlighted within its mission statement, stating that the goals of the village include “support[ing] other tiny home builders” and “model[ing] what a tiny house could look like” to the larger community (Boneyard Studios, 2016). Outreach efforts includes “a rigorous education campaign” that includes seminars on tiny house building and open houses to demonstrate the ability of tiny homes and tiny home communities to creatively fulfill the need for sustainable, affordable urban housing. In the words of founder Lee Pera, “A lot of folks have been talking about tiny house communities, but most tiny houses are in someone's backyard or in a rural area.” She continues, “I really wanted to see what we could do creatively in D.C. with urban infill, and just another form of affordable housing” (Cater, 2015). Also to the village’s advantage is its close proximity to public transit and local retail establishments, both important aspects of sustaining the community and its inhabitants socially.

Each of the original Boneyard Homes is unique, showcasing the versatility of the tiny home and the ability to shape each home to fit its owner’s preferences while still effectively supporting the goals of sustainable living. Two of the homes feature rainwater collection systems, and two utilize solar power (Laylin, 2013). Aesthetically, they range from the rustic cedar-sided Pera House to the cubic modern look of Brian Levy’s Minim House—which also won the 2013 Merit Award from the Washington, DC, chapter of the American Institute of Architects, as well as the Washington Award of Excellence from the same organization in 2015 (Goldchain, 2015). In terms of square-footage, the houses range from 140 to 210 square feet (Laylin, 2013).

## **Summary**

Zoning laws in Washington, DC, state that a structure must be a minimum of 400 feet in order to be considered habitable. Because of this law, the homes in Boneyard Studios cannot legally be lived in full-time. Additionally, the lot is considered “nonbuildable” because the surrounding alleyways are less than 30 feet wide (which prevents adequate access by emergency vehicles), so the homes are all on wheels, built and towed in on trailers. Part of Boneyard Studio’s outreach involves advocating to change building and zoning codes, but until the laws change, the homes can only be used as part-time residences to model the potential of a full-time tiny home village.

Over-reliance on community resources, rather than building each home to be completely self-sufficient on its own, has proven to be a disadvantage to the Boneyard Studio. As of 2015, disputes over ownership of the land, finances, and use of community resources have fractured the original founding group, and Brian Levy is no longer associated with the group and has moved his Minim home to a different D.C.-area tiny house commune (Mok, 2015). Indulgent Restraint has also been moved elsewhere, leaving Jay Austin and Lee Pera as the sole part-time residents and proprietors of Boneyard Studios today (Boneyard Studios, 2016).

### **iii. East Union Homeless Village: Seattle, Washington**

In 2015, more than 45 homeless people died on the streets of Seattle, prompting Mayor Ed Murray to declare a civil state of emergency, whereupon he pledged \$5.3 million to combat the issue (Cohen, 2015). \$2.6 million of the pledged funds were directly allocated for prevention efforts, including moving the homeless into housing (City of Seattle Executive Action Plan, 2015, as cited in Cohen, 2015). Along with public funding, many private organizations made efforts to help alleviate the city’s growing homelessness. In January, 2016, Seattle opened the doors to its first tiny house village for the homeless. The 15-house village is located at 2116 East Union

Street, and is a joint project of Seattle’s Low Income Housing Institute and Nickelsville—a network dedicated to provide eco-friendly housing to Seattle’s homeless (Johnson, 2016).

Each home cost about \$2,200 to build, and each is insulated and has electricity, with oil heat registers during winter and fans during the summer (Capitol Hill Seattle, 2016). Because the lot upon which these tiny homes were built previously contained a single-family residence, the prior utility services can still be used for the tiny home village (Johnson, 2016). Each can fit a family of three, and there are communal amenities including a kitchen tent, showers, and a bathroom pavilion (Capitol Hill Seattle, 2016). Residents will pay \$90 monthly to cover the utilities (Johnson, 2016).

### **Summary**

With rules and a contracted agreement in place for all residents, East Union Village is less likely to fall victim to the conflicts that plagued the Boneyard Studios over fair usage of community resources. In addition, the transitional nature of the housing allows countless people to benefit from this housing, even when the initial tenants have no more use for them. This enables the community to embody the principles of both environmental and social sustainability.

## **LOCAL INTEREST IN TINY HOMES**

Athens-Clarke County is geographically the smallest county in Georgia, and is also home to the University of Georgia, the second-largest university system in Georgia. It is also one of the most impoverished counties in the state. Here, the combination of a large, low-earning population condensed into a geographically limited space leads to circumstances ripe for the consideration of tiny homes as a housing solution, and local interest has been growing.

In November of 2015, local periodical *Flagpole Magazine* ran a cover story on the increasing local interest in tiny homes. Spurred on by “ever-rising rents and property values,” some locals have begun expressing an interest in incorporating tiny homes into Athens’



residential options (Perry, 2015, p. 8). Residents in favor of tiny houses, such as Paula Loniak, cite many of the common perceived benefits of tiny living: “she wants to simplify her life by downsizing, but another major draw is the financial freedom of owning a house that, if she builds it herself, might cost as little as \$12,000” (Perry, 2015, p. 8). Loniak is also the leader of a local online interest group, the Athens Tiny House Meet-Up (“Athens Tiny House Meet-Up,” n.d.), which had 148 members as of March, 2016, and whose purpose is to unite “people who are interested in tiny houses or the philosophies that go along with tiny house living.” She is also interested in tiny homes as a way to preserve the interests of long-time Athens residents, noting that “[i]t seems that all the building that’s going on in Athens is geared toward UGA students, and it’s not taking into consideration the people that are going to be here for more than four years...I want to stay in Athens, and I’m getting priced out” (as cited in Perry, 2015, p. 8). This is a concern that is also seconded by Dr. Kimberly Skobba, a University professor who introduced a course on Tiny House Construction to the Fall 2015 curriculum at the University of Georgia. “We have a very high poverty rate here in Athens, so we have a lot of low-wage earners trying to compete in the housing market with college students who have more resources available” (as cited in Perry, 2015, p. 9).

The displacement of long-term residents by college students even has the potential to erode the character of Athens itself, according to some concerned citizens. Athens has a reputation of being a creative hot-spot in Georgia for independent artists and musicians, with local groups such as R.E.M. and the B-52s going on to achieve national fame. In earlier days, “[t]he people that put Athens on the map by creating this arts and music scene...had these great neighborhoods intown, near our commercial corridors and right near downtown, where they could all live in close quarters,” states Athens-Clarke County Commissioner Melissa Link, which created a collaborative atmosphere which is “necessary for that creative environment” for which Athens is known (as cited in Perry, 2015, p. 8). With dwindling options for affordable housing,

Commissioner Link warns that “[c]reative people...are getting dispersed to the suburbs, or they’re moving to other cities,” and this affects the diverse character of the town in a detrimental way that may dissuade others from wanting to live there. She claims herself that “I don’t wanna live in a community where artists and musicians and restaurant managers and school-teachers can’t afford to live” (as cited in Perry, 2015, p. 8).

Tiny house advocates have also taken steps to demonstrate their interest in actually introducing tiny homes to the community. Athens resident Peter Hartel owns a 204 square foot tiny home that he built himself (Perry, 2015, p. 9). Loniak’s Tiny House Meet-Up Group organizes meetings with the Planning Commission in order to lobby for the wider consideration of tiny homes or a tiny house community within Athens, and states plans on its site to even present the idea to other local organizations such as the Athens Land Trust (<http://www.meetup.com/Athens-Tiny-House-Meetup/events/228855723/>). In March of 2016, tiny house residents and leaders of the Georgia Tiny House Association, Jon Kernohan and Fin Davies, organized the first Georgia Tiny House Festival, a three-day event held in Eatonton, Georgia, less than an hour’s drive from Athens.

## **LEGAL BARRIERS TO IMPLEMENTATION**

As interest in the Tiny House Movement grows, a closer look at what living tiny actually entails is required. Anyone interested in building their own tiny home has quite a few issues to wrangle with, both practically and philosophically.

Practically, the greatest barrier to the proliferation of tiny homes is adherence to building codes and local zoning ordinances (Anson, 2014; Murphy, 2014; Priesnitz, 2014; Williams, 2014; Perry, 2015). Tiny homes occupy a grey area between a trailer/mobile home/RV and a house, and for the most part do not fit neatly within any existing legal category. If viewed strictly as a

house, they often violate building codes regarding size, both in terms of overall size (many areas designate a minimum square-footage in order for a space to be considered habitable); the size of interior features such as doorways, hallways, and staircases; and even whether certain “green” features often employed by tiny house owners (for example, greywater or compostable toilets) are permissible. When viewed as a mobile home, there are many restrictions placed on where they can be legally parked—and mobile home communities (“trailer parks”) and RV communities don’t always allow tiny homes (Anson, 2014).

Athens resident Peter Hartel was able to build his own stationary (foundation-built) tiny home in Athens, but describes the process of building to suit all local codes and regulations as “a nightmare” (as cited in Perry, 2015, p. 9). Because his home is located in the Bloomfield Street Historic District, he not only had to consider the laws of the Athens-Clarke County Planning Commission, but the regulations of the Historic Preservation Commission as well. New homes built in historic districts are subject to regulations regarding their appearance, as they must not disrupt the aesthetic character of the original neighborhood. After working with both Commissions to ensure that his 204 square-foot house was built to code, he admits that much of his own vision was obscured in the process: “[i]n my heart, I would have been better off buying another piece of property and building the house that I really wanted to build” (as cited in Perry, 2015, p. 9).

Mary Murphy, who built a tiny home on wheels in central Vermont, also acknowledges the legal difficulties of trying to abide by building codes, whose requirements of “broad hallways, wide doorways, and a host of other details...make it difficult to design a small space that works well” (Murphy, 2014, p. 54). She suggests that putting one’s tiny home on wheels is not only a way to achieve the convenience of mobility, but is also a way to exploit the “legal loophole” that exists around tiny home construction (Murphy, 2014, p. 54). Building her tiny home atop a trailer allowed her home to be governed by RV laws, which eliminated the need to abide by a minimum

habitable space requirement, and also allowed her to choose which systems to include in her home according to her individual needs, rather than “waste[fully]...installing conventional systems just to meet building codes” (Murphy, 2014, p. 54)—systems that could go unused would ultimately waste resources and cost her more in utility bills and upkeep. She also notes that trailers are not subject to property taxes, which further lightens her financial burden (Murphy, 2014, p. 54). However, the advantages of a mobile tiny home are offset by the difficulties imposed on them by zoning ordinances, which regulate where tiny homes can legally be parked.

Even in areas reputed to be more lax in zoning regulations, such as in the West and Pacific Northwest (where tiny homes are more commonly seen than in the South), zoning ordinances can still be less maneuverable than expected. Dee Williams, who built her tiny home in Oregon, ran into problems with zoning through all phases of her tiny home journey, from construction to residence. When planning the dimensions of her tiny home on wheels, she had to abide by the safety requirements of the Department of Motor Vehicles to ensure that her home could travel the roads without taking up more than a single traffic lane or getting clipped by highway overpasses, leading her to the conclusion that her home could not exceed 13.5 feet in height and 8.5 in width (Williams, 2014, p. 96). She ran into her first major setback when her neighbor, a building contractor, informed her that the city of Portland would not allow her to keep her trailer on the street (Williams, 2014, p. 124). As it was too large to fit on her driveway, she ultimately had to park the trailer on a friend’s driveway to construct the home, while storing construction materials in her friend’s garage. Once the home was completed, she moved it to Olympia, Washington, to park in the backyard of another set of friends. After an article about her tiny house ran in the local newspaper, townspeople began to complain that Williams and her tiny house were “squatting” in town, “undermining the local economy” by unfairly taking advantage of the public amenities (such as the public library) while not paying property taxes (Williams, 2014, p. 251). After an inspection, she was notified by the city that as her home was considered a

travel trailer, it was illegal to reside in it full-time as it is considered a vehicle only for “recreation” (Williams, 2014, p. 255). Her one recourse was to exploit a legal loophole in which she was able to receive a special caregivers’ dispensation; by registering as an official caregiver for her friends’ ailing great-aunt (who also lived on the property), she would be able to legally keep her recreational vehicle on the property (Williams, 2014, p. 257).

As tiny homes grow in popularity, a few locations have begun to take legal measures to recognize them as their own form of housing, as opposed to trying to fit them into existing regulations. In January 2016, Fresno, California, became “the first city in the nation to write into its development code authorization for ‘tiny homes’” (Mayor Ashley Swearingen, as cited in Khokha, 2016). The law allows any tiny home on wheels to legally be parked on a property as a permanent dwelling, rather than applying RV or travel-trailer legislation (which are legally only for temporary residence, and have restrictions on where and for how long they can be parked) to them. Although this is a victory for tiny home enthusiasts, Fresno is (as of the time of this study) the first and only area that has changed its laws regarding the zoning of tiny homes.

### **CRITICISM OF THE MOVEMENT**

One of the philosophical tenets of the tiny house movement is the departure from the values of conventional society, most notably excessive consumerism and materialism. By living small, one must keep only what is necessary to live, and a tiny house is also a deterrent to acquiring more stuff that will just take up more space. However, as tiny houses gain more recognition nationally, they themselves have become a part of popular culture, feeding into the consumerist trends they are supposed to deviate from. Anson points out that “[p]opular media is undeniably bound to the commodification of environmental sustainability in a market that continues to shelter economic and class privilege,” thus bringing attention to a glaring

discrepancy between the theory and practice of the movement (Anson, 2014, p. 292). Tiny house shows have become a fixture of cable television; the HGTV network alone currently airs three tiny house-related shows—*Tiny House Hunters*, *Tiny House Builders*, and *Tiny House, Big Living*—and will soon be adding a fourth, called *Tiny Luxury*, which advertises itself as following the commissioned homes built by the show's hosts, who own “the country's premier, high-end tiny home building company” (“Tiny Luxury”, 2016). These shows market the tiny house movement as the new trend in consumerism, and using the language such as “premier,” “high-end,” and “luxury” automatically connotes a diametrically-opposed construction between privilege/wealth and poverty—which feeds the consumerist narrative of the haves vs. the have-nots (and the desire to belong to the former), rather than opposing it.

As discussed previously, living sustainability involves adopting long-term practices rather than focusing on the needs of the moment. However, many tiny housers do not live in their tiny homes permanently, and instead choose to adopt the lifestyle as a temporary arrangement (Anson, 2014, p. 294). Popular impermanent uses for a tiny home include using one as temporary housing while the inhabitants save for a traditional home, as a vacation or recreational home, or even as a rental home to generate extra income. None of these involve adopting a long-term change in lifestyle, and actually turn the tiny home into an extra material convenience, rather than a sincere consequence of a simplified lifestyle. In fact, Athens' own tiny-homeowner, Peter Hartel, falls into this category. He does not live in his tiny home in the Bloomfield District; rather, he lives in his primary residence while the tiny home is parked in the backyard, where it is utilized as a guesthome “to host UGA guests, students, and interns” (Perry, 2015, p. 9). When used as a second property (a vacation home or income property), the homes become “yet another form of accumulation,” undermining the philosophical bedrock upon which the movement was formed in the first place (Anson, 2014, p. 294).

Practically, there are also hurdles to overcome before tiny living can be widely adopted. Although tiny homes have been proposed as the solution to a wide array of housing issues to suit different populations, “questions of access and private property rights emerge as controlling factors in the ability to join the movement,” which also undermine the tiny home’s claim as the most sustainable housing solution available today (Anson, 2014, p. 297). These include:

1. The expense to build. Although tiny homes do cost less to build, homeowners need to have the capital to build them up-front. Because tiny homes are not solidly defined as either a home, accessory dwelling unit, or trailer in many jurisdictions, construction loans to build them are hard to obtain. Although building a home for less than \$10,000 seems inexpensive, it becomes expensive when one needs all \$10,000 outright (Anson, 2014, p. 293). Also, people like Mary Murphy and Dee Williams had easy access to second-hand and salvaged materials to build their homes, which helped decrease their construction costs even further. However, poverty-stricken people may not have ready access to second-hand or salvageable materials depending on where they live or what vehicles they have available to collect and transport goods. Therefore, tiny home may not be as accessible to poor populations as may be initially assumed.

2. Living expenses: Although heating and cooling costs decrease with a limited space, so too does space for appliances and storage. Often, tiny homes contain either limited or no food storage, so residents need to make more frequent trips to the grocery store, or spend money and gasoline by going out to eat more. In addition, tiny homeowners may find themselves relying on others for access to showers or to store possessions. In a situation where a person has strongly established social networks or ready access to public amenities, this may not be a hurdle; however, once again, disadvantaged populations may be unable to manage a lifestyle in which they need to travel frequently to eat or shower.

3. Lack of privacy: Because tiny homes are so small, lack of privacy becomes a concern for those who do not live alone; for this reason, Mary Murphy admits that tiny homes may not be a suitable living arrangement for families (Murphy 2014, p.15). Fuyuhito Moriya, a 39-year-old unmarried man, lives with his mother in a home built on a 30 square-meter lot in Tokyo (Lah, 2010). After living in the home for six months, he cited privacy as his biggest challenge with the space.” Privacy has proven a challenge, he says, since he and his mother can't exactly escape each other in their super small house” (Lah, 2010).



## **CHAPTER 3**

### **METHODOLOGY**

This thesis encapsulates characteristics of both case study and grounded theory methodologies. A case study involves “in-depth and often longitudinal examination with data gathered through participant observation, in-depth interviewing, and document collection and analysis” (Glesne, 2011, p. 22). Participant observation occurred at the Georgia Tiny House Festival during an hour-long discussion led by Southface, an Atlanta-based company with a focus on sustainable residential design. In-depth interviewing took place at the festival, as well as at the Athens Land Trust. Document collection and analysis was conducted through viewing and analyzing photographs, literature, and media featuring tiny homes.

A case is defined as any “bounded system with working parts,” and the bounds of the system (as well as the system itself), are subject to definition by the researcher (Glesne, 2011, p.22). For the purposes of this study, the case around which this study is centered is the undeveloped lot in the Cannon Drive neighborhood in Athens, Georgia. More specifically, this type of case study is categorized as an instrumental case study, which “provides insight into an issue or...redraw[s] a generalization” (Stake, 2000, as cited in Glesne, 2011, p.292). In this study, the Cannon Drive lot is an instrument to aid in providing insight to the recent small- and tiny-living movement, as well as understanding how adopting aspects of the movement can provide a design solution to a current problem. Sometimes, a case study is viewed as a “research strategy” rather than a method in itself, as various methodologies can be employed in doing a case study research project (Glesne, 2011, p.22)

A grounded theory approach more accurately describes the methods by which this case study is conducted. Grounded theory involves “developing theory that is ‘grounded’ in data” (Glesne, 2011, p.21). Often used in social research, the researcher develops theories by “collect[ing] data (through interviews and observations) on a topic, analyz[ing] that data for conceptual categories, link[ing] the categories into a tentative theory, and then collect[ing] more data to see how the theory fits” (Glesne, 2011, p.21).

Initially, data was collected at the Georgia Tiny House Festival. At the conclusion of the festival, the interview transcripts and media were analyzed to identify any emergent themes that corresponded to themes encountered in the Review of Literature. Tentative theories about these themes were developed, and the information gathered from the Festival helped to refine the direction of the interviews that were later conducted at the Athens Land Trust. Finally, I used the theory generated from the data to create a visual design solution in a series of drawings.

A study such as this one requires a qualitative approach—focusing on questions of people’s perceptions of how and why a particular phenomenon affects a population—as opposed to a quantitative approach. The underlying questions of *how* the tiny house community espouses ideals of sustainable living, *why* its enthusiasts and adherents want to adopt such a lifestyle, and *how* this approach to sustainable living can be adapted to fit the requirements of an existent residential neighborhood, cannot be fully answered by calculating percentages, numbers, or discrete quantities. In investigating local interest around the Tiny House Movement, identifying perceptions and motivations were of the most importance, and was thus a qualitative inquiry. Synthesizing the opinions, perceptions, and suggestions of others into a series of drawings demonstrating a design solution is a qualitative endeavor.

This study, as is common in qualitative inquiry, involves taking an in-depth look at a smaller population, rather than broadly viewing a larger population. Spending time with a

smaller population—four interview participants in this research— yields a depth of information that is often impossible to glean from a purely quantitative inquiry, which helps qualitative researchers in achieving their ultimate goal of “mak[ing] sense of actions, narratives, and the ways in which they intersect” (Glesne, 2011, p. 1). In this case, the narratives of various stakeholders in the residential community were examined during the first phase, in order to determine the best course of action for implementing the second phase, which is designing an appropriate housing solution for the vacant lot.

### **PARTICIPANTS**

First, participants representing the local tiny house community were observed and interviewed during the course of the Georgia Tiny House Festival held in Eatonton, Georgia. Observations and perspectives of various unidentified tiny home owners and enthusiasts were written as field notes during an hour-long discussion facilitated by Southface, an Atlanta-based company dedicated to green building methods and sustainable living. I then conducted a 30-minute semi-structured interview with Participants 1 and 2, a young Atlanta couple living in their own tiny home.

What was heard during the course of the observations and interviews with the tiny home community helped me identify initial themes to follow up on, which helped refine the questions that were then posed to Participant 3 and Participant 4. Participants 3 and 4 were representative of the Athens Land Trust, and were selected because of their direct and long-term involvement in the Athens Land Trust’s affordable housing program. In addition, Participant 4 was selected because of his participation with the tiny home construction course that was taught during the Fall 2015 semester at the University of Georgia.

## **ETHICAL CONSIDERATIONS**

Before beginning the interview process for this thesis, all potential interview subjects underwent recruitment and informed-consent process as per the Institutional Review Board guidelines. All potential interview subjects were initially contacted through publicly available e-mail addresses. Once subjects agreed to be interviewed, they were provided with consent forms prior to being interviewed. Although there were no foreseeable risks (professional or personal) involved in the study, all participants are identified in this study by number only, and in the transcripts by first initial only. All recordings of interviews were destroyed after the completion of transcription.

## **PROCEDURES**

### **Phase 1: Data Collection**

The first phase of the study relied on both interviews and observations to provide information that aided in determining the eventual design of the house. For this stage, interview subjects were recruited from both the Athens Land Trust and from the local tiny house enthusiast community. Interviewing from both groups ensured that techniques of both traditional home construction and tiny home construction were considered in the design of the home, which is intended to integrate the space-saving techniques and sustainable features of a tiny home into a traditionally-constructed foundation-built home.

From the Athens Land Trust, both the Housing Director and the Construction Supervisor—who have been the researcher’s main points of contact for previous projects—were interviewed individually. Each of their interviews was semi-structured, and between 20 minutes to a half hour in length. The interview question guides generated for this study are included in Appendix C.

The goal of these interviews was to establish the intentions of the Athens Land Trust in relation to this project, both in terms of building construction and target resident market. Questions also covered material selection (determining what materials have been used in the construction of other houses in the neighborhood), the desired aesthetic, the demographics of their typical clientele, common challenges faced when building or selling homes, and any feedback they may have received from current and former residents in the Cannon Drive neighborhood. Also, they were asked about their own perceptions of, or experiences with, the tiny house community. The semi-structured interview style consisted of an identical list of questions regarding the aforementioned themes, ensuring that they would be addressed during both interviews; however, these questions were open-ended, allowing the subjects to respond to each with a variety of possible responses, that the researcher could then pursue during the course of the interview as differing themes arose.

To obtain the perspective of tiny home owners, the researcher attended the Georgia Tiny House Festival held at Crooked Pines Farm in Eatonton, Georgia. There, field notes were taken during an hour-long panel discussion attended by tiny house enthusiasts interested in starting their own tiny home communities in Georgia. A semi-structured interview was also conducted with two Atlanta-based tiny homeowners, whose home was featured on the television show *Tiny House Hunters*. Questions for that interview (also listed in Appendix C) were designed to discover recurrent themes from the tiny house enthusiast communities in terms of what the goals of the Tiny House Movement are, how each participant has used or plans to use their home to exemplify those goals, any challenges encountered during the building process or during residence, and any feedback on their overall satisfaction with the space.

All interviews were audio-recorded in order to most accurately capture subject responses, to facilitate ease of conversation during the interview process, and for ease of transcription after the interview process. Examining the transcripts aided in identifying major themes that arose

during conversation, dealing with both major themes discovered during the review of literature, as well as themes that provided direction for the design phase (text of transcribed interviews appears in Appendix D). Also supplementing these interviews were observations from the homeowners' episode of *Tiny House Nation*, as well as photographs from the Georgia Tiny House Festival, which had examples of tiny homes on-site to observe and tour. The additional visual content helped provide additional inspiration during the design phase.

### **Phase 2: Design Work**

Emergent themes from all parties were identified via thematic analysis. In order to identify relevant themes, the interviews were transcribed and manually analyzed and coded by the researcher in order to identify recurrent themes, which then informed the design process of the tiny house hybrid. Information from the interviews and collected observations guided the space planning, selection of materials and finishes, and the overall aesthetic composition of the home.

A floor plan, section views of the house, exterior elevations, and interior elevations were completed with Autodesk's AutoCAD 2015 software. A suggested furnishings plan was also completed with AutoCAD 2015. A floor plan shows a bird's-eye view of each floor, indicating the spaces that will be included in the home. Elevations are a two-dimensional representation of a "head-on" view, which gives a more detailed look at certain features such as the structure of cabinetry. A furnishings plan shows a potential arrangement of furniture in the space.

### **Phase 3: Drawing Conclusions**

In addition to creating a set of drawings based on the information supplied during the interview and observation process, conclusions were also drawn regarding the initial research questions regarding local interest in the Tiny House Movement and its feasibility as a long-term sustainable housing solution for Athens, Georgia.

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

Upon analyzing the interviews and other content collected during the course of research, several themes emerged that corresponded to the current literature on tiny homes. Several others directly addressed aesthetic considerations and the design process, which then informed the decision-making process for the Cannon Drive prototype. For ease of reading, this chapter is divided into three sections: the first addresses findings regarding the philosophical themes brought up in the literature, the second addresses aesthetic themes that directly influenced the design of the prototype, and the third addresses the final selections made regarding the design of the prototype.

#### **PHILOSOPHICAL THEMES**

##### **(Objectives 2 and 3)**

##### **Pattern Language in Practice**

As previously mentioned, Christopher Alexander's architectural theories of patterns and pattern language provide the conceptual framework for the design process in this thesis. Alexander advocated for a more informal, user-friendly approach to building design. In his works, he argued that even a layperson with no former architectural, engineering, or design knowledge could design a functional and pleasing space as long as they take into account their habits and practices and designed a space to accommodate those patterns.

This "do-it-yourself" attitude prevails in the tiny home community, especially as many homeowners choose to build their own tiny homes rather than employing an architect or interior designer. It is especially important for tiny home owners to make wise use of their space, as there

is not much of it to work with. As discussed in the review of literature, Dee Williams took notice of her body and movements during the course of her daily habits, and designed her space accordingly (Williams, 2014, p. 110-111).

Tiny home owners Participant 1 and Participant 2, who appeared on the show *Tiny House Nation* and were interviewed by the researcher during the Georgia Tiny House Festival, also embarked on their project with a similar approach. Although they had the aid of the professional builders on the show during the construction process, when it came to the conceptualization and initial planning of their space, Participant 1 and Participant 2 realized that taking their own needs into account made for a much smoother process. Participant 2 stated that “[their] initial intent was to do something a lot more grandiose to kind of appeal to the capitalist society that we live in and say, ‘Yeah, we have a tiny house, but it’s something that doesn’t make us peasants or smaller in the eyes of people’” (Participant 2, personal correspondence, March 5, 2016). When the intent was centered around building an image for the benefit of others who might judge them, their own original vision easily became obscured. Had they pursued that line of thinking, the house they currently enjoy would not have been built. Participant 2 admits that “we outgrew that” and that the design process became easier once “it became about the functionality and the purpose and the life that we wanted,” rather than trying to appeal to the sensibilities of others (Participant 2, personal correspondence, March 5, 2016).

For those who have trouble realizing their own original visions, Christopher Alexander suggests that gaining inspiration from known and familiar locations—and identifying the qualities one enjoys from those places—is an acceptable approach that can still yield a design that is organic and alive, and that will serve the occupants well:

We need only ask ourselves which places—which towns, which buildings, which rooms, have made us feel like this---which of them



have that breath of sudden passion in them, which whispers to us, and lets us recall those moments when we are ourselves....Places which have this quality, invite this quality to come to life in us.” (Alexander 1979, p. 53)

Participant 1 and Participant 2 also incorporated that approach, gleaning inspiration from other places that appealed to them while deciding on the eventual design of their home by “perus[ing], tak[ing] walks, study[ing] others’ living, dwellings, and things like that and see what it would be like to have something— nice[, b]ut on a smaller scale, so the comfort and everything would still be there” (Participant 2, personal correspondence, March 5, 2016).

Similarly, when interviewing the Athens Land Trust’s Construction Manager, Participant 4, about designing a functional home, he advised, “[j]ust think of other houses that please you, and if you do that with enough insight and put some of those thoughts onto paper, you’ll come up with something well-designed, I believe” (Participant 4, personal correspondence, April 19, 2016). By connecting feelings of familiarity and well-being to certain aspects of buildings one has previously found pleasing, one can create a new space that elicits similar feelings.

### **“Tiny” as a Fringe Identity**

As tiny homes have not yet entered into the mainstream housing market, and are a relatively new phenomenon, those who choose to adopt the tiny lifestyle often find themselves considered part of a fringe movement. Georgia’s Tiny House Festival aimed to bridge the gap between the general public and tiny homeowners with a number of discussion panels and homes available for touring. One of these panel discussions was led by Southface, an Atlanta-based organization that uses its pillars of “education, research, advocacy, and technical assistance” to discover sustainable solutions for the residential design field (field notes, March 5, 2016). During the discussion, audience members interested in building tiny homes spoke about their experiences

in dealing with their local communities, many of which were not positive. Although some cited legal roadblocks (such as local zoning regulations) preventing them from building the tiny home they wanted, others spoke about how public perception of those who lived in tiny homes is a social barrier to adopting the lifestyle. Those who had expressed interest in building mobile homes or a community of tiny homes on wheels stated that they felt resistance from their local communities, described as a “general fear of transient people” (field notes, March 5, 2016). They felt that the lack of social acceptance, or the assumptions that they felt were being made about them as transient people, was just as significant of a barrier as the legal barrier in being able to implement tiny homes and tiny home communities in their local areas.

Participant 1 and Participant 2 also indicated a division between themselves and the larger public, referring to those outside of the tiny house community as “normal people.” Framing it as not just a choice, but a lifestyle, Participant 2 noted how living tiny shaped his identity as a person: “Living tiny is something I think that will stick with you even if it’s not necessarily in terms of the space; your mannerisms, behaviors, appreciations, and values have changed” (Participant 2, personal correspondence, March 5, 2016). The greatest shift in his values, he said, pertained to his relationship with material possessions. Seemingly, it is this relationship that demarcates the line between “tiny housers” and “normal people.”

Participant 1 and Participant 2 acknowledged that their original intent was to build a larger home “to appeal to the capitalist society that we live in” so that they wouldn’t be “seen as peasants in the eyes of people” (Participant 2, personal correspondence, March 5, 2016). Here, he made the assumption that tiny homes are perceived negatively by those outside of the community, and that placing value on conspicuous consumption and the display of wealth is a part of living in mainstream society. He also mentioned a “debate between tiny housers and normal people” regarding the sincerity of motivations behind living tiny, stating that tiny homes are sometimes criticized by those outside the movement as a form of “idealized poverty” (Participant 2, personal

correspondence, March 5, 2016). He was optimistic that once the law becomes more open to tiny homes, that tiny homes would also become more socially acceptable. Participant 1 also establishes her identity as someone outside of the mainstream, stating that although they were selling their current tiny home, she hoped to be able to continue the tiny lifestyle to avoid “be[ing] sentenced to a life in, I don’t know, mediocrity in society. I want to escape” (Participant 1, personal correspondence, March 5, 2016).

However, an inherent risk of the greater awareness and acceptance of the tiny house movement is the insertion of the tiny house life into popular culture, complete with mass production and consumption.

### **Commodification of the Tiny House Industry**

As part of their tiny home journey, Participant 1 and Participant 2 were featured on their own episode of *Tiny House Nation*, a show on the FYI Network that is just one of the several television shows documenting the process of going tiny. As with any product created to generate mass appeal, the original intent of the movement can be lost in the process of making it palatable to mainstream culture.

Although Participant 2 said that they had approached the show with their plans drawn and vision already formulated, he noted that “when we said we want a modern house, they tried to kind of hijack the idea and interpret modern to their standards” (Participant 2, personal correspondence, March 5, 2016). Participant 1 and Participant 2’s home was later used in promotional trailers for the show, which paints a very different picture of tiny house life than what Participant 1 and Participant 2 laid out in their interview. Instead of an escape from mainstream society and a departure from capitalist society, the trailer plunges Participant 1 and Participant 2’s house right into the middle of both. Loud rap music blasts as the tiny home becomes filled with adults partying and dancing, while rap star Lil Jon joins the party and

provides the hook to a rap that encourages viewers to tune into FYI on Saturday nights to watch the show. As hip hop music and partying is not a prominent feature of the show (and Lil Jon does not even appear in the episode in which Participant 1 and Participant 2's house is built), it appears that the show intentionally attached its image to a celebrity for the sole purpose of attracting mainstream attention. By linking tiny house living to celebrities and images of glamour, tiny houses will likely become part of the dynamic of materialism and consumption that participants in the movement claim to reject.

Further complicating the future of the tiny home as a viable mainstream housing solution are shows such as *Tiny Luxury*, soon scheduled to appear on HGTV. Shows like these present an image to the public of tiny homes as the newest "must-have" trend, which further damages the original assertions of the movement's adherents, who advocate for a detachment from a materialistic worldview. Unfortunately, those effects are already being seen in the tiny house community. "It's already becoming a saturated market," lamented Participant 2 during his interview, "Same way it is when people buy Jordans. Not everyone's a sneakerhead, but a lot of people get caught in the hype and go spend hundreds of dollars that they don't technically have on shoes, so now people are going to want to get tiny houses for the luxury and the namesake..." (Participant 2, personal correspondence, March 5, 2016). Participant 1 added that the consumption-driven attitude of luxury tiny homes "miss[es] the entire point of going tiny," but that this attitude has already been voiced by members of the public who visit their tiny home. They have even received comments from children who boast, "'Oh, you know, this looks like my friend's dollhouse,' or 'You know, my friend just built a treehouse like this'" (Participant 2, personal correspondence, March 5, 2016). With the rise of shows such as *Tiny House Nation* and *Tiny Luxury*, such attitudes may spread more quickly through the general public, and can pose a threat to the very foundation of the tiny house movement.

### **Sustainability and Tiny Homes: Intention vs. Practice**

Proponents of the Tiny Home Movement often link tiny homes with ideas of green building and sustainability. Participants 1 and 2 addressed economic, social, and environmental aspects of their tiny lifestyle during the course of the interview. When asked if living tiny was “a sustainable way of living for both of you in the long-term,” Participants 1 and 2 indicated that it was, and that living tiny was something they hoped to continue into the future (Participant 1 and Participant 2, personal correspondence, March 5, 2016). Participant 2 stated that “Living tiny is something I think that will stick with you even if it’s not necessarily in terms of the space; your mannerisms behaviors, appreciations, and values, have changed to some degree so we don’t put as much importance on material things in the sense that we don’t need to be overwhelmed with them” (Participant 2, personal correspondence, March 5, 2016). Participant 1 followed up by saying that she imagined herself living tiny for the rest of her foreseeable future, as a traditional home “seems unnecessary, it seems pricey” (Participant 1, personal correspondence, March 5, 2016). Here, they both address components of social sustainability (being able to adopt a mindframe that will carry into the future) and economic (low cost) sustainability. They also discussed how, during construction, durability of materials was important, and that they made their materials decisions based on what they thought “would live up to the lifespan of what we wanted to do” (Participant 2, personal correspondence, March 5, 2016), addressing both environmental (sourcing durable materials that won’t need to be replaced) and social (anticipating a long lifespan for their home) considerations.

Although their intentions were clearly aimed toward supporting sustainable living, Participants 1 and 2 encountered some of the pitfalls of permanent tiny living described by April Anson (and discussed in the Review of Literature) that ultimately undermine the sustainability goals of the movement (Anson, 2014). Despite their care in sourcing durable materials and minimizing their spatial footprint, and their intentions to live in the home for their own

foreseeable future (and that of the clothing brand they created), Participant 1 admits that “we kind of rushed into it, into the idea of living tiny” (Participant 1 and Participant 2, personal correspondence, March 5, 2016). She also admitted that in their rush to adopt the tiny lifestyle, they failed to fully consider the necessary measures to support their lifestyle in the long run, thinking that “it would be easy to get a truck or a piece of land, and it hasn’t been so far” (Participant 1, personal correspondence, March 5, 2016).

Without their own land, they had to rely on friends to park their house, which ultimately led to problems when friends changed their minds—as their friend in Lithonia did—or when disapproving neighbors called zoning—as in the case of a friend in another town who let them stay on her farm (Participant 1, personal correspondence, March 5, 2016). Participant 1 described how their house had been moved no less than eight times during the eight months they had been living in the home, due to these factors—but without their own truck to move the house, they had to pay others to do so, which became expensive. Ultimately, the difficulties became too great, and Participants 1 and 2 revealed on the day of their interview that they planned to sell their home. Although they hoped to use any money gained from the sale of their home to fund other tiny projects in the future, such as a van conversion, they admitted that they “spent pretty much everything we have” to build their tiny home in the first place, and that their future plans to fund further tiny projects were contingent on their ability to gain money from the sale of their home (Participant 2, personal correspondence, March 5, 2016). When asked about their experiences with other tiny homeowners they have encountered, it seems that Participant 1 and 2 were not the only ones whose residence in a tiny home was temporary: “Some have sold theirs, some are renting it out, um, some are just kind of sitting on it, um, some are doing fine where they are because it doesn’t matter. So it’s—they’re all having different experiences” (Participant 2, personal correspondence, March 5, 2016). Participants 1 and 2s’ experience supports discussion in the Review of Literature, specifically April Anson’s observations about the frequency of tiny

homeowners using their homes as impermanent dwellings (Anson, 2014, 294). Stability and permanence are both components of social sustainability, and it appears that until the legal tide shifts, Georgia tiny homeowners will have challenges ensuring that tiny houses will fully encapsulate the triple-bottom-line.

### **Future of Tiny Homes in Athens**

Primarily due to legal factors, but also partially due to social factors, tiny homes still seemingly have a long way to go to be fully accepted in Athens. Both Participant 3 and Participant 4, the Housing Director and the Construction Manager of the Athens Land Trust, are not yet convinced that the tiny house movement is fully compatible with the goals of their organization. While both agree that tiny homes could provide suitable housing for certain populations, they both doubt that tiny homes would practically serve their primary clientele of low-to-moderate-income earning families.

When asked for his opinion of the tiny home movement and whether it is a good fit with the goals of the Athens Land Trust, Participant 3 admits that his opinion is not entirely objective, “just given my background and my experience” (Participant 3, personal correspondence, April 6, 2016). In his experience, the families that are seeking homes through the Athens Land Trust program have often never had the opportunity to own any property at all, often coming from rental properties or backgrounds growing up in government housing or apartments. Once presented with the chance, they want to get as much space as possible to accommodate themselves and their family. Families that buy homes from the Athens Land Trust not only include children, but also extended family in many cases. Participant 3 describes a typical client as someone “who just want[s] enough space so that their mother can live with them, and their mother getting older, and they don’t have enough money to put her in a nursing home, so somewhere for her and her mom to be, or somewhere for her and her kids to live comfortably.” Although the Athens Land Trust clientele prioritizes independence and freedom from financial

obligation to a landlord (much like in the tiny house movement), they also highly prioritize privacy and stability—both qualities that are all-too-often compromised in the mobile tiny house life.

Participant 4 has a similar assessment of the Athens Land Trust's clientele: "What we're finding now is that people want three and four bedrooms because they're going to have an aunt, sister, daughter, mother, somebody else moving in besides the nuclear family" (Participant 4, personal correspondence, April 19, 2016). Because of this, he explains that the Athens Land Trust does not currently "have the market" to build tiny homes for its clients, and that not even "two-bedroom houses...of 1,000 [square feet] or less" seem to sell successfully (Participant 4, personal correspondence, April 19, 2016). However, as a teacher and technical advisor to the Tiny Home Construction course taught during the Fall 2015 semester at University of Georgia, he believes that tiny homes are a good solution for short-term living arrangements, but states that "it's really more sustainable to buy and rehab an old Airstream or some other less prestigious brand of trailer that's already existing and would do fine for temporary housing for one or two people for a season or a year or a few" (Participant 4, personal correspondence, April 19, 2016). He notes that the tiny home that was constructed during the university course will be used as temporary housing for workers on an organic farm, and anticipates that future tiny homes built by the course will have the same use (Participant 4, personal correspondence, April 19, 2016).

Participant 3 also agrees that although tiny homes are not well-suited to their usual clientele, they may still serve certain populations well:

Now if you're talking about affordability for a college student or a grad student, yes, that'll work! If I'm a single grad student and I'm just looking for a small space, I have a bicycle and don't have a car, I have three jeans and five shirts, I'm good, you know, that's affordable. And it's in a



good part of town, I can hop on my bike and commute, yes, great. So that would be perfect for that demographic of folks, but not really if you're trying to have a broader impact of affordability in Athens. (Participant 3, personal correspondence, April 6, 2016).

Although they both demonstrate skepticism that the tiny house movement will provide a “scalable solution for hundreds of thousands of people” in terms of affordable housing, or even the families they target through their affordable housing program, they do acknowledge that they may have useful applications for young people looking for temporary housing, of which Athens has many (Participant 4, personal correspondence, April 19, 2016).

## **AESTHETIC THEMES**

### **(Objective 1)**

Table 2 shows a comprehensive comparison between the multiple spaces studied for this thesis, including the spaces discussed in the Review of Literature. What follows is a fuller discussion of aesthetic themes, based on those spaces, as well as with interviews with Participants 1-4.

#### **Exteriors**

The architecture and interior design of a building are often linked. The appearance of a building's exterior visually sets expectations for what can be found within its interior, and thus can establish an immediately apparent identity. In the case of Participant 1 and Participant 2's tiny home, the appearance of the home represents a dual identity: a “modern contemporary ” home for two, as well as a “pop-up shop” for their clothing brand (Participant 1 and Participant 2, personal correspondence, March 5, 2016). To reflect their non-traditional aesthetic, they clad the house primarily in corrugated aluminum, rather than wood. The square appearance of the home and off-center porches also helped create a modern image the owners described as “industrial”

(Participant 2, personal correspondence, March 5, 2016). To associate the home with their brand, the side of the home is emblazoned with their company logo, as well as a mural featuring Participant 1's likeness (Figure 7). Further linking the home to the brand is its name, Serena, which is a nod to their clothing business "Style is Serene."

Table 2. Aesthetic Comparison of Spaces Studied.

	Location	Square footage	Mobile ?	Height	Spatial Organization	Materials, exterior	Materials, interior	Colors	Fixtures and Appliances
<b>Cannon Drive homes</b>	Athens, GA	1200-1300 square ft	N	One and two stories	2-4 bedrooms, 2-3 bathrooms	*hardieplank *concrete *tin roofs	*hardwood (oak floor)	<u>Exteriors:</u> Light green, taupe, orange, light blue, gray <u>Interiors:</u> White	electric range, refrigerator, microwave, oven, toilet, sink, bathtub, washer, dryer, lights <u>NOTE:</u> all appliances are Energy Star-certified and EarthCraft compliant
<b>The Big Tiny (Dee Williams' Tiny House)</b>	Olympia, WA	84 square ft	Y	One story plus loft	1 bedroom, no bathrooms	*wood (cedar and pine)	*wood (cedar and pine)	<u>Exterior:</u> red <u>Interior:</u> unfinished wood	Propane one-burner, composting toilet, sink <u>NOTE:</u> no electricity or running water
<b>Serena Tiny House</b>	Atlanta, GA	224 square ft	Y	One story, no loft	1 bedroom, 1 bathroom	*corrugated aluminum	*mosaic tile *hardwood	<u>Exterior:</u> grey, black,	refrigerator, toilet,

						*wood	floors	red <u>Interior:</u> grey, white, light blue, red	bathtub, lights <u>NOTE:</u> electricity provided by generator
<b>Kyosho Jutaku</b>	Tokyo, Japan	varies	N	Multiple stories (2+)	varies	*ferro concrete *wood *glass *fiber- reinforced plastic *thin steel membranes	*concrete *wood *glass *plastic	<u>Exterior:</u> grey, white <u>Interior:</u> white	Full-size or compact appliances can be found
<b>Minim House</b>	Washington , DC	210 square ft	Y	One story, no loft	1 bedroom, galley kitchen, bathroom	*Structural Insulated Panels (plywood exterior, insulation sandwiched in the middle) *wood (cypress)	*hardwood (walnut)	<u>Exterior:</u> unfinished cypress, which weathers to grey <u>Interior:</u> white	7 cu ft refrigerator and freezer, 2-burner stove, microwave/ convection oven, LED projector with stereo speakers



**Figure 3. Participant 1 and 2's Tiny Home, with a view of logo (Tiny House Swoon blog, via Participants 1 and 2).**



**Figure 4. Participant 1 and Participant 2's Tiny Home (author's personal photo).**

Naming homes seems to be a relatively common practice amongst the American tiny home community. Homes can be named after the person who owns it (as in Boneyard Studios' Pera Home, owned by Lee Pera, and April Anson's aatinyhome), or an outstanding feature (the Matchbox, also of Boneyard Studios, in reference to its small size). Dee Williams named her memoir *The Big Tiny*, which is also the name she gave to her home. The practice of naming homes for their unusual exterior features is especially common in the *kyosho jutaku* in Tokyo, where ferro concrete and other unconventional materials allow architects to craft homes in a wide

variety of shapes. For example, “Lucky Drops” house, built by architect Yasuhiro Yamashita, has a flexible, thin, translucent membrane for an exterior wall, allowing the home to be shaped like a raindrop; the name also refers to the architect “squeezing the last drop of volume” out of his limited build site, which was only 40 feet wide (Craft, 2010).

Although the previous examples demonstrate how a building’s exterior can be used to assert a unique and individual identity, the exterior of a home can also provide visual cues linking it to other buildings around it, as in the case of houses in a neighborhood having a similar appearance. The homes on Cannon Drive have a largely similar appearance, described by Housing Director Participant 3 as “modern,” “streamlined,” and “having clean lines” (Participant 3, personal correspondence, April 6, 2016). Despite being uniform in their modern style (siding and roofing materials are consistent for all the houses), Participant 3 has a strategy for reflecting the diversity of the neighborhood through the appearance of the homes. He expresses a wish for the exterior colors of the house to represent the “vibrant” and “diverse” makeup of the community within. The houses that have already been built feature bright and eye-catching colors, such as orange, blue, and green, and he hopes to add a red or plum to the color palette. A wide variety of bright colors serves as a metaphor for the inclusive and diverse nature of the neighborhood, which is already home to residents of various ages, races, occupations, and levels of ability.



**Figure 5. 315 Cannon Drive in orange and its purple neighbor (Athens Land Trust).**

## **Interiors**

### ***Multi-functional spaces***

One way to make the most of a limited area is to build rooms that can support multiple different activities, rather than having a dedicated separate space for each household function. For example, rather than having a formal dining room, a breakfast bar can be added along a kitchen counter to seat diners. Instead of a dedicated home office, a small desk for a computer may fit in the living area or a bedroom.

In Participant 1 and Participant 2's tiny home, the landing space next to the sink doubles as a breakfast bar to seat two people (Figure 11). This eliminates the need for a dedicated dining room. The barstools also stack so that they can easily fit under the counter and free up precious floor space.



**Figure 6. Serena Tiny House Kitchen (Tiny House Swoon blog, via Participants 1 and 2).**

Their living room serves multiple purposes: the bed can slide partially into the half-wall behind it to become a couch, or all the way into the wall when they need more floor space (Figure 12). In addition, rather than building a dedicated sewing space, their sewing machine and table are integrated into the built-in cabinets, and can fold down whenever they are needed.



**Figure 7. Serena Tiny House. Note built-in storage along the wall and the sliding bed (Tiny House Swoon blog, via Participants 1 and 2).**



Furniture that folds into walls are also a common feature of Tokyo microhomes (Craft, 2010). As Tokyo homeowner Fuyuhito Moriya notes, “Every single corner” must be utilized in a tiny home, even down to the smallest nooks and crannies (Lah, 2010). In his home, even the space under the stairway was used for storage; under-the-stairs storage was also observed in the tiny homes featured at the Georgia Tiny House Festival (Figure 13).



**Figure 8. Under-the-stairs storage observed at Georgia Tiny House Festival (author's personal photo).**

### *Colors, Materials, and Finishes*

In addition to using space to make room for extra storage wherever possible, a change in color scheme can give the illusion of a more open space. When Participant 2 and Participant 1 first visited their tiny home during the construction process, they were taken aback by how small the space seemed, but were later even more surprised to discover how much more space they seemingly had once paint and finishes were applied.

...[W]hen it was being built it was wooden. And so we walked in and we were like, ‘This is small. This is a lot smaller than we thought it was going to be,’ but then by the time it was finished, we were like, ‘It got bigger! Did they make it bigger or...?’ [laughter] You know, so the

color played that much a role. (Participant 2, personal correspondence, March 5, 2016)

Participant 2 attributes the seeming increase in space to the fact that the frame of the home was wooden, while the finishes and materials chosen for the interior were not; he explained that wood, as a material that conjures images of a rustic and cozy cabin “steeped in the woods,” gives him a “warm, shrunken feeling” that causes him to “instinctively crouch” whenever he enters a completely wooden space (Participant 2, personal correspondence, March 5, 2016).

Participant 2 and Participant 1 specifically chose light colors for the interior of their space to maximize the reflection of light, which keeps the eye moving from place to place (Figures 11 and 12). Remembering the cramped feeling they experienced in unfinished wooden homes, they chose a limited palette of light neutrals, which gives a more open feeling to their tiny home. The walls are white, with the cabinetry in the kitchen painted a “dove grey.” The wooden flooring is also very light, “acid-washed” to a near off-white. “[E]verything bounces so you can breathe....There’s not really a color in the house that holds the light and sucks it in,” explained Participant 2 (personal correspondence, March 5, 2016).

Participant 4, the Construction Manager of the Athens Land Trust, also agrees that “it helps to have something to help your eye move unfettered, rather than it bump against walls everywhere you look” when asked for suggestions on making a small space appear larger (Participant 4, personal correspondence, April 19, 2016). Visual obstacles include inconsistency in color, but can also include walls that obstruct sightlines and excessive variance in materials or finishes. This principle of consistency in materials is evident in many of the Tokyo micro-houses as well. “Lucky Drops” house retains an open and bright appearance in its interior—even on its underground floor—because of the consistent bright white on every surface, as well as the uninterrupted view from end to end (Craft, 2010).

Even within non-white spaces, consistency in finishes and materials lends a smooth and cohesive look to the interior, as in the all-concrete “Magritte’s” or the all-wooden “Yachiyo” microhouses, also designed by the same architect responsible for “Lucky Drops” (Craft, 2010).

### ***Fenestration and Outdoor Space***

Thoughtful placement of windows is another way to create the illusion of space. When asked what features are common to Cannon Drive interiors, Participant 4 advised that “of extreme importance are the penetration of light into the house, the feeling of openness” (Participant 4, personal correspondence, April 19, 2016). Similarly, Participant 3 notes that, “we try to make sure the homes we build, you know, bring in plenty of natural light, so the homes we design have plenty of windows in them” (Participant 3, personal correspondence, April 6, 2016). This is one aspect of homebuilding that they both specifically address during their interviews—and, in Participant 4’s case, multiple references were made to window placement and its effect on the interior of a home.

In order to facilitate the penetration of light into the house “[f]airly large and open glass areas” are incorporated into the Cannon Drive homes (Participant 4, personal correspondence, April 19, 2016). Much like an open floorplan and a consistent color scheme, windows are “[s]omething that draws your eye up and across the room,” which aids in creating a sense of openness (Participant 4, personal correspondence, April 19, 2016).

A sense of openness is especially important in tiny homes. In the microhomes of Tokyo, large windows that face the south are installed whenever possible to allow in light, creating the illusion of more space (Lah, 2010). Brian Levy’s award-winning Minim House, formerly part of the Boneyard Studios community, features large ribbons of windows along opposite walls.

Participant 1 and Participant 2, of Serena Tiny House, also point to the fenestration of their home as a prominent feature used to create more space. Despite the home's 224-square-foot size, it features nine large windows, including two sets of French doors and two skylights. "[W]ith all those windows it leaks a lot of light, so even when you're inside with all the doors closed ...it tricks your mind into thinking you have more space to move than is actually available," Participant 2 explained (Participant 2, personal correspondence, March 5, 2016). Having so much open glass area allows sightlines to extend to the outside scenery, which also creates the illusion that "the world becomes a part of the house, making it feel that much larger" (Participant 2, personal correspondence, March 5, 2016). He and Participant 1 also chose to further incorporate the outside as part of their home by having two porches that allow them to sit and look out at the surrounding scenery. Allowing the world to become a part of the home, as they put it, also supports the idea of connecting to nature and the wider world outside of the society.

## **PROGRAMMING**

When considering the design of the Cannon Drive prototype, to be located at 105 Cannon Drive, not only were the above themes considered, but also the expectations of Participants 3 and 4 regarding the spatial organization. Their expectations, based on interviews, are simplified and condensed into Table 3. These expectations, along with themes gleaned from the various tiny homes study, were blended together to create the "tiny house hybrid" referred to in the Objectives of this thesis.

### **Exterior**

The main goal in the design of the exterior is to establish this home's identity as a member of its surrounding neighborhood. In keeping with the character of the Cannon Drive neighborhood, a contemporary and modern look was chosen for the home. The exterior will feature paneled siding like its neighbors, with a vaulted tin roof. Other than white trim around doors and windows, and along the corners, no ornamentation will be applied to the exterior. The

exterior will feature a light purple color, something lively and eye-catching that complements the current neighborhood and fits within the same color family as the “red or plum” requested by Participant 3. The reason for a light purple, rather than a more saturated color, is to avoid the home posing a visual distraction from the surrounding neighbors (which are colored beige, light blue, and gray). The house occupies a footprint of 20 feet by 40 feet.

## **Interior**

### ***Kitchen***

A galley kitchen, which is a kitchen with two parallel counters with an aisle in between, was the format chosen for this kitchen. A popular choice for kitchens in which space is limited, galley kitchens efficiently make use of space by minimizing the distance in between work spaces. Brian Levy’s Minim House, formerly of Boneyard Studios, features a galley kitchen, and galley kitchens are also the format adopted by the Athens Land Trust for many of the other homes in the Cannon Drive neighborhood. To conserve counter space, the microwave is built-in above the stove. Open shelving above the sink provides space for sponges and soaps. A breakfast bar eliminates the need for a formal dining space, and also provides additional landing space for the kitchen if needed. To conserve floor space, the trashcan is located in a pull-out drawer next to the refrigerator.

### ***Living Room***

In a nod to the microhomes of Tokyo, a large south-facing window is a prominent visual feature of the living room. As the primary living area and entertainment area, this space also has the greatest allowance of light in order to extend sightlines and give the illusion of spaciousness. In addition to the south-facing window, a large glass sliding door—reminiscent of Participant 1 and 2’s oversized French doors—allows more natural light to enter the space, an additional view to the outdoors, and access to a porch. As in Participant 1 and Participant 2’s tiny home, the porch is meant to make the outdoors seem like a part of the home itself.

### ***Powder Room***

To address the need for privacy for the homeowners that was requested by Participants 3 and 4, a powder room will be available for guests to use on the first floor. This enforces the boundary between public and private space in the home by preventing guests from entering the master bedroom in order to use the restroom. For easy access, the room is conveniently located off of the public kitchen, dining, and living areas. To save space, the powder room is located underneath the stairs, as is a stackable washer-dryer unit. Built-in storage cubbies and drawers are also present under the stairway, as a nod to both the Tokyo microhomes and the Georgia tiny homes.

### ***Master Bedroom***

The master bedroom is located at the very back of the home and away from the main circulation patterns for privacy. In the spirit of down-sizing, this room is not large enough to fit a king size bed, but can accommodate a queen bed and most comfortably fits a full-size bed. The master bedroom also includes an en-suite bathroom, to support the homeowners' privacy, which is an area that some tiny homes do not sufficiently address. The bath features a single vanity (rather than a double vanity that has become common in conventional homes), toilet, and bathtub/shower.

### ***Secondary Bedroom and Bath***

The secondary bedroom is located in the upstairs loft area, and is intended to serve as a child's bedroom for a family with children, or a guest bedroom for a family without children. The upstairs bathroom is accessible from both the secondary bedroom and from the multipurpose loft space. This compact bathroom features built-in over-toilet storage, as well as a shower stall instead of a full tub.

### ***Multipurpose Loft Space***

Multi-purpose spaces are a common feature in tiny homes, and are often what enable people to perform multiple household tasks in such a small space. Reminiscent of Participant 1 and Participant 2's multi-purpose living room-to-bedroom-to-sewing space, the loft space in this home can support a number of functions, from a home office space, an additional entertainment area, or for guest sleeping quarters.

### **Materials and Finishes**

The material selections for this home reflect the combined influence of the other Cannon Drive homes, as well as the tiny homes studied. Participant 1 and Participant 2 attributed the spacious feeling of their home to the color scheme chosen, which included light neutrals with a single accent color, a light teal blue. Participant 4, from the Athens Land Trust, also agreed that when building small, the interior needs to "have something to help your eye move unfettered" throughout the space (personal correspondence, April 19, 2016). Application of a light color throughout the interior will help to reflect natural light, making the inside appear bright, and therefore more open. Thus, a white paint will be the color applied to all walls and ceilings in the interior of the home (including kitchen cabinets), with no accent color or trim.

A light hardwood would be the most appropriate choice for flooring; not only is that the flooring used for the other Cannon Drive neighborhood homes, but wood is also a common choice for tiny homes (as they are often constructed of wood). To support the Athens Land Trust's goals of sustainability, any hardwood flooring used in the home should be locally sourced. As wood is not the most durable choice in areas where spills and moisture are common (the kitchen and bathrooms), an alternative flooring choice should be considered for those areas. Because the Athens Land Trust hopes for their homes to accommodate families for many years, durability of materials was cited as an important consideration by both Participant 3 and Participant 4; although vinyl flooring is inexpensive and cleans easily, tile is more durable over

the long-term, and would therefore be a more appropriate choice for the bathrooms. Because plates and dishes can easily break on a tile floor, as well as cause discomfort during long periods of standing, an alternative choice to tile should be considered for the kitchen. A unique, economical, durable, and sustainable choice for the kitchen would be a cork floor. Cork's spongy surface is less likely to cause broken dishes and sore feet, does not emit VOCs, and as a natural insulator, it is also resistant to heat and moisture, which contributes to its durability.

Stainless steel appliances will be featured throughout the kitchen, and all appliances will be Energy-Star certified in order to comply with EarthCraft standards. Stainless steel is the finish of choice for the Athens Land Trust, is also featured in Participant 1 and Participant 2's home, and gives a modern appearance. Stainless steel countertops will blend with the appliances to give the kitchen a more seamless appearance to the eye and to provide a smoother sightline. The kitchen cabinetry will be painted white, in keeping with the limited color palette, and cabinets will feature frosted glass in order to support the sleek and modern aesthetic desired.

## **Furnishings and Textiles**

### ***Kitchen and Living Room***

Although the homeowners will ultimately be responsible for furnishing their own home, a sample furniture plan is provided with this study to provide a sense of scale, and to demonstrate how a resident could potentially use the space.

The breakfast bar, the primary dining space for the home, seats four barstools. The living room features built in storage for a media center, as the wall shown is too short to accommodate many commercially-available media centers. The open shelving surrounding the television can be used to store books, or additional media such as DVDs or video games. A small sectional sofa provides comfortable seating for the family and for guests, and a large ottoman can serve as additional storage or as a table space.



### ***Porch***

The porch serves as additional entertaining space, or outdoor dining space, and can comfortably fit a bistro set (a small table and two chairs). An olefin rug adds a decorative element, and the waterproof material withstands weathering, spills, and UV exposure. In addition, there is enough room to incorporate citronella torches to repel mosquitoes and pests, which encourages more frequent use of the outdoor space.

### ***Bedrooms***

Although not large enough for a king, the master bedroom can fit a queen bed with a storage bench, nightstand, and dresser. The secondary bedroom can accommodate one or two twin beds, or one full-size bed. To maximize usable floor space, a twin bed can be lofted, creating space underneath for a work desk for a child to do homework.

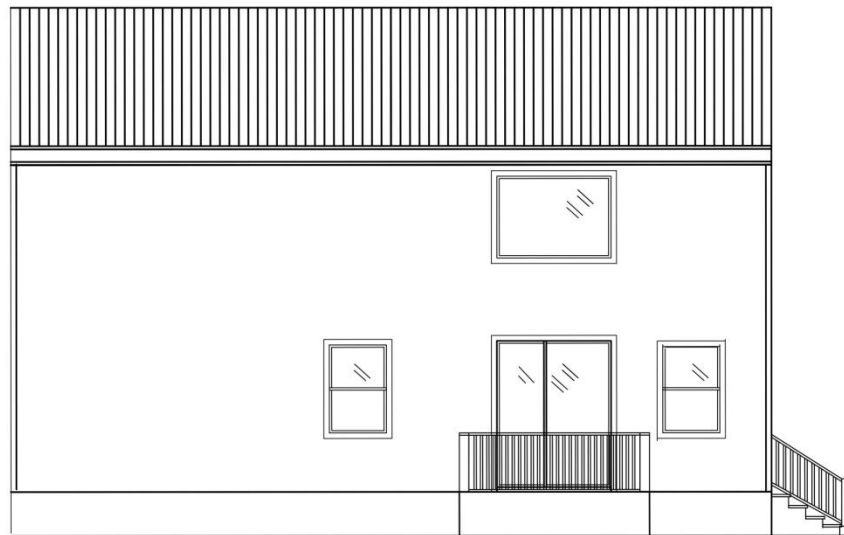
### ***Multipurpose Loft Space***

A daybed provides an additional bed for a guest, or additional seating for a second entertainment area. A bookshelf and a corner desk provide an area for the homeowners to have an office space of sorts while conserving floor space. A second television placed on top of the bookshelf could be used by the children, or for a guest's entertainment while staying with the family.

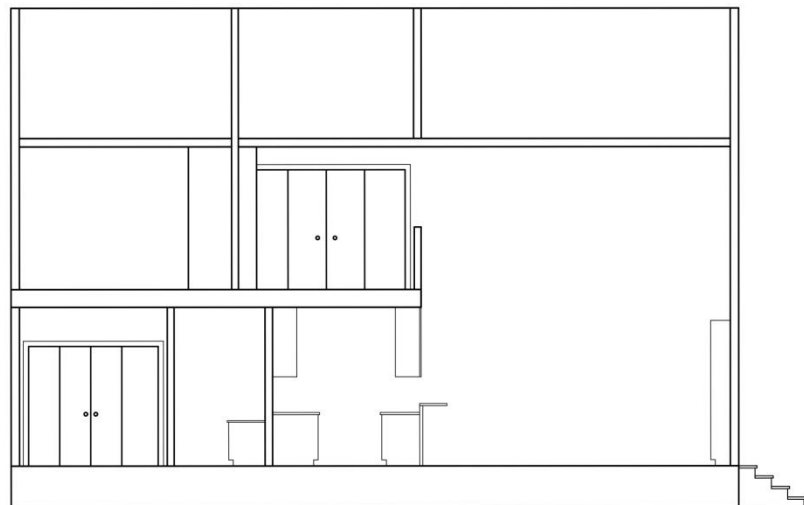
**Table 3. Expectations of the Athens Land Trust**

	<b>Square Footage</b>	<b>Height</b>	<b>Spatial Organization</b>	<b>Materials, Exterior</b>	<b>Materials, Interior</b>
<b>Participant 3</b>	600-900	Two stories	“preferably, two bedrooms one bath; optionally, a one-bedroom, one and a half bath.”	*bright paint in “a plum or red” *hardiplank siding or panels	*hardwood, *tiles *finished concrete *stainless steel appliances
<b>Participant 4</b>	600-1000+	One story	”it could conceivably be a three-bedroom, two-bathroom house”	*“brightly colored” exterior *concrete siding, *“fairly large and open glass areas” *tin roof	*hardwood (oak)

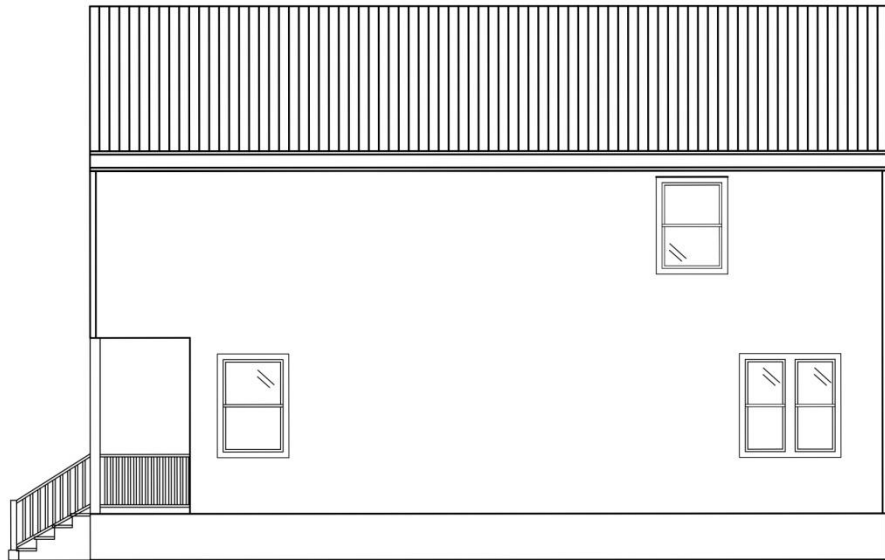
**DRAWINGS****Figure 9. Front elevation.**



**Figure 10. Left elevation**



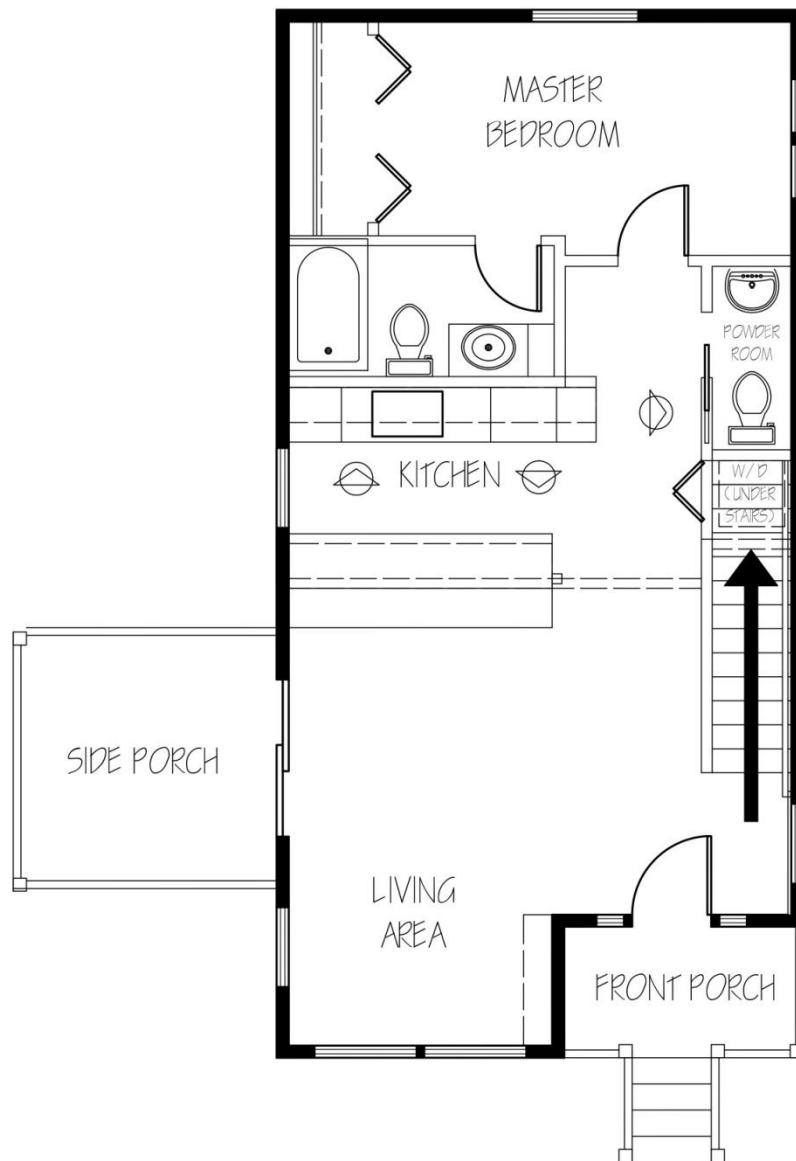
**Figure 11. Left section view. Shown to illustrate a cross-section view of the house interior.**



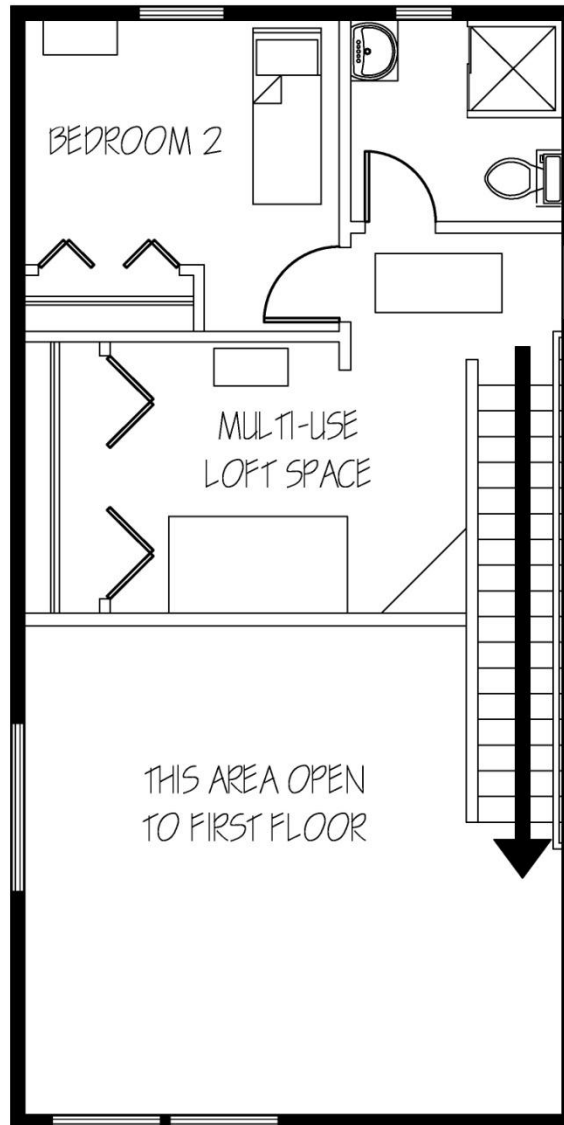
**Figure 12. Right elevation**



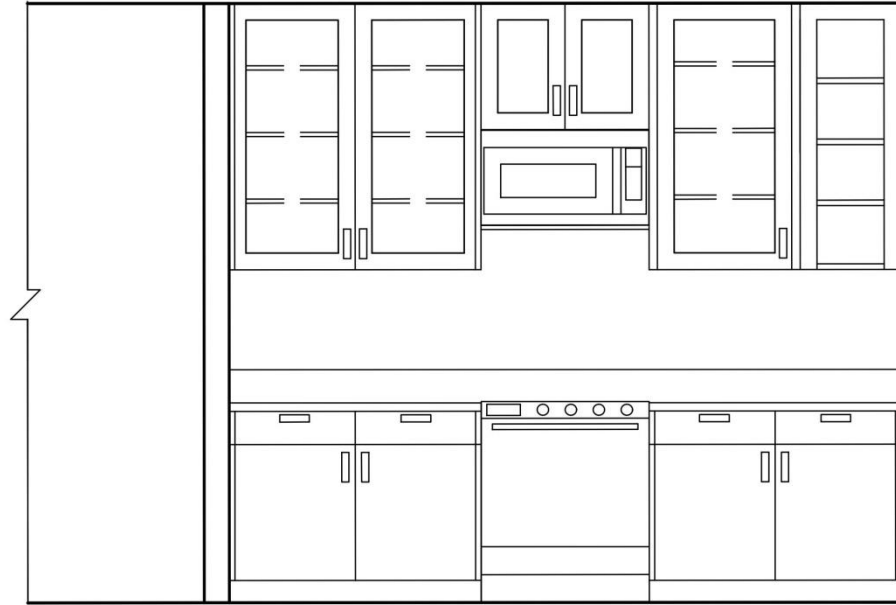
**Figure 13. Right section view.**



**Figure 14. Floor plan, first floor**

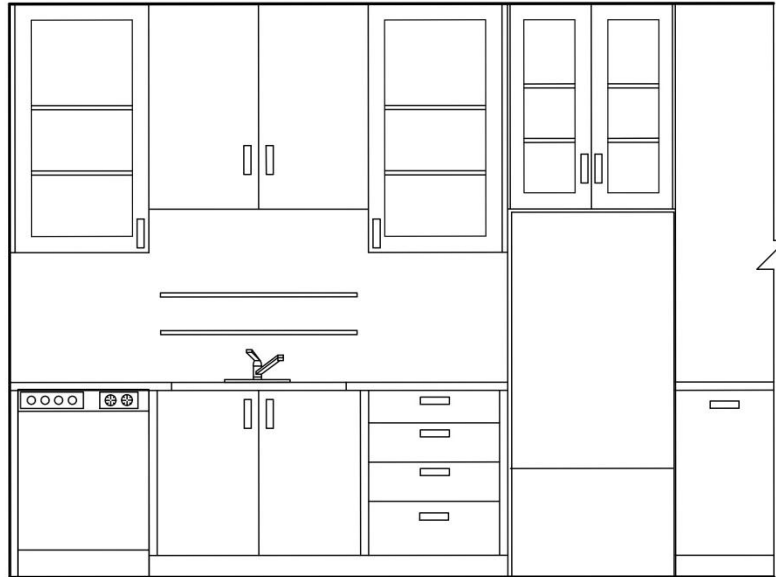


**Figure 15. Floor plan, loft**

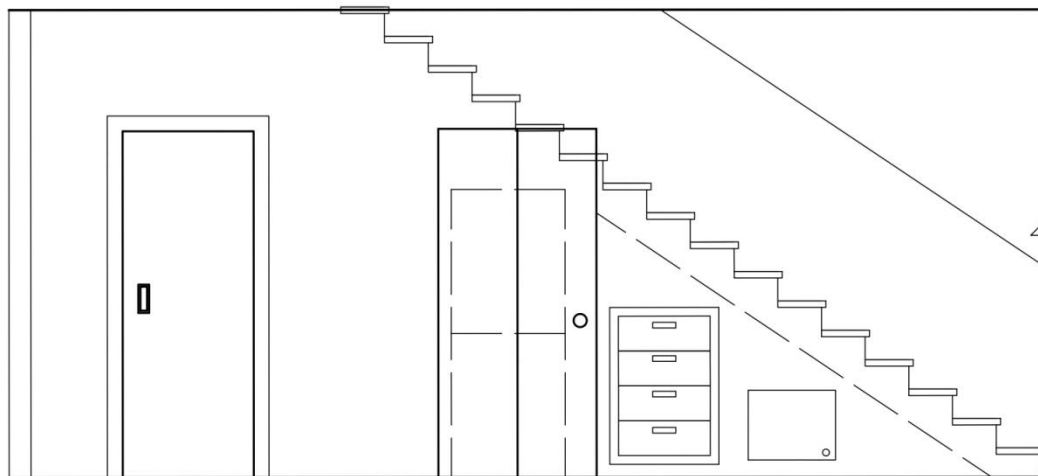


**Figure 16. Kitchen elevation 1.**

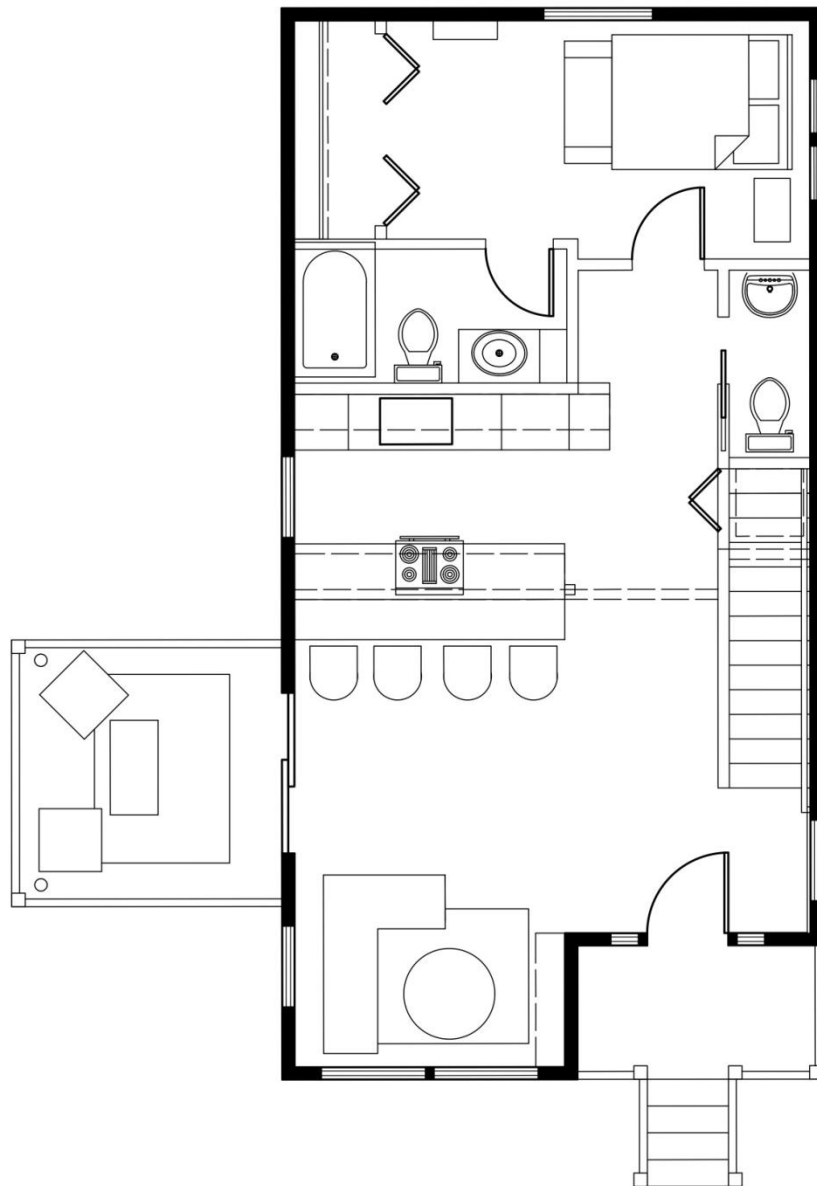




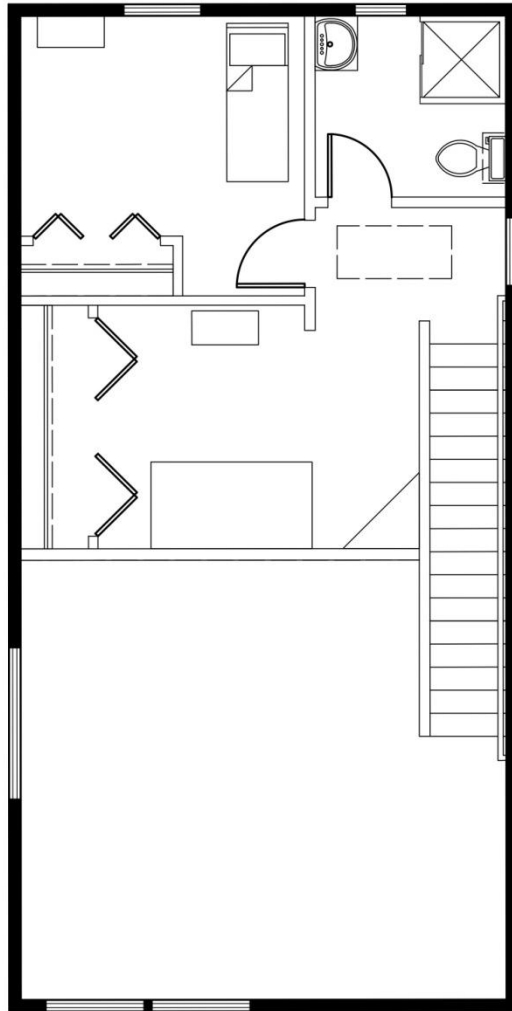
**Figure 17. Kitchen elevation 2.**



**Figure 18. Stair storage elevation.**



**Figure 19. Furniture plan, first floor.**



**Figure 20. Furniture plan, loft.**

## **CHAPTER 5**

### **CONCLUSIONS**

As public environmental awareness grows, many industries have been revising their practices to demonstrate a stronger commitment to responsible environmental stewardship. The residential industry is the third-largest energy-consuming industry, and is thus in a prime position to consider adopting alternative practices (Friedman, 2007, p. 2). Enter the tiny home, which has been brought forward by its proponents as a solution to environmental wastefulness. The original intent of the tiny house movement was to present an alternative to man's unnecessarily excessive consumption and destruction of the environment, as well as to introduce a more affordable path to home ownership. Throughout the world, and more recently in a few areas of the United States, tiny homes have been used to solve a number of housing crisis issues. These issues usually stem from lack of space in urban areas, or to provide more affordable housing in areas where real estate is expensive. However, there are many legal and social barriers to wide-scale acceptance of tiny homes as a mainstream housing solution within the United States. In addition, the message of environmental sustainability risks becoming overshadowed by marketing gimmicks and glamorized portrayals in popular media.

The objectives of this thesis were three-fold: To explore the local interest in the tiny house movement and its feasibility as a housing solution for Athens, Georgia; to—based on this information—design a home based on the characteristics of a tiny house that can appropriately serve the needs of local low-to-moderate income earners; and to add to the academic body of knowledge surrounding the tiny house movement.

I wished to explore interest surrounding the tiny house movement in my area, the motivations and desire of those who consider themselves part of the movement, and to more thoroughly investigate the Tiny House Movement's claims of sustainability. Despite growing local interest, mobile tiny homes are not a workable solution for Athens, Georgia, at the time of this thesis, due to zoning regulations. Although it is legally possible to build a tiny home on a foundation, building codes and local preservation ordinances are quite restrictive and may dissuade would-be tiny homeowners from taking on the challenge. Although local non-profit Athens Land Trust shares the goals of environmental sustainability and affordable housing with the Tiny House Movement, tiny homes lack important components of social sustainability (privacy, space for extended family and for children to grow over a generation) for the clientele that the Athens Land Trust serves. As part of this project, I also combined "the best of both worlds" to create a prototype for a very small vacant lot that has posed a design challenge to the Athens Land Trust. Although the home was designed to be built on a foundation, and contains full-sized appliances and all the amenities that average homeowner is accustomed to, there were many aspects of tiny home design that were incorporated into the design of the home to create the illusion of space and maximize storage options.

At the outset of this study, I hypothesized that a stationary, "tiny house hybrid" can be an appropriate and sustainable housing solution for low-income earners in areas of dense populations and limited space (such as Athens, Georgia), who wish to own their own homes. I discovered that a home that certain aspects of the tiny house movement—such as maximizing floor space and storage space—are compatible with the needs of low-to-moderate income families, but that a tiny home itself will not provide the privacy, stability, and security that many of the Athens Land Trust's clients seek. Although the tiny lifestyle is not a suitable fit for everyone, it shows promise within certain contexts, and among certain populations. As more cities make allowances in their zoning ordinances and building codes, the future of the tiny home and its best uses will

become clearer. At this time, tiny homes are considered legal residences in only a few locations, and academic literature is limited. With this thesis, I hope to provide an initial exploration of the tiny home movement in my local area. Because there are significant legal barriers to building tiny in Athens, Georgia, at the time of this study, I integrated aspects of both tiny home construction and traditional home construction to propose a prototype for a small house build.

As tiny homes continue to grow in popularity, more opportunities to study the movement will present themselves in other areas. Future areas of study could include:

1. post-occupancy evaluations of long-term tiny homeowners
2. an examination of tiny homes used as permanent residences vs. tiny homes used as commercial enterprises (rented guesthomes, etc.)
3. a feasibility study of a specific location that has expressed interest in adopting tiny homes
4. a design for a tiny home or community of tiny homes to be implemented for a certain purpose (homeless village, series of guest lodgings, student housing)

## **PERSONAL REFLECTION**

Before this project, I did not know much about tiny homes other than what I had seen on TV. I enjoyed interacting with tiny homeowners and hearing what motivated them to adopt this lifestyle. I am curious to see what the future holds for tiny homes as permanent residences, as the law presents a significant barrier to the widespread adoption of tiny homes as anything other than part-time or transitional housing. Because of the issues with privacy, as well as practical considerations of fitting large or growing families within such a limited space, I think that tiny homes have the most promise when used as short-term housing, whether that be in the form of

transitional housing for the homeless, as guesthomes, or an alternative to hotel accommodations for travelers.

## REFERENCES

- Alexander, C. (1977). *A Pattern Language: Towns, Building, Construction*. New York, NY: Oxford University Press.
- Alexander, C. (1979). *The Timeless Way of Building*. New York, NY: Oxford University Press.
- American Society of Interior Designers and The United States Green Building Council.  
*REGREEN: Residential Remodeling Guidelines*, 2<sup>nd</sup> ed. (2008). Accessed at  
[http://www.regreenprogram.org/docs/regreen\\_guidelines.pdf](http://www.regreenprogram.org/docs/regreen_guidelines.pdf)
- Anson, A. (2014). “The World is My Backyard”: Romanticization, Thoreauvian Rhetoric, and Constructive Confrontation in the Tiny House Movement. *Research in Urban Sociology*, 14: 289-314.
- Anson, A. (2016). “About.” aatinyhouse. Accessed from <https://aatinyhouse.wordpress.com/about/>
- “Athens Clarke County by the Numbers.” Accessed from <https://athensclarkecounty.com/DocumentCenter/Home/View/535>
- “Athens Tiny House Meet-Up” (n.d.). Accessed from <http://www.meetup.com/Athens-Tiny-House-Meetup/>
- Buchan, D. (2006, April 14). Obituary: Sir Roy Denman. *Financial Times*. Accessed from  
<http://www.ft.com/cms/s/0/4e440776-cbcf-11da-a7bf-0000779e2340.html#axzz4BIMM13P1>



- Boneyard Studios (2016). Boneyard Studios. Accessed from <https://boneyardstudios.org/>
- Capitol Hill Seattle (2016, January 24). Take a Tour of E Union's Tiny Home Village. *Capitol Hill Seattle*. Accessed from <http://www.capitolhillseattle.com/2016/01/chs-pics-take-a-tour-of-e-unions-tiny-house-village/>
- Cater, F. (2015, February 26). Living Small in the City: With More Singles, Micro-Housing Gets Big. *NPR*. Accessed from <http://www.npr.org/2015/02/26/389263274/living-small-in-the-city-with-more-singles-micro-housing-gets-big>
- Cohen, B. (2015, November 2). 45 Dead in 2015--Mayor declares Seattle homelessness in State of Emergency. *Capitol Hill Seattle*. Accessed from <http://www.capitolhillseattle.com/2015/11/45-dead-in-2015-mayor-declares-seattle-homelessness-in-a-state-of-emergency/>
- Costelloe-Kuehn, B. (2016). "Volatile Organic Compounds." Salem Press Encyclopedia.
- Craft, L. (2010, August 3). In Japan, Living Large in Really Tiny Houses. *NPR*. Accessed from <http://www.npr.org/templates/story/story.php?storyId=128953596>
- "Cypress." Tumbleweed Tiny House Company. Accessed from <http://www.tumbleweedhouses.com/products/cypress>
- "EarthCraft House" (2016). EarthCraft. Accessed from <http://www.earthcraft.org/builders/programs/earthcraft-house/>
- "Elm." Tumbleweed Tiny House Company. Accessed from <http://www.tumbleweedhouses.com/products/elm>
- Friedman, A. (2007). *Sustainable Residential Development: Planning and Design for Green Neighborhoods*. New York, NY: McGraw-Hill.

Goldchain, M. (2015). Minim House, D.C.'s Most Famous Tiny Home, Wins AIA Award.

*Curbed*. Accessed from <http://dc.curbed.com/2015/6/11/9950918/minim-house-foundry-architects-aia-washingtonian-award>.

Glesne, C. (2011). *Becoming Qualitative Researchers: An Introduction*. 4<sup>th</sup> ed.

Hunter, M. (2015, November 10). Tiny house rentals for your mini vacation. *CNN*. Accessed from <http://www.cnn.com/2015/11/09/travel/tiny-house-rentals-best-usa-feat/>

Johnson, G. (2016, January 19). Tiny house village for the homeless set to open this week.

KIRO—Seattle. Accessed from [http://m.kirotv.com/news/news/national/seattles-first-tiny-house-village-homeless-open-we/np7S3/?icmp=cmgcontent\\_internallink\\_relatedcontent\\_2014\\_morepopularheadlines3](http://m.kirotv.com/news/news/national/seattles-first-tiny-house-village-homeless-open-we/np7S3/?icmp=cmgcontent_internallink_relatedcontent_2014_morepopularheadlines3)

Jones, L., ed. (2008). *Environmentally Responsible Design: Green and Sustainable Design for Interior Designers*. Hoboken, NJ: Wiley.

Khokha, S. (2016, January 19). Fresno Passes Groundbreaking ‘Tiny House’ Rules. *The California Report from KQED Daily News*. Accessed from <http://ww2.kqed.org/news/2016/01/19/fresno-passes-groundbreaking-tiny-house-rules>.

Lah, K. (2010, November 15). Ultra-Small is Beautiful for Japanese Homeowner. *CNN*. Accessed from <http://www.cnn.com/2010/WORLD/asiapcf/11/12/japan.ultra.tiny.home/>

Laylin, T. (2013). PHOTOS: Whole Village of Tiny Houses Makes Boneyard Studios a Unique Urban Retreat. *Inhabitat*. Accessed from <http://inhabitat.com/d-c-s-first-tiny-house-village-boneyard-studios-offers-up-a-slice-of-urban-paradise/>

Lee, E., Allen, A., Kim, B. (2013). "Interior Design Practitioner Motivations for Specifying Sustainable Materials: Applying the Theory of Planned Behavior to Residential Design." *Journal of Interior Design*. 38(4): 1-16.

"Linden." Tumbleweed Tiny House Company. Accessed from

<http://www.tumbleweedhouses.com/products/linden>

Maghribi, L, Wakatsuki, M, and Defterio, J. (2015, November 3) Tokyo's Big Idea: Can Micro-Homes Offer a Housing Solution? *CNN*. Accessed from <http://www.cnn.com/2015/11/03/asia/tokyo-japanmicro-home/>

Memari, A. M.; Huelman, P. H. ; Iulo, L.; Laquatra, J.; Martin, C.; McCoy, A. ; Nahmens, I; and Williamson, T. (2014) "Residential Building Construction: State-of-the-Art Review." *Journal of Architectural Engineering*. 20(4): 1-38. DOI: 10.1061/(ASCE)AE.1943-5568.0000157.

Mok, K. (2015, May 6). The Shake-up of Boneyard Studios, a Tiny Home Community. Treehugger. Accessed from <http://www.treehugger.com/tiny-houses/demise-boneyard-studios-tiny-house-community.html>

Morrison, J. (2014). Downsizing with Style. *Entrepreneur Magazine* (March 2014): pp. 16-18.

Murphy, M. (2014). Tiny Houses as Appropriate Technology. *Communities*, Number 165 (Winter 2014): pp. 54-59.

Perry, S.A. (2015, November 4). Tiny Houses are Huge: Going Small is Getting Popular, but Regulations Stand in the Way. *Athens Flagpole*, pp. 8-9.

Priesnitz, W. (2014) Tiny Houses, Tiny Neighborhoods. *Natural Life Magazine* (March/April 2014): pp. 12-19

Robinson, M. (2016, January 6). A pair of Harvard students have designed 160-square-foot 'tiny houses' that could be the future of weekend getaways. *Business Insider*. Accessed from <http://www.businessinsider.com/tour-the-tiny-houses-designed-by-harvard-innovation-lab-students-2015-12>

Shahani, A. (2015, November 2). Could a Tiny Mobile Studio Solve Your Housing Crisis? NPR's All Tech Considered. Accessed from <http://www.npr.org/sections/alltechconsidered/2015/11/02/453975501/could-a-tiny-mobile-studio-solve-your-housing-crisis>

"Tiny Luxury." HGTV. Accessed from <http://www.hgtv.com/shows/tiny-luxury>

United Nations World Commission on Environmental Development. (1987) *Our Common Future, From One Earth to One World*. Accessed at <http://www.un-documents.net/ocf-ov.htm#1.2>

U.S. Census Bureau (2015). Number of New Single-Family Houses Sold by Sales Price. Survey of Construction. Accessed from <https://www.census.gov/construction/chars/pdf/soldpricerange.pdf>

U.S. Census Bureau (2015). Square Feet of Floor Area in New Single-Family Houses Completed. Survey of Construction. Accessed from <https://www.census.gov/construction/chars/pdf/squarefeet.pdf>

Williams, D. (2014). *The Big Tiny: A Built-it-Myself Memoir*. New York, NY: Blue Rider Press

Winchip, S (2011). *Sustainable Design for Interior Environments*, 2<sup>nd</sup> ed. Fairchild.

## **APPENDICES**

### **APPENDIX A: CONDITIONS OF SUSTAINABILITY FROM THE 1987 UN SUMMIT**

1. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.
2. Thus the goals of economic and social development must be defined in terms of sustainability in all countries - developed or developing, market-oriented or centrally planned. Interpretations will vary, but must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it.
3. Development involves a progressive transformation of economy and society. A development path that is sustainable in a physical sense could theoretically be pursued even in a rigid social and political setting. But physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in the distribution of costs and benefits. Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity within each generation.

**Appendix B: 2008 REMODELING GUIDELINES, AS PUBLISHED BY ASID**

1. Be an advocate for products and services that are environmentally benign, produced in a socially just manner, and safe for living things.
2. Protect the biosphere.
3. Promote a sustainable use of natural resources.
4. Reduce waste.
5. Use energy wisely.
6. Reduce environmental risks to the health of end users.

## **Appendix C: INTERVIEW QUESTION GUIDE**

### **Interview Question Guide: Athens Land Trust**

- How do you define sustainability?
- How do the homes your organization builds support living sustainably?
- What materials are used?
- What are the most important considerations when building a house for low-income earners?
- What challenges have you faced while building for lower-income populations as opposed to building for higher-income populations?
- Questions regarding target demographic for the unoccupied lot.

### **Interview Question Guide: Tiny House Community**

- What made you interested in The Tiny House Movement?
- Would you live in a tiny home yourself? Why or why not?
- If you are planning on living in a Tiny Home, how will it be constructed? (self, or bought from a company? Mobile or stationary?)
- What materials do you plan to use?
- Do you plan to purchase or rent land for the home?
- What do you think are the greatest challenges/obstacles to building a tiny home in your area?
- Do you plan to live in the home permanently, or as a form of transitional housing?
- What advantages does living in a tiny house afford you that living in a traditional home does not?
- What does living sustainably mean to you?
- How does living in a tiny home support your goals of living sustainably?
- For tiny home residents: how long have you lived in this home, what challenges have you encountered? What benefits?

## Appendix D: INTERVIEW TRANSCRIPTS

### Participants 1 and 2

J: Thank you for talking to me today, and for letting me take a tour of your house. Could I just get you guys to start by just introducing yourselves, and telling me a little bit about yourselves or about the house?

F: Alright. Um, my name is Frances, and I'm currently a student at Kennesaw State, um, studying Integrated Studies, and um, I got into this idea of tiny houses after watching this documentary on Netflix and I kind of incepted it into Greg's head...

J: Yeah?

F: ...and then he started making floor plans, and then we came together, um, to be on the Show "Tiny House Nation"...

J: Wow!

F: And then that happened.

J: That's really neat.

G: I'm Greg, I went to school at Southern Polytechnic State University, umm...I'm adept in architecture and design, and apparel and textiles and fashion, so, umm...the life of the tiny house began during our journey as a couple. We wanted something that we'd own, something that would, um, affirm our aspirations kind of? Um, and, help with our intended business ventures. So, she incepted me [laughter], and that's what happened.

J: Well, to talk a little bit about your aspirations, how do you feel the tiny house has helped you achieve the aspirations that you set out to accomplish?

F: Um, well, we set out to have the tiny house as like a living space...

J: Mm-hmm.

F: ...and that's been going OK except that we keep on running into zoning problems and whatnot, so we've had to be on-the-go a lot. As a mobile shop, um, that part goes pretty well. We can, um, be on the go, have our mobile pop-up shop, and that's not really a problem, that's more of a point, a point of sale.

J: OK.

G: Um, there was a lot of preparation that may—not a lot but, like, some preparation was overlooked, so, um, the start of the business life was slow...

J: Yeah?

G: ...and is still slow, but it's growing, so we have been fortunate to be blessed with some opportunities, um, and have been able to showcase our home, um, such as at Hammonds House



museum we did an architectural exhibit about art and architecture, um, and we were on a panel with some, you know, heavy-hitters in the architectural world...

J: Oh, nice!

G: Peter Pittman, Oscar Harris, um, the designer of Grady and Hartsfield-Jackson, so you know, things like that have come to play. They may not be the most relative to SIS as a fashion line, but I think—SIS as a brand, it still makes a big impact, so with things like that going on we still have a reputation that we're building, and we can say, you know, 'Look what we've done, and we're going to do more.'

J: That's great! So, SIS is y'all's clothing brand that you--- Are you doing that together, or is that more one of you or the other?

F: It's together, for the most part...

J: Yeah?

[laughter]

G: Yeah, it started as a solo thing, from being a lost child still in a cocoon...

J: Yeah...

G: But through my meeting of her, she's definitely helped to expand and build the brand into where it is today. I think we're in—probably in our sixth, seventh year now, so she's been involved for the past two to three years, and she's been marketing and communications and PR, so a lot of the opportunities and meetings and networking that's occurred, you know, she's contributed to it.

J: That's really neat. You know, it didn't even occur to me how, you know, having a mobile lifestyle could help contribute to the success of the business. But that's really neat how you were able to meld it all together and wrap it all into one big lifestyle package [laughter]. But to talk a little bit more about the house, how did you start with the house? I know you've got your background in architecture, so did you have to start just, like, from scratch with process work and CAD and all that, or did you kind of just jump in and get started on the building?

G: I am a hands-on person, so at that time I wasn't really CAD-happy...

J: [laughter]

G: We did a lot of pencil paper designs, so I would just go to my drafting board and do the whole pencil drawing and then from there do, um, some perspective drawings, 3d modeling, and through the both of us the iterations changed over time, because our initial intent was to do something a lot more grandiose to kind of appeal to the capitalist society that we live in and say, 'Yeah, we have a tiny house, but it's something that doesn't make us peasants or smaller in the eyes of people,' but then we outgrew that and it became about the functionality and the purpose and the life that we wanted. So through her, a lot of the things that I was trying to do got omitted, but in a good way. It was a constructive dialogue between us. Um, so we both have a hobbyist mentality in terms of liking homes. So we would peruse, take walks, study others' living, dwellings, and things like that and see what it would be like to have something—nice? But on a smaller scale, so the comfort and everything would still be there.

J: Yeah, and it's certainly evident looking at your house compared to some of the other houses that we've seen that you definitely— I think hit it on the head,

[laughter]

J: ... in making it a place that's small but still, you know, very homey, something that could appeal to a wide variety of people.

G: Yeah like um...what is it? We did the show "Tiny House Nation" and we watched every episode. So we're like, 'Oh they're going to do a modern one, they're going to do a modern one!' And modern turns into barnyard and modern turns into rustic and modern turns into industrial, and we're like, 'Well, we don't think that's what the word modern means in my dictionary.' And I was like, 'What does modern mean to you?' And she was like 'Not that.' So then we were like 'contemporary?' Then we were like, 'What's contemporary?' You know, um, learning the styles of like homes for me was never like a big thing when I was in school so I was like, 'What's traditional, what's contemporary, what's cathedral?' And all these things, I was like 'I don't know, I want a modern house, let's just make it look nice, square,' you know. We learned there was a steep learning curve.

J: OK.

G: So when we said we want a modern house, they tried to kind of hijack the idea and interpret modern to their standards. We were like, 'No no no, don't worry, we'll show you what modern is. I'm an architect, here's the draft, here's the design, this is what we want.' They were like, 'This is weird.' And I was like, 'No it's not,' I was like, "It's contemporary modern?" and they were like, 'OK whatever, I don't know, so we'll just do what you drew.' And so, you know, um, it was nice to see it come together. It came out better than expected. Um, there were some deviations from the original plan, but like you said, with the way it feels? You know, um, a lot of tiny homes the color scheme is a very big thing. Ours is made out of many if not all the same materials, but the color alone gives it a completely different aesthetic, or vibe to the whole thing.

J: Right.

G: You know like, we have seen...when it was being built it was wooden. And so we walked in and we were like, 'This is small. This is a lot smaller than we thought it was going to be,' but then by the time it was finished, we were like, 'It got bigger! Did they make it bigger or...?' [laughter] You know, so the color played that much a role. A lot of tiny houses are pretty steeped in the woods, so they feel very warm and shrunken, and you instinctively crouch when you enter them, and with this, the light and the white...everything bounces so you can breathe. [laughs] That's a lot of words.

[laughter]

J: Could you tell me a little bit more about some of the materials and finishes you chose? Because you're right, you know, the color's different, you walk in and the feel is different. It does look like you guys have used a little bit different materials in the interior than some of the other houses that we've seen, or what you would normally see when you think of a tiny house.

G: Yeah...

F: [To Greg] That's you.

G: I'm getting tired of my voice! [laughter] Um, so she actually did a lot of the sourcing. I think she's selling herself short! She did do—she learned a lot about colors and finding materials and how to make things work. So I don't think she's going to claim what she did, but she did a good job, in terms of making the color palette work. We tried to source durable materials, um, things that we felt would live up to the lifespan of what we wanted to do. We have aluminum siding for our exterior, so a lot of people think it's going to be something more industrial before they enter it. So from the street it has a lot of curb appeal in the sense that it's not the most traditional build, so it doesn't have barn siding or regular stained sheathing. And her persona is on the side of the house as well, so that's also another thing that lends to curb appeal. But when you enter into the space, there are nine windows total in the house. Two sets of French doors, two skylights, one circle window in the kitchen, one large circle window in the bath area, and then another rectangular side window. And so with all those windows it leaks a lot of light so even when you're inside with all the doors closed and you have the line of sight through the glass, it tricks your mind into thinking you have more space to move than is actually available, and then when you open the door we have a tiny-slash-micro porch, so when you open the door the line of sight continues so much further than the house, so it's almost as if the world becomes a part of the house making it feel that much larger. And so we chose a lot of light colors, light textiles...um, fabrics, textiles, wood flooring, even the kitchen is a light grey, dove grey, white walls, um, even like an acid washed type of flooring, so everything screams light, you know? There's not really a color in the house that holds the light and sucks it in...it doesn't really make it interact with another object or something.

J: Right. And it's all integrated so well and it blends so well, and I think it really does a good job of demonstrating the name—because I noticed the name of the house, hashtag-Serena House—it is very serene feeling and spacious. I'm sure that's probably what you guys were going for, and you guys did a good job with that.

F: Awesome! [laughter]

J: Yeah, it's really beautiful, and I remember you saying that you've been in there for eight months. Um, is there a reason why you are selling the house now?

F: Um...we are selling it because we kind of rushed into it, into the idea of living tiny.

J: OK.

F: We had the thought process that it would be easy to get a truck or a piece of land, and it hasn't been so far, um and we keep on having to move because people complain that, 'There's this big thing in someone's yard, and I don't think it should be there.'

J: Right.

F: So we have to keep on moving, and that's a pain and that's expensive, uh...but then the other side, we still can't afford the land or the truck so we're kind of in a weird spot and we don't really know what to do until something grandiose happens and it hasn't happened yet, so we've been kind of struggling for a long time. And, [to Greg] I don't know about you, but firstly, I'm tired.

[laughter]

J: Yeah?

F: It's been fun, it's been an experience, but I don't know, I feel like someone else could better utilize it.

J: OK.

F: So yeah. And we can try again at a later date.

J: Is that something that you guys would be interested in doing later, maybe once the issues with, you know, acquiring a truck or a piece of land or if building or zoning codes change or anything like that?

F: Yeah, definitely.

G: I think, yeah. Aside from zoning codes and things like that, with the sale of the house I think comes new opportunity. Because we spent pretty much everything we have to facilitate this build.

J: Gotcha.

G: So with the sale of this build we have what we had back plus some. So we can start on a new foot and we can compensate for the mistakes that we made the first time around. So, she has a venture that she wants to get into in which she wants to do a sprinter van conversion, and I have a venture in which I want to do a shipping container foundation build.

J: Oh, wow!

G: So, it's you know still progression, even though it's not necessarily where we are, I think it gives us a more grounded place to start so it's not technically an abandonment but moreso a way to facilitate what's next.

J: To facilitate an even bigger venture in the future.

G: Exactly.

J: So, this tiny lifestyle, then is this something that you see as a sustainable—I guess I should say, a sustainable way of living for both of you in the long-term? Something that you would like to continue for, you know, the foreseeable future, or is there a time limit on this, you know if you guys have a family or anything like that, or...

G: Living tiny is something I think that will stick with you even if it's not necessarily in terms of the space; your mannerisms behaviors, appreciations, and values, have changed to some degree so we don't put as much importance on material things in the sense that we don't need to be overwhelmed with them. I think we— or maybe I'm speaking for myself, I don't know— have become a little less sentimental in terms of, um, possessions, like, you know, childhood trophies. You know, you have your parents that collect your bibs and all these things from when you were growing up and when they were young and all these things, but you know when you live tiny, it's like, 'What's really important? What am I going to remember? What's going to trigger a feeling or a memory?' and those are the things you keep instead of just saying, 'Here's everything that I had once, you know, let me look back on it.' So things like that I think carry over. Even if I get a mansion, I'm going to be like, 'I don't need that medal, but I really remember *that* medal.' So, things like that.

J: Right.

F: Um, I think, hopefully we could be tiny forever. I just imagine myself in my little sprinter van travelling and having fun and doing cool stuff, and I don't really see a need for a traditional

home. It seems unnecessary, it seems pricey, I don't want to be—I don't know—sentenced to a life in, I don't know, mediocrity in society. [laughter] I want to escape. So, yeah.

J: Just out of curiosity, where are some of the places that you guys have lived? Because I know you that because of, you know, the legal situation being the way it is right now you guys have had to move around a lot. And you're from Atlanta, and now you're up here in Eatonton at this festival, so what kind of stops have you made along the way? Where all have you lived?

G: Is Eatonton a stop? Umm...[laughter]

F: Yeah, [to Greg] stop talking. So we started off actually building the foundation or whatnot in Roswell, Georgia, and then for the reveal of the Tiny House show, we did it in Little Five Points.

J: Oh, wow.

F: And then after that, we ended up in, we went to Lithonia. We were trying to be in someone's backyard in Lithonia and then they changed their mind.

J: Oh, no!

F: So, we were trying to be in Lithonia and then that didn't work out. So like, the same—or, like, the morning after, we drove to a RV park in McDonough. We were there for, like, the weekend and then we found some— [to Greg] was it immediately after, Cartersville?

G: Um....yeah, yeah.

F: We found some nice people up in Cartersville who let us stay on their farm.

G: Let's shout out their business, or something.

F: Oh, yeah.

G: I don't know what it is anymore—

F: 'He Shed, She Shed,' Jan.

J: OK.

F: Yeah [laughter]. She was super sweet. And she, um, we actually, after we were in Cartersville, um, we had to vacate the house because the neighbors called Zoning. And we couldn't be there, but we kind of left the house up there and she took care of it for us while we figured some stuff out, and we had the art show at Hammonds House, that was Atlanta...[to Greg] What part of Atlanta?

G: West Atlanta.

F: West Atlanta? West End. Um, and then after that we—

G: Silver Hills.

F: Oh, yeah, we went to Silver Hills, and we were looking for some Air BnB properties so um because they seemed like they would already be cool with having something in the backyard and renting it out, um, because that's what we wanted, we weren't living in it anymore, and then, after Silver Hills, we moved it where it kind of resides now, um, next to our friend's place in their

backyard—kind of mooching off of them, but hanging out there for the last few months, and that's the longest we've ever stayed somewhere, so.

J: Oh, wow. I know, with the constant moving, and it seems like you guys are really in this together, as a unit, but there's been a lot of talk of the tiny house taking a more communal approach to tiny house living. Have you forged any connections with other tiny housers along the way, or are you guys kind of, you know, doing your own thing?

F: Um, we got in contact with people from the tiny house show specifically to begin with and we were just talking about the experience of the show and um how their tiny house is doing and what they're doing with it. Um, some have taken different paths. Some have sold theirs, some are renting it out, um, some are just kind of sitting on it, um, some are doing fine where they are because it doesn't matter. So it's, they're all having different experiences. And then, with all the events that we've been doing, we've met a lot of people that really want tiny houses or are working on building theirs or actually have their own tiny house or something, uh, a tiny space of some sort, um, so it's been a very social experience, kind of unexpectedly. I didn't know the community was so close-knit and so friendly. But it's been nice!

J: Ah, good! Do you foresee this becoming more of a mainstream housing trend, or do you kind of see this staying more kind of on the alternative, "fringe"—if I dare use that term [laughter]—side of things?

F: I think it's going to end up being like a mass-produced—

G: It seems like it's already becoming a saturated market.

F: Yeah.

G: There's politicians and things that are looking for ways to profit off of it already, and once I think that happens, it's going to become a lot more socially acceptable. Right now, there's a large debate in between, you know, tiny housers and normal people, that's like, is tiny house living a form of, like, idealized poverty or something of that nature. You know, so, when the laws change I think it's going to be a lot more commonplace for people to say, 'It's just something, you know, we did.' Same way it is when people buy Jordans. Like, Not everybody's a sneaker head, but a lot of people get caught in the hype and go spend hundreds of dollars that they don't technically have on shoes so now people are going to want to get tiny houses for the luxury and the namesake and what brand existed first and who makes the most luxurious tiny house, and—

F: There's actually a show, coming to HGTV, called 'Luxury Tiny Homes.'

J: Oh, no.

F: It's kind of missing the entire point of going tiny. It's like the same price of a regular house, like what's the point?

G: It's really ironic for us to see, you know, not what people will spend, but, you know, why. There are people that spend 325,000 on 200 square feet. And I'm like, we made a tiny house, our tiny house seems luxurious, our tiny house satisfies every need, and cost us less than a fraction of that. Less than a half of that, and people will willingly just go and say, 'Yeah, here's, you know, 300,000 dollars just to say mine is better than yours.'

J: Right.

G: And it's like, 'You have a mansion already, but now you have a guesthouse or a dollhouse.' You know, we've heard people come through our house and kids are saying, 'Oh, you know, this look like my friend's dollhouse' or 'You know, my friend just built a treehouse like this' and it's like [laughter] 'I mean, we're not peasants, but [laughter] you know, sorry,' so, I don't know.

F: It's weird.

J: Well, I really appreciate you two taking the time to talk with me today. It's been about 20 minutes, so I'll let you get back to being the gracious hosts that you are to everyone that's here at the festival today [laughter]. Thank you for your insight!

G: Thank you!

F: Thank you.

### Participant 3

J: Thank you for taking the time to sit here with me and answer some of these questions.

D: Not a problem!

J: Alright, so I guess we'll get started with, um, just tell me a little about yourself and your role in this organization, and what the organization is about.

D: So, um, my name is David Ogunsanya, I am the Housing Director of the Athens Land Trust, and my role here is pretty much to do anything housing-related, from applications to financing to grants um, to the construction, managing contractors, um, looking for acquisition opportunities and, also uh working with homebuyers and homeowners. Um, on the backend when they're ready to buy and sell their homes. And as far as the Athens Land Trust, we're, um, the only community land trust in the country that works, um, that has a community agriculture program and affordable housing program and a land conservation program all in one. So we do a lot, and we're looking to do a lot more here in Athens.

J: Great! I know that, you know, the Athens Land Trust has a big focus on sustainable living...I can tell by your logo, you've got the two trees with the house in the middle.

D: Yeah.

J: I know that, you know, when you ask 'What does sustainability mean?' everyone's got, you know, a slightly different definition. Some people like to focus on just on the environmental—

D: Mmhmm.

J: Some people focus on the three-pronged approach of environmental, economic, and social. I guess, in your experience with the Land Trust, how would you say that the organization defines sustainability for itself?

D: Well, we, the way we look at it is, um, sustainability should be focused on access for the individual. And it does have all the components you just mentioned. Um, it should have an economic perspective to it, it should have green space, and it should have affordable housing; that has a huge part to do with sustainability, and also the type of affordable housing that's available, and the amenities, where those homes are located, that's what makes the environment sustainable. So if you can envision just this person in the middle and all these things around them, that's what sustainability means to us. On the home construction side, we focus on making sure the homes we're building are energy-efficient, you know we use metal roofing, because that saves money long term, for the homeowner spray foam insulation, zero to low VOC paint for the floors, we focus on making sure the homes are solar ready so that at some point when solar panels are affordable—very affordable

J: Right.

D: To the point where an affordable home owner can afford it, the access to that is there. That improves the sustainability of the house. You know, Energy Star appliances, insulated windows, um, and also we try to make sure the homes we build, you know, bring in plenty of natural light, so the homes we design have plenty of windows in them. And also, where we build those homes, we make sure they're easily accessible to, um, employment centers so, you know, I would say



about 90 percent of our homes that we've built or rehabbed in Athens, it's within about a 10 minute drive of UGA, Athens Regional the hospital, St Mary's hospital, any police station around, so that's part of sustainability as well. So you're not heavily dependent on your car, we try to focus on building on bus lines. So that if your car's not working, you can hop on a bus line. A lot of people use Uber.

J: Right

D: But some of our homeowners don't use Uber. They don't have access to the high-level technological phones like iPhones or Androids just yet. Um, but also their kids can easily get to school, they can get on the bus or get on the school bus or if you want to drive them it's all within 10 minutes. Also having a walkable community where they can easily walk to a park or any kind of green space, and you know that part is actually very critical as high level high stress as life is in general, you need to be able to go somewhere to just de-stress. And you know, that's part of what we try to implement into the homes we build and all the construction that we do. So that's my view of sustainability.

J: Excellent!

D: It's, um, a person-centered approach.

J: And also, just really all-encompassing. I think it's great that you brought up that the homes are easily accessible to the bus lines, employment centers. You also mentioned that some of your homeowners don't have access to Uber, they don't have—perhaps they don't have the disposable income to constantly use Uber, you know they don't have the high-tech, high-technology smartphones...

D: Mmhmm.

J: And I do know that a lot of your homeowner target is for low-to-moderate income earners. So can you talk with me a little about the definition of what makes a low-to-moderate income earner?

D: So, a low-to-moderate income earner, um, is a person making below 80% of the income level in Athens-Clarke County. Um so for an individual, that means if you make below 31,750 you qualify for our program and one of our homes. And the number goes higher as the family size goes up. So if it's a family of two, the threshold is 32,650. HUD does the calculation and then sends it out every year. So between that, I would say that between 50 percent and 80 percent is the low-to-moderate income level. That's the range that we primarily focus on. And you know we do get the lower level as well, 50 percent or below, and the thing about Athens is about even though we're not able to serve that population, groups like Habitat for Humanity are able to further assist that population of people. And you know, you do have the above 80 percent which is considered the workforce, workforce housing, so if you're between 80 to I believe 110, that's the workforce, and anything above that is just—people making great money.

J: [sneezes] Excuse me!

D: Bless you, bless you.

J: Thank you. Um, I guess kind of along the same vein of the low-to-moderate income earners, I guess I would also just like to talk about the general demographics of the people who tend to buy the homes that you all build. Is there a certain demographic that you try to target, like families or singles, or do you try to target across the board?

D: Well, no, it really varies. We try to focus on income ranges, um, because regardless of your family size, if you're within the income range then you're qualified. So we focus primarily on the income ranges and by doing that, that dictates the kind of clientele you get. So you know we get everything from teachers to Clarke County School employees, UGA employees, Athens Regional employees, Caterpillar, um, Pilgrim's Pride, you know, Jittery Joe's, so, it's really, income brings in a huge demographic of people. I mean, we have a homeowner that's a potter, we have a homeowner that works at Starbucks! [laughter] So you know, variety is the spice of life, so the way we look at it is regardless of where you come from or your race, if you're looking for an affordable home, this is an option. So someone can always find an affordable, energy-efficient, sustainable home to buy, if they're looking to buy.

J: Right. Well, I think that is definitely a noble goal, especially in a county like Athens-Clarke County that tends to rank as one of the most impoverished in the state. It's also the smallest in the state, too.

D: It is, it is the smallest in the state, um, I think the poverty level might have dropped slightly, but it's still pretty high. And you know it's— Athens is not a high economic area like Atlanta, or, you know, other cities. UGA and Athens Regional are one of the major employers here, and then you have other manufacturing businesses, so...you know it's kind of like, if that's what you have, and you know unless you're a physician, a nurse, an RN, an LPN, or something, a phlebotomist or whatever, you're going to be within a certain income bracket. All those individuals should have access to affordable homes in Athens, and not in Monroe or Commerce or whatever. In Athens, and be able to have access to get to everywhere within a short amount of time. So we try to focus on the fact that we build in-town, because right now new construction, any new construction market-rate home is 300-plus, and a lot of employees here cannot afford that.

J: Right.

D: Yeah. And everyone should get to benefit from being, from living in Athens, and not just people that are wealthy.

J: Absolutely. Can we talk a little bit specifically about the Cannontown neighborhood?

D: Sure.

J: Since that's, I guess, the focus of this project. I know at the, the last time I was there with you, there were, I helped draw up the plans for three houses and I believe there were two that were already built in the neighborhood?

D: So, six were already built.

J: OK.

D: So we have 15 lots.

J: OK.

D: So the plan is to put 15 homes there. We have completed three homes, I mean six homes, and we're building three now.

J: OK. Are many of the homes occupied at this time?

D: Yeah, they're all occupied.

J: Oh, they're all occupied? That's great. What's the general makeup of the neighborhood?

D: As far as?

J: Oh, as far as, does it seem like there are families or couples or age ranges—

D: It's actually mixed.

J: Mixed? Ok.

D: Yeah, it's actually mixed. We have one, two, two families. And one is a family that's growing, they just had a baby, and they bought a four bedroom house, because they're planning on having more kids. Um, and then, one person is a...well-seasoned lady [laughter], and she was just looking for something affordable that wasn't an apartment. And you know, this was a good option because if you're going to be paying the same amount for rent and you have a roommate and you can get a three-bedroom house, it only makes sense.

J: Right.

D: So she's in one of those, and then we have a guy that works at UGA, and he's in one of them. And then we have another lady, who works at UGA, and she's in a wheelchair and she's the one we did the custom-built home for.

J: Oh, OK.

D: So everything is customized, lower counters, a more open floorplan, I think we put sealed—we didn't put hardwood, we put a sealed concrete type thing so that it's more water-resistant in case she drops stuff, and given that she's in a wheelchair, it prevents her from leaving wheel marks on the floor. Um, so, we, it's going to be a very diverse neighborhood.

J: That's what it sounds like.

D: Yeah, it's going to be a very diverse neighborhood, so we're looking forward to it, given the designs that we have, and the color scheme of the neighborhood, we're thinking we're going to paint them right now, so definitely something vibrant, I'm going for like a plum or red or something, something not too bright but definitely that fits within the color range of what we have there now.

J: OK. So the colors you're looking at are more on the vibrant side, so you were saying like plums, reds....

D: Yeah, more of like a magenta, uh yeah and you know we also want them to complement the other colors that are in the neighborhood.

J: Right.

D: So, um one might be a little bit of a grayish color because one of the homes close to the three we're building have a darker grey, so just to play off of it. So, just, no green.

J: No green? Okay [laughter].

D: Yeah, no green, I think we've exceeded our green usage limit.

J: [laughs]

D: We've, uh, met our quota, so no green. So, no...that's going to be interesting just picking the exterior colors for the homes, and how we want them to look.

J: And, in terms of the exterior, I know you've got your color scheme set out...is there kind of a cohesive theme you're looking at in terms of maybe like building materials, or siding on the exteriors, or what's the general look that Cannontown is going for?

D: So, I guess a mix. I believe one of the homes has siding...it's like hardiplank, but the remaining ones have the panels.

J: OK.

D: They're panels, they're individually-cut square panels, and we use those to make up the exterior of the home. I believe that's what we might stick to, um, unless we find something else that is intriguing and we try to use it. But I do like the paneled look. It gives it a very streamlined, um, and neat look. Clean lines and, it just looks good. But we'll see, I need to talk to my contractor about that...[laughter] you know, of all the things we've discussed, we have not discussed the exterior of the house. We've discussed everything else: framing, how the interior's going to look, but not how you're going to wrap up this house.

J: Right.

D: So we'll see.

J: So when it comes to the interiors, of the house, um, it sounds like there's a varied population that lives in the neighborhood. Does the makeup of the houses reflect that as well? Do you have a wide range of, like, square footage or bedroom numbers or a two-story/one-story? What does that look like?

D: So there are a mix...but the whole subdivision is going to be a mix of one and two stories.

J: OK.

D: Umm, and most of them are going to range from two bedrooms to four bedrooms. So that's going to be the range. Um, as far as the square footage, it's really going to be anywhere between...well, currently, it's going to be between a thousand and 1500 square feet, just because of the size of the lots, it really—you can't build more than that.

J: Right.

D: Um, but for the lot number 15, that's going to be much smaller, just because it's a smaller lot. So that might be more in the nine-to-six-hundred square foot range.

J: OK.

D: But depending on whichever plan comes up, we don't know yet.

J: Yeah, I do know that that corner lot I'm looking at for this project is particularly challenging because it is smaller than its neighbors. Have you all discussed any ideas about what you would like for that home to look like, in terms of what kind of homeowner do you think might live in it? Or, OK, you just mentioned the maybe 900 to 600 square foot size...do you guys have any preferences in terms of any of that?

D: I mean, given the size of the lot, um, we know it's going to be a single person, and we're OK with that, because it's not our choice. Yet, there are zoning requirements that we have to abide by...the size of the lot really doesn't allow for much bigger building, so it's the hand we've been dealt, and we have to build what we can build on there. So, but realistically, it might be an individual or a couple, um, if it's—depending on how spacious it looks, a couple might be able to fit and live comfortably in there. But I don't see a family of three or four living in there. There's just not enough space, and there won't be enough yard space for a kid to play. So, it's a challenging build...but you know? That's life, you just have to dig into your creativity and come up with something awesome. [laughter]

J: [laughter] Right.

D: It's an opportunity for awesomeness.

J: Well, that's a good way to think about it. You know, and so, are you looking to keep the metal roof? I know you said the other homes do have metal roofs.

D: Yeah, so whatever we build, it's still going to be Earthcraft-certified. That's something we're really dedicated to doing. So it's still going to have all the components of every other home we've built there, even though it is going to be different. So, yeah, everything stays the same.

J: OK, so Earthcraft-certified, the Energy Star appliances, what kind of materials do you guys look for on the inside? I know I've been into a couple of the homes and have seen the hardwood floors, except in the case of the custom-build where you have the finished concrete. But is it hardwood floor, what kind of—is it stainless-steel appliances, or what kind of look are you guys going for on the interior?

D: You know, we try to complement the look of the exterior, so, it's a more modern design, so we try to have more modern finishes. So, stainless steel appliances, and they're all electric, so we put in electric stainless steel stoves and refrigerators, and we make sure they're vented. So we either do the microwaveable vent or we just vent it outside. Hardwood floors...I believe all the rest of the homes we're building are going to have hardwood floors. Umm, so that's the look we're going to go for...just more of a stainless look, just to keep it in line with everything else.

J: Right, because it does seem like a pretty modern-looking neighborhood, like you said, I did notice that there were a lot of clean lines, there's not really a lot of excess ornamentation or anything like that on the outside.

D: No, no, not for these.

J: Right, so you're going for a clean, modern, stream-lined...what about, in terms of, I guess, the space distribution: two bedrooms, or three? How many bedrooms, what do you see for this house?

D: Wait, you mean the...

J: The little one.

D: Oh! Um, shoot, you know, to maximize space, I would just like to do a one-bedroom master if I could, but I doubt if anyone would want to buy that. [laughter]

J: Yeah.

D: Um, I mean, but it's probably going to be a two-bedroom, one bath, or maybe a two-bedroom, one and a half bath, so have a half-bath downstairs just for guests, you know, and have the main bathroom upstairs. Actually, you know, I had not considered just a one-bedroom master house. It would be very unique. I don't know how people would take it.

J: Right.

D: But I would rather have a one bedroom that's huge than two tiny bedrooms, but that's just me. So preferably, two bedrooms one bath; optionally, a one-bedroom, one and a half bath.

J: OK.

D: But, rest assured, that it will have plenty of light.

J: Great, OK, so plenty of light is definitely a priority.

D: Absolutely. Plenty, plenty of light.

J: Well, I will definitely make sure to note that in the design. I, um, I know that you guys have built in several areas around Athens, so you guys have a pretty well-established presence in Athens right now. And looking forward to the future, I know there are a lot of different, you know, housing trends that claim to be a good fit for low-to-moderate income earners. Like, really small homes, tiny homes. Is that something that you guys as an organization have looked into? What have you heard about the tiny house movement?

D: Well, I mean...I think just given my background and my experience, my perspective about the tiny house trend, it's very different. I think that one, it's not for everyone, and two, it's not a way to create affordability. Because one, you have to deal with all the zoning hoops that you have to jump through just to build a tiny house, which you don't have to do if you're just building a regular-sized home.

J: Right.

D: Two, you're really looking at the cost difference. Um, how less expensive is it to build a tiny house on the same lot compared to building a normal house, and what do you get? If you're building a tiny house for \$100,000 with everything in it and it's still a tiny house and it's 300 square feet, and I can build you a three bedroom two bath house for \$120,000 and it's 1200 square feet, and it's still affordable, which do you go with? So that's the decision people have to make. But, you know, it also depends on who the affordability is affecting. If you're thinking about families and tiny homes, those don't go well. That does not meet up. Because families are looking for space.

J: Mhmm.

D: If you're a family and you've been renting a one-bedroom apartment, you're not looking to buy a one-bedroom tiny house. You're looking to get something larger, so that your kids can have their own room, and have privacy and their own independence. So I don't think that meshes well. Now if you're talking about affordability for a college student or a grad student, yes, that'll work! If I'm a single grad student and I'm just looking for a small space, I have a bicycle and don't have a car, I have three jeans and five shirts [laughter], I'm good, you know, that's affordable. And it's in a good part of town, I can hop on my bike and commute, yes, great. So that would be perfect for that demographic of folks, but not really if you're trying to have a broader impact of affordability in Athens.

J: Right.

D: it's not a sustainable solution, is how I should put it. It's more of a trendy kind of thing.

J: Or more of a niche-market?

D: It's a very niche market. You know, I say this all the time, people looking to move into a tiny home never lived in a tiny space before. Because if you grew up living in a tiny space, that is the absolutely last thing you want to do. If anything, you're clamoring for more space. Because, you know, you don't want to have flashbacks of you and three of your siblings sleeping head-to-foot in one bed [laughter]. You want space, you want to entertain family, stuff like that.

J: Right. You know, one criticism that has come up, you know, during my interview process with people who have lived in a tiny home...there was a catchphrase that they used, that they had heard being used as a criticism of the tiny home movement being something of an "idealized poverty," where, you know, you have people who are talking about "Oh, you know, we want simple, we want down-sized, because we just have so much stuff that we need to learn to shed our sentimental attachments to material possessions and choose to live, you know, in a more simplified impoverished manner with our compostable toilet and our small appliances in our shipping container houses that can only fit these five articles of clothing that we own." And I would imagine that the demographic that's looking for that kind of lifestyle, or that return to nature, is different than the demographic that you usually sell your homes to.

D: Mhmm.

J: The people, they talk about connection to nature, they talk about sustainability according to their own definition, they talk about, you know, being simple and trying to get away with as little as possible, but I don't imagine that's the, sort of, goal of the homeowners that you deal with, or the home seekers that you deal with. You know, even though you are dealing with low-to-moderate income earners, what makes a home for them?

D: So, I think what you said is quite interesting, because, you know, you have people who are OK. They're well-off, and they're trying to downsize.

J: Right.

D: Well, one, they should be blessed that they have money and means that it's become a burden to them that they feel the need to downsize their living, and, you know, that's a good thing. They can donate their clothes to the Salvation Army or give it to churches or whatever and that's fine. Now on the other end of the spectrum, you have, you know, families that don't have a lot of money. They're just making it above the poverty line. They've probably been renting for, you know, over seven to ten years, never thought homeownership is possible, just because of the job they have, or just growing up it was never something that they thought was a reality, "Oh, I can actually buy a house." You know, because, when they were growing up, they lived in a rental, either public house or they were renting a house, and their grandmother's place is probably a rental, so that's the cycle they're in. So now that they're employed, and they're making some money just given economic trends—they're still not making a lot, but they're earning a pay, there's an opportunity for them to get, to be able to afford something where they feel like they have some solid footing. Um, they don't have to pay rent to someone else, they can actually pay down a mortgage and build some equity, get tax benefits from their home, live comfortably, have privacy, not having to worry about your landlord is coming to inspect your property, you don't have to deal with your neighbor that's right next to you just being a nuisance...

J: Right.

D: So that's where they're coming from. They're not privileged, or they've never had the opportunity to own anything, and this is a great possibility for them, compared to "Oh, I own so much I need to downsize into a shipping container to really feel like I'm struggling." And the thing is that a lot of people who build tiny homes or move into tiny homes, their income is not going down. So, if you're making 150,000, and you decide you want to move into a tiny home, you're still making 150,000. So you have access to money and capital to make other decisions, compared to "I make 20,000 a year, um, I'm paying 800 a month in rent, I have money to do nothing else with, if I get sick or I have a medical bill right now, I probably have to go get a payday loan and then I'd have to pay that back, you know, with interest." So, those are real situations. Someone wanting to deal with, you know, living an impoverished life, I equate it to people who go to prison hotels to see how prison life is...

J: [laughter] Right.

D: And it's not the same. It's an experience, it's not your everyday way of life.

J: Right. So high on the list of priorities for the home seekers you deal with, you know, you mentioned security, privacy—which is something I think is very important and something that doesn't really fit well with what I've encountered previously in the tiny house movement because you're relying on having to live on someone else's land, so you've got this sense of...you might have that return to nature because you can pack up and drive to somewhere and be in nature. But there's not that sense of security or that sense of ownership, especially with zoning and building codes, and zoning being the way it is, at any moment at the drop of a hat you could move.

D: I mean, yes, having a tiny house on a trailer does provide you with some type of flexibility. So if you do want to drive to a nature reserve and live your house, yeah, you can get back to nature. Or if you have five or ten acres and you want to park your house on there, yeah, that's great. But, a lot of the families that we're dealing with, they're not looking for that. They know where the parks are [laughter].

J: [laughter] Right.

D: They just can't afford anything close to where they are, is the challenge. And you know, what they want is different than what the tiny house movement is really focused on. Um, that's not what we've come across.

J: Right.

D: We've come across people who just want enough space so that their mother can live with them, and their mother getting older, and they don't have enough money to put her in a nursing home, so somewhere for her and her mom to be, or somewhere for her and her kids to live comfortably. Those are really just security, stability, safety, and also having a sense of ownership.

J: These are all really interesting points that you've brought up, and I want to make sure I bring a design to you all that I think will suit the needs of the home seekers that you guys deal with, so I want to make sure that I'm doing something that will serve their needs and that will be relevant to them, rather than trying to design something for the sake of fitting in with a niche market housing trend, or something that's not actually going to be sustainable in the way that your organization needs your homes to be sustainable. So I really appreciate you taking the time to sit and go through this process with me.



D: Absolutely.

J: And just hashing out what it is that we're looking for here.

D: Absolutely.

J: And so with that, we actually are right at the 40-minute mark, 40 minutes and 6 seconds, so, with that, I guess I will let you continue with your day, and thank you for participating!

### Participant 4

J: Well, thank you so much for talking with me today! And the first question, which is really simple, I just wanted to ask if you could tell me a little bit about yourself and your role here at the Athens Land Trust.

G: Um, this is George Wright, and I am the Construction Manager of the Athens Land Trust, mostly involved with building and some rehab of affordable housing.

J: OK, and I know that one of the goals of the organizations is sustainable living, right? With the tree in the logo and everything that I've noticed.

G: We hope so.

J: Yep, and I've noticed that everybody has their own spin on sustainability, or their own definition, but in your own words, could you tell me about what living sustainably means to you?

G: Wow. I'm not sure any of us have a good enough handle on that. I think it means more drastic changes in our American lifestyle than we can really envision.

J: Right.

G: So I'm ready to envision perhaps deeper cuts in that than some, but I don't think I'm thinking really sustainable in what I do in my life for instance. I live in 1300 square feet with one other person, we fly from place to place, we fly overseas occasionally, we drive what we call "fuel-efficient" cars in today's market, but they do use gas, and that's clearly not sustainable, it's not going to last forever.

J: Right.

G: Nothing about that lifestyle is really sustainable. We grow some food in our yard, three percent of what we eat. Maybe.

J: Right.

G: So, sustainability is a work in a progress.

J: Well, I agree that that's true for most of us, and it sounds like you have a better handle on it than I do, or certainly many others.

G: It's important to me, and it'll get important to the next generation or the one after, or something. It's going to be critical at some point, I think trying to adjust some now and work on some of the technologies we'll need and some of the attitude changes, thinking about redistributing wealth across our society and across the world is—well, it's not even something I'm really all that much interested in doing. I'm not sending my paycheck overseas, honestly.

J: [laughter]

G: So, it's a start.

J: Can you tell me a little bit about why it's important to you to live sustainably, or, or the importance of sustainability to you in terms of...anything in living your own life, or the good of society, or just your thoughts on that?

G: One might say the good of society, but really I think it's my own self-respect.

J: Mhmm.

G: I need for my own self to do what I think is right, and I've simply got to figure it out for myself. I'm not religious, and I'm working on my own set of morals, and sort of trying to do it that way.

J: Right. That's good. I definitely think that it's a noble goal, because it is true that the resources we have here on Earth are finite, and they are going to end at some point, so we need to do what we can to look ahead. Um, I did want to ask about how the homes you guys construct at the Athens Land Trust, how you feel they support the goals of living sustainably. If there's anything you do in terms of material or finish selection that's environmentally friendly, or the process or anything like that that you can tell me about.

G: All of that stuff is better-than-average, at least, and that's faint praise, but it's a factor in every decision that I make. So are other factors like cost and marketability. We have to build houses that people will want to buy and move in. Um, hopefully they want to buy and live in something that costs to heat and cool, for instance.

J: Right.

G: And if it's small, trying to make it not feel so small, livable.

J: Right.

G: And, um, and make it as small as I think we can get away with and make it work for our clientele. Um, as much as possible, locally-sourced, not toxic, those kinds of issues are important to me.

J: Absolutely. Uh, when you talk about some of the smaller homes, how small is the smallest that you're comfortable building for any of your Athens Land Trust homes?

G: I, I would be comfortable building smaller than we're building, I think. But, I'm told that we don't have the market for that, so at this point, we're building houses that are about the size of what I live in, which I've already indicated...might be a little large.

J: OK, so about 1300 square feet?

G: Yeah, I think thereabouts, 12 to 1300 square feet.

J: OK.

G: Three bedrooms, hopefully they'll support more than just two people.

J: Right... [long pause] I hope you don't mind me jotting down notes during the course of the interview.

G: Nope!

J: I just want to make sure I remember...um, now I know you talked about how you don't think there's a market to build smaller than what you guys currently are building. Is that specifically in reference to tiny homes, or just any home that's smaller than the—

G: I think for the Land Trust model, our target audience, it tends to have space for extended family to stay with them. 300 square foot tiny houses are not going to work.

J: Right.

G: Evidently, two-bedroom houses of, say, 1000 or less are not going to work, maybe we'll try that at some point with some of our houses. What we're finding now is that people want three and four bedrooms because they're going to have an aunt, sister, daughter, mother, somebody else moving in besides the nuclear family.

J: Right, OK, that makes sense, too. In a way, that itself is also sustainable, because you're thinking of housing multiple generations and extended family in one place rather than having them all scattered in their own homes.

G: Absolutely.

J: So, I think that works too! Um, I did want to ask you, while we're on the subject of tiny homes, about your experience with the class.

G: Uh-huh.

J: With the tiny homes class, can you tell me a little bit about that, what got you interested in joining the course, or how the course came to be?

G: Uh, it was the inspiration of one professor who I think actually wants to build one for himself, to use as a second home sometimes.

J: OK.

G: That's probably how he got interested. He interested others to work on it, including myself as a technical advisor. I think a tiny house is a great classroom or laboratory experiment.

J: OK.

G: A laboratory setting for a small number of students, they can actually start and finish a structure in one semester.

J: Right.

G: And for that to happen, as far as I can see, it has to be tiny because it just barely got done.

J: Oh, my goodness.

G: It was. It would be hard to build a three-bedroom, 1300 square foot house with a few students in just one semester. Maybe that's doable, but I don't know how. So, it's kind of like building a model of a house.

J: OK.

G: The learning experience, I think was great. The product is going to be used as temporary housing on an organic farm, and future ones have a similar fate, so far. I think that's a good use for them, and I'm interested in doing it again.

J: Oh, that sounds great! Because I was just curious because I had no idea what the houses were being used for, but there was a little bit of talk in our department, especially over in Furnishings and Interiors, about the tiny house class. And I think at least one of our undergrads took the class, and she really enjoyed it, so—is that something that you'd be interested in repeating in the future, having that class?

G: I think we need to do it again. There's a thought of building two this semester or doing it'll be repeated.

J: OK. And during the course of your experience with the class, did you have any opinions about tiny homes before starting the class? Did those change during the course of the experiment?

G: No, I'm pretty set in my ways I guess. I still feel about the way I did about them. I think they're a great idea for some people, even built on a trailer as this one was, could make some sense. Although, it's really more sustainable to buy and rehab an old Airstream or some other less prestigious brand of trailer that's already existing and would do fine for temporary housing for one or two people for a season or a year or a few. I think building very very tiny houses on the land, especially in rural settings, could make a lot of sense. I've done a few things like that, although never less than about 500 square feet.

J: OK.

G: Well, once, less. And that was a great project. It was on an environmental education center outside of Asheville, seemed like a wonderful place to build such a little tiny house for people to live in seasonally or something like that. I, uh, I still think that they're not a scalable solution for much of the world. I don't think we're all going to live in individual little cubicles. More likely we'll jam them together and leave less space disturbed, and fewer exterior walls and less utility hook-ups per square foot. The whole thing is a little bit difficult and expensive per unit of use, or per square foot that you get out of it. So, I still feel that way, but I have an opportunity to think that out a lot better and I'm sure I'll think it through.

J: Yes, I do know that there seems to be a growing local interest in tiny homes as a permanent solution to some of the housing problems that seem to exist in Athens today. But what, what makes you think that this is not a good idea to employ tiny houses as a permanent solution? What would you have to say to some of these people?

G: I would say, go for it.

J: Go for it?

G: I think on some scale, say somebody had a piece of land that they wanted to have used for that purpose for at least a few years, maybe a generation, as a site for multiple little bitty houses that could maybe be moved somewhere else at the end of that period, and house people who otherwise didn't have housing...may not be the best way to spend money towards housing and giving them to people, but it's worth playing with the idea, if somebody wants to put their resources toward that. I don't think it's wrong. I think it's unlikely that it's going to prove to be a solution for hundreds of thousands of people in our country. I don't think so.

J: What do you think would be a good solution for many people who are looking for affordable housing and might not have the means to buy a traditional home?

G: A living wage.

J: Mhmm. So you think the problem is more societal, and not something we can do a quick fix for within the residential industry.

G: No, I don't think we can just build things to give away, ultimately. We need people to make their living and make their own choices in the marketplace and have things appropriately cost for—priced for the resources that they use and the good that they do. And I think people will ultimately make good choices about that if the tax structure didn't favor certain kinds of investment over others and if people were guaranteed a job and a livable wage from it, then I think the housing problem would, more like, take care of itself. That's not going to happen in my lifetime, but it's where I hope we're headed someday.

J: Right. Now, I guess to go back to your experience in the class, can you tell me a little bit about how the house was constructed? You said it was built on a trailer, but maybe tell me a little bit more about some of the materials or techniques that were used? For example, I've noticed on some of the TV shows that tiny houses like to take advantage of a lot of built-ins to make spaces more flexible...you know, you have a table that folds into the wall, or a couch that pulls out into a bed that's kind of also built into the wall, and little things like that.

G: I didn't think we had time to build those kinds of things.

J: OK.

G: So we built on a purpose-built, umm...metal frame, rubber-tire trailer that pulled behind a medium-large truck. Used it as the floor system; there are many little tales about how that was done to make it more or less efficient, but that's basically what it comes to; it's a regular stick-built house, very similar to other single-family residential construction, except it's built on a trailer. And it's tiny.

J: How small was it?

G: It's about 8 by 20, so 160 square feet on one floor, and it has a loft over something like two-thirds of it, which is just barely tall enough to sit up in. And it's a place to sleep, but if you put a thick mattress up there, then I don't think you could sit up.

J: Oh, goodness!

G: So, there's not a lot of room. It has to be able to pass under 13-foot, six-inch power lines as it goes down the road, unless you get a special permit to move it around. And it can be no more than 8-feet, six-inches wide to the outsides of the tires, or any other portion of it.

J: Right.

G: So, it can be longer; the next will probably be longer. It will probably be a gooseneck type trailer that can easily be longer. But basically it's a wooden-framed house with normal kinds of finish materials, specially built cabinets that are very small. It turned out, I think, to be very pretty. It's a nice little house, and like I said, it's a good lab exercise for a bunch of students to see everything that goes into building a house. Some of them will probably do it again for themselves, or have some larger role in it or understand when they're having it done. It had all

the mechanical and plumbing and electrical systems, and they all learned a little bit about all of that.

J: Oh, wow, that's really neat.

G: But basically, it's a little shed. It looks like a scaled-down, simple, single-family house that has tires under it.

J: That's really cool. Now I'm sad that I didn't hear about the course until it was already underway!

G: I'm surprised you didn't. It got a lot of talk around campus for a little course with 13 students. There were a lot of people who came to visit.

J: I heard about it mid-way or towards the end of the semester when Dr. Gomez-Lanier told me that one of the undergrads was in the class, and I was thinking, 'Man! If only I had known, it would have been great to maybe take it as an independent study!' That sounds like a really fun experience. Also, in this interview, I wanted to ask you a little bit about the Cannon Drive neighborhood specifically, since that's where this small house is going to go. I guess, could you tell me about this neighborhood, if there's an overarching vision for this neighborhood, or commonalities between the houses that have already been built?

G: So far, they're stylistically about the same. So far, they're all about the same size. The lot that you're looking at I believe is smaller, or has greater setbacks. You probably have more information about that that you'll share with me later, but it's a small lot. It's, the neighborhood is a convenient one. It's on a bus route, it's not too far from other needs.

J: Right.

G: It's in-town in Athens. Real estate is expensive in Athens, and these are going to be far more affordable houses than most nearby. Most of the new construction nearby, as you know, is going to student housing, not families. In fact, families are being displaced a lot by students. Right across the street from there, something like, I don't remember the number, 50 or 75 trailers were moved out to build apartment buildings for—I don't know, 300 units for students, or something. So, affordable housing disappeared over time and with one big jump right across this street, right in that neighborhood. So it's an appropriate place to be working on providing for traditional residents.

J: Right. And so the target demographic, it sounds like you're looking for, is families. What sort of family do you envision living in that small house, or what's the largest family that you think that lot could accommodate?

G: I guess I don't want to make that decision for the people who are going to live in it.

J: OK.

G: I don't think this can be a huge house.

J: Mhmm.

G: It could conceivably be a three-bedroom, two-bath house, though, I suppose. Maybe smaller is more practical, but I don't have a view. And you say we're targeted towards families. Well, sort of, hopefully. We want traditional residents, but there's no exclusion of anybody because of the kind of family unit they live in, or don't. Of course.

J: Right.

G: And so people are various, as they are in every neighborhood.

J: I did hear that Cannon Drive neighborhood have quite a bit of diversity among the residents that live there already.

G: I guess it does.

J: Could you tell me a little bit about some of the residents that are living there?

G: Um, there are a couple of handicapped people. There are people of various races, related in various ways, I think [laughter] I don't want to get too much into, about those people. But there's a baby, there's nobody over—let's see, it's all fairly young people. The oldest person in the entire neighborhood might be, 40 at the most I think. That's interesting. I hadn't thought of it. I don't have any race, color, creed, gender idea of who's going to be next to live there.

J: OK, OK.

G: Someone who needs it.

J: Right.

G: Can't do it otherwise.

J: Right. Do you require that this home be ADA compliant in case there is somebody of...someone who is handicapped who's looking for a house, or is that not really a concern for this one?

G: Of the six that are there, I know there was one that was built with that in mind, specifically to have handicapped people in it. These three houses are all going to be less accessible. They're built higher off the ground.

J: OK.

G: They are built on crawlspaces, not slabs, and on somewhat difficult sloped lots where it would require some adaptation for a person to live in one of these houses with a wheelchair. Two of them are two story. And the one story one is going to have probably at least six steps to get up to the door. So, they're not wheelchair houses.

J: OK.

G: Others in the neighborhood could be, as some already are.

J: OK, and in terms of materials and finishes that you've selected for the neighborhood so far, are there any commonalities? Are they different from house to house, or do you generally go for the same type of flooring, same type of interior, what would you like to see?

G: I look for durable materials throughout. And the outside of these houses I designed to look like they belong with the first six, although not specifically so. There are some differences. I don't think yours has to look exactly like those, but you probably want to make some reference to the ones around.

J: Oh, absolutely.



G: On the other hand, it's on the corner, and adjacent is a newish but traditionally-styled house next door. Back behind it is a sixties ranch, behind and adjacent to the one you're designing is something very different. So you're addressing that neighborhood as well, and there's an institutional building across the street. So, there's no rules.

J: [laughter] No rules?

G: Well, it probably ought to look like it goes with this neighborhood.

J: That was my hope, that I would try to make it look like it does go. So I just wanted to make sure I try and hit the—are there any sort of aesthetic priorities or themes that you want to prioritize in this house visually? Is there anything I should keep in mind?

G: Only if you want that advice, and I think I hear you asking.

J: Mhmm.

G: So, I would suggest fairly simple lines. Fairly large and open glass areas. The fenestration of it should be similar to the others in the neighborhood, I think. The lines of the roof maybe should be similar. They're mostly sheds of low pitch, with one or two high pitches in. The materials are brightly-colored, durable, mostly cement siding, and tin roofs. I think choosing all of those aspects for this house is appropriate, or not. Leave some of them out if you want.

J: OK.

G: Especially if you've got a reason for it, that has to do with the site or the client, or your own desire to express something different on that corner. I mean, there's all sorts of reasons to make a choice. And we're not designing for any particular client. You're sort of freed up, and sort of have got no guidance. [laughter]

J: [laughter] Right. That's why I appreciate any guidance that you have, that, you know, you and David have to provide. Um, as far as the interior, is there anything that you guys have noticed works particularly well in this neighborhood? I know yesterday you mentioned the oak flooring that you enjoy using. Is that something that you would like to see continued?

G: Probably. I want to see sustainable and durable materials, and that's my typical choice of materials, is hardwood and tile for the floors, because those are durable and not terribly expensive. And sometimes locally-sourced, or can be. So, you asked about things that work well in this neighborhood.

J: Mhmm.

G: Well, things that work well in any house I think are—this is going to sound like an elementary architecture class and we can't go through all that—but of extreme importance are the penetration of light into the house, the feeling of openness, the uplifting feeling, the attractive feeling when you enter it, the being drawn toward aspects of it towards the windows or toward the hearth-like area or towards the kitchen. The kinds of things that are important in any kind of house are important here too. You won't learn all of that in one house [laughter]. We're all still learning. I'm happy to help you through the process if you have questions or anything.

J: Oh, I'm sure I will.

G: Just think of other houses that please you, and if you do that with enough insight and put some of those thoughts onto paper, you'll come up with something well-designed, I believe.

J: Well, I hope so! Do you have any tips for making a smaller space appear larger?

G: Well, you need to have some fairly lengthy sightlines within it, I think. I believe It helps to raise the glass up high on the wall. You're not particularly limited with height here so you don't have to have eight-foot ceilings with the window tops at 6 and a half feet, as is traditional, say in midcentury architecture in America. I think something that draws your eye up as well as across the room can help. I think you've noticed in all three of the houses that I've designed there are vaulted ceilings. Probably not all of the others out there, but in general, we've tried to do that. These houses aren't that small, actually. Pretty good size, but at this scale it still helps to have something to help your eye move unfettered rather than it bump against walls everywhere you look.

J: Is there an ideal square footage that you're looking at for this particular house?

G: You'll have to tell me! You're going to get some information about the size of the buildable footprint and so forth, and I can choose better things about sizes if I had more information about that. But I think something as small as 600 square feet, which might be the county minimum, it varies by zone, it may be 900 square feet there. I've not researched that. It could be six, nine, or 1000. But I think you could probably build bigger than any of those. So target square footage...big enough to be legal, and as big as seems appropriate for something that will be pleasing and hopefully sell to somebody, and that somebody would want. So I'm thinking it's not 6000 square feet...

J: [laughter] Right.

G: Maybe something between a thousand and two at the very most, I think. Probably at least a thousand square feet.

J: Do you think that taking advantage of outdoor space, maybe with a porch or a patio area, is that something that you guys—

G: I think porches may be required in the neighborhood. I don't know if you've got that information. I think they're a good idea. I think having some private patio area is a great idea, but it's a tiny lot and it's got two street frontages.

J: Yep.

G: Not a lot of privacy is going to happen there. I think curtains are about the only privacy you get on that lot. Although, come up with something inventive.

J: That's a good point that you just brought up, that there are two street frontages, so privacy might be a concern. I do know that things like privacy, stability, comfort, those are all things that any client's going to be looking for in a home. Um, do you have any recommendations for helping to contribute to a sense of privacy?

G: Towards the adjacent house, maybe put the glazing, the windows, up high, so that you don't have your neighbors looking straight in your windows. But people can look in any of the windows of this house and you don't want all the glass up by the ceiling, so a lot of that will have to happen with drapes or blinds. I don't think fences would look very appealing there, it's such a small lot that you'd feel like you were walling yourself off from the world. You're just going to have to get someone who doesn't mind being open to the world, because this is definitely in the world...I mean, it's not downtown high-rise living, but it's pretty public.

J: Right. Because you also mentioned there's the institutional building across the street too, so you'll probably have lots of people coming in through there.

G: Or you'll have people on your sidewalk trying to smoke cigarettes because they can't across the street. That happens right now! Maybe it'll happen a little less when someone is living there.

J: Oh, goodness! Well, these are all good things to keep in mind, so I'm really really glad and appreciative that you took the time to talk with me about this, because, this is all a brave new world for me!

G: It's a fun project.

J: Yeah! Well, thank you so much!