



## **@ S Columbia Street (15-501) across from Southern Village**

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### **1. Written Narrative**

#### Introduction

This request is for Conditional Rezoning of the South Creek Mixed-Use proposal on an approximately 43 acre property located on the east side of US 15-501 across the street from Southern Village and the Southern Community Park. The proposed development will include for-sale residential homes (both market-rate and affordable housing units), a small component of rental units, and a mix of complementary land uses including retail, office, and public trails. The for-sale residential units will include both condominiums and townhouses. (Accordingly, a Townhouse Development preliminary plat/application will be provided in conjunction with the conditional zoning application.) The proposal embraces the adopted vision of the Chapel Hill 2020 Plan and specifically its Future Focus Area 6: South 15-501 section which calls for meeting the evolving needs of the community with concentrated, compact development that maximizes open space preservation. When considering the 688 proposed units, a density of 12.4 units per acre would be yielded which is in alignment with our proposed zoning classification of MU-V-CZD Arterial. This density would also help to address several of the housing challenges highlighted in the recent Chapel Hill Housing Need Analysis commissioned by the Town by offering multiple different housing types suitable for a wide range of stages in life and income levels. A large portion of the proposed housing in South Creek would furthermore provide a better balance of housing types in Chapel Hill with a focus on multi-family condos (ownership) addressing the increasing need for “missing middle” housing as well as a significant number of homes in compliance with the Town’s Affordable Housing requirements. Finally, the project team has worked closely with Town staff to ensure that the new development would appropriately integrate multimodal transportation methods, specifically a future BRT station along 15-501 making it feasible to live in a community in which one does not need to own a car.

#### Project Background

The Town and the previous property owner entered into a development agreement for the property in 2015. The development agreement contemplated a dense mixed-use commercial development of up to 1.6 million square feet known as “Obey Creek.” Following the execution of the development agreement,

the property was rezoned DA-1, which is the Town's zoning designation that is applied to properties subject to an approved development agreement.

The Obey Creek development agreement contemplated a mixed-use development made up of primarily commercial uses. However, market conditions are not suitable to support the level of commercial development called for by the Obey Creek development agreement and no development activities have been commenced.

Based on a formal administrative determination from the Town in June 2021, the DA-1 zoning district permits all uses which are listed as "permitted" in Use Matrix, found in Table 3.7-1 of the Land Use Management Ordinance. This means that the property could be developed "by right" with single family dwellings, duplexes, townhomes and other multifamily dwelling units on all 120 acres spanning both sides of the creek. The entire site, as opposed to the limited portion that Beechwood now proposes to develop, could yield approximately sixty (60) +/- one-acre lots.

The new project sponsor, Beechwood, proposes to terminate the existing development agreement, pursuant to the termination provisions outlined therein, and to petition the Town to rezone the Obey Creek property. Our proposal includes the exchange and re-zoning of a 2.19-acre tract owned by the Town within the site, to the same conditional zoning. Our intention is to obtain final approval for the exchange concurrently with the approval of the conditional zoning. This course of action will allow Beechwood and the Town to negotiate appropriate development standards without being constrained by the existing development agreement which was drafted for a different use profile, different demographics and is no longer feasible under current market conditions. Beechwood believes that the newly proposed development far better addresses the Town's Comprehensive Plan and its current housing needs than either the current development agreement or the alternative "by right" one acre lot single family zoning.

#### General Site Layout and Building Orientation

The property is approximately 43 acres and is located on the east side of US 15-501 at the southern end of Chapel Hill across from Southern Village. Wilson Creek divides the property into easterly and westerly portions. While not formally part of the rezoning action, the area on the eastern side of Wilson Creek is intended to be preserved as a natural space. The area on the western side of Wilson Creek is intended to be developed. With the sloping condition of the site, Beechwood intends to bench the townhome and condominium buildings into the grade to optimize parking opportunities and preserve the natural topography and sightline. These areas partially below grade will be used for parking garages and some walk-out ingress and egress. The stepping of the buildings into the grade will afford residents and visitors views out to the nature preserve further enhancing the community's connection to nature and open space.

#### Site Access and Circulation

The site will be configured so that there will be two primary access points directly across from Sumac Road and Market Street creating direct links to the Southern Community Park and Park and Ride lot. These access points are desired to be signalized, full movements pending NCDOT approval and Town of Chapel Hill coordination. It is understood that NCDOT would need to review their median spacing guidelines to allow Sumac Road to become a full-movement intersection. That process is ongoing with NCDOT and

Town staff. There is also a right-in, right-out for the northernmost section of the project proposed to assist with northbound traffic desiring access to the property.

The South Creek development will only generate 20-30% of the traffic from what was expected to be generated by the underlying approved Obey Creek site plan. However, despite the lower amount of traffic expected to be generated by South Creek, internal stem lengths have been updated from the concept plan and are shown on the plans for this Conditional Zoning application. A primary north-south internal street will provide connectivity between the two primary access points with secondary streets and alleys to assist with vehicular circulation. South Creek will have on-street parking as well as parking integrated into the condo and mixed-use buildings. In addition, the proposed community will have a strong emphasis on walkability with the incorporation of a pedestrian trail surrounding the community with access points to the internal road network and scenic overlooks. We also intend to incorporate electric vehicle charging stations throughout the community to encourage clean and renewable transportation modes.

#### Site Conditions

Wilson Creek, the most notable physical feature bisecting the property meanders northward to join with Morgan Creek. Land on both sides of the creek is characterized by moderate to steep slopes (12% - 30%) within the stream buffers and adjacent to the alluvial zone. Incorporating this grade change into building footprints will create an immense amount of character as the grade is transitioned. Soil types that persist over much of the area include Appling sandy loam, Louisburg sandy loam and Wedowee sandy loam which pose only moderate constraints for development. Vegetation includes a mixture of hardwoods and pines with younger growth pines throughout the area west of Wilson Creek. Larger hardwoods occur along the stream buffer and to the east of Wilson Creek.

#### Natural Features, Environment, Landscaping and Cultural Significance

Vegetation includes a mixture of hardwoods and pines with younger growth pines throughout the area west of Wilson Creek. Larger hardwoods occur along the stream buffer and to the east of Wilson Creek. Except for several vacant houses and the abandoned quarry located east of Wilson Creek, the site is undeveloped.

A portion of the property had previously been the site of the Watts Restaurant and Motel, one of the last segregated businesses in Chapel Hill and the site of numerous civil rights protests in the 1960s. The project sponsor intends to include historical markers and informational material to emphasize this site's important significance in the struggle for racial and social justice.

#### Non-Residential Uses

As mentioned above, while the proposed development will primarily focus on residential uses, a mix of complementary non-residential uses are proposed. In addition to business-convenience, business, office and business general, there may be some other non-residential uses such as child/adult day care facilities, medical clinics, bank/financial offices, barber shop/beauty salon, commercial recreational facilities, and other personal service business land uses including retail, office, and public trails that are proposed to be permitted as part of this conditional zoning process.

### Developer Background

The Beechwood Organization is ranked at the forefront of privately-owned residential developers nationwide and on the East Coast. It is one of the largest developers of single-family homes, multi-family homes and sophisticated lifestyle communities in New York State and listed #58 of 245 U.S Housing Giants by Professional Builder. Since 1985, Beechwood has built more than 7,500 homes in 60 communities, averaging 3.9 million square feet in new developments annually since 2017 with new projects on the map from New York to the Carolinas.

Beechwood founder and chief executive Michael Dubb, with son and principal Steven Dubb, are renowned for their innovative and forward thinking in “not just selling a home, but a lifestyle” with signature quality construction and design for how sophisticated buyers and renters want to live today. Their company is known for its commitment to thoughtful land planning and design, repurposing disused land, building in harmony with nature and creating a benefit for all residents.

In 2022, Beechwood carries these values forward to the North Carolina market. With thoughtful proposals for new residential developments, starting in Charlotte and Chapel Hill, Beechwood’s vision for the Carolinas is to enhance quality of life for both residents and the distinguished communities in which it develops.

## **2. STATEMENT OF JUSTIFICATION**

Beechwood believes that the goals and objectives of this development proposal are in positive alignment with the goals and objectives of the Town’s Comprehensive Plan and its Future Focus Area 6: South 15-501 section and do much more to address the Town’s need for housing diversity than either the development agreement currently in place, or the by-right zoning that would allow for one-acre single family homes to be built. The revised land uses and lower intensity would require a rezoning of the property. Beechwood formally requests a mixed-use category of MU-V-CZD Arterial, which accommodates a broad mix of uses, for this Conditional Zoning application.

Final action by Town Council on Conditional Zoning application is to be based on the following:

- a. The conformity of the application with the applicable provisions of the Town Code.
- b. The conformity of the proposed application with the Comprehensive Plan.
- c. The compatibility of the application with adjoining uses.
- d. The impacts of the proposed application on the surrounding properties and Town as a whole.
- e. The relationship of the application and proposed built systems including utility infrastructure, transportation facilities, police and fire coverage, and other public services and facilities.
- f. The relationship of the application to natural systems such as hydrology, topography, and other environmental constraints.

As provided with the application materials and associated plans, compliance with each of the findings has been demonstrated. The proposed development embraces the key components of the Town’s 2020 Plan and its Future Focus Area 6: South 15-501 section, while also addressing the urgent housing needs and desires highlighted in recent analysis conducted by the Town regarding its housing stock. South Creek

intends to be a transit-friendly development that welcomes and integrates with the Town's Bus Rapid Transit (BRT) system and enhances its operation on the southern end of Town while providing quick non-car commutes to job centers at UNC and UNC Hospitals. Moreover, the application proposes concentrated, compact development and create a place that celebrates the area's unique qualities while making South Creek a neighborhood known for its diverse offering of homes and residents.

### **3. STATEMENT OF CONSISTENCY WITH COMPREHENSIVE PLAN**

The South Creek application is proposed to comply with the Town of Chapel Hill's Comprehensive Plan, and in particular the Future Focus Area 6: South 15-501 section. The site plan has been designed to meet the plans in the following ways:

#### **A. Compliance with the Comprehensive Plan**

##### A Place for Everyone

South Creek will provide the community with diverse choices regarding where to live, work, and play in Chapel Hill and will attract those working in Chapel Hill during the day to remain and become residents. In particular, South Creek seeks to provide housing opportunities for many of those almost 20,000 commuters who cannot afford to live in Chapel Hill. These choices will be achieved in a development that will offer new outdoor amenities and gathering spaces, small-scale retail and work places in a manner that will serve as a unique gateway into Chapel Hill. Our hope is to address the crisis of the "missing middle" in Chapel Hill by providing a truly diverse range of housing types which are affordable at varying income levels.

##### Community Prosperity and Engagement

The South Creek development will increase revenues for the town by creating employment opportunities, increasing the real estate tax valuation, and by enticing those who work in Town to become a resident. It will also complement the Southern Village development across 15-501 by providing additional retail opportunities and public amenities to Southern Village residents, and by providing additional consumers for the Southern Village retail shops.

##### Getting Around

A diverse residential development such as South Creek will support optimum use of the BRT for the Town and enhance the live-work experience to attract those UNC and UNC Hospital workers that live outside of Town to move to Chapel Hill, thereby helping to address the fact that 90% of Chapel Hill's employees live outside of Chapel Hill. The finalized TIA will inform the Town of additional improvements needed to ensure a development design that minimizes traffic impacts and does not subtract from the quality of life of existing neighbors and future residents.

##### Good Places, New Spaces

The proposed development provides new housing options to the South 15-501 Focus Area, while promoting architectural diversity and quality. The streetscape in South Creek will provide a pedestrian friendly and vibrant space for residents and visitors including spaces to gather and socialize outdoors. Beechwood also intends to celebrate an element of the land's cultural heritage by honoring the significance the Watts Motel played in the US Civil Rights movement of the 1960s. Collaboration with local organizations will be conducted to best determine how to formally integrate a historical marker regarding the Watts Motel as well as commemorating an open space into the development plan.

### Nurturing Our Community

Providing connectivity and access to trails will promote active transportation via walking and biking to reduce vehicle use and emissions, therefore reducing carbon footprint and improving air quality. Trail connections both internal to South Creek and at stub-outs to external trail system opportunities will provide physical connections with the ultimate goal of linkage to Chapel Hill's future "everywhere to everywhere" greenway system. These connections will not only provide important physical connectivity for members of our community with linkage to open spaces, but social opportunities as well. Finally, residents of South Creek will have an easy walk or bike to a community transit stop offering routes to job centers for the opportunity to live car-free if so desired.

### Town and Gown Collaboration

South Creek will provide a variety of desired choices in southern Chapel Hill. The diverse housing options offered will blend and interconnect with each other; and while residential centric, South Creek will deliver neighborhood commercial services for residents to walk or bike to on a regular basis. By contributing to the range of housing options that will primarily target the Missing Middle, not only will a wider range of people be able to live in Chapel Hill, but the diverse offering of housing in South Creek will give many of the employees of UNC and UNC Hospitals the opportunity to live nearby.

## **4. RESPONSE TO COMMUNITY DESIGN COMMISSION AND TOWN COUNCIL CONCEPT PLAN COMMENTS**

### CDC Review of Concept Plan (12/16/21)

- a. Appreciated the thoughtful approach to topography and terracing the grade; but concerned about relationship of the buildings to 15-501 (i.e., grade separation and differential)  
**Applicant Response:** Confirmed. Please refer to the proposed plans and associated building elevations and setbacks
- b. Continued conversation about 15-501 and proposed intersections and believes the project makes a compelling approach; but encourages meaningful conversations with NC DOT so that the road functions better for pedestrian connectivity and improves/enhances bus transit along the corridor.  
**Applicant Response:** Agree. While residents are already crossing 15-501 at the northern Southern Village entrance to access the bus get to campus, we are dedicated to working with the Town and NC DOT to improve and enhance movements for connectivity to Southern Village and Sumac and Market streets at grade. Multiple meetings with Town staff and DOT have occurred since the review of the Concept Plan and we are awaiting DOT confirmation on a spacing variance to allow Sumac to be a full movement intersection as well as allowable crossing details at grade.
- c. Does the southern section where the townhomes are located need all that road?  
**Applicant Response:** Confirmed. Goal was to prioritize the pedestrian experience with access for owners along the alley and guest access/parking along the public street.
- d. Supports the townhome streetscape with alley and "front" public road but big question is 15-501. Seems like there is a trail and landscape buffer but would prefer no fence and bolstered landscaping. Also, a concern about noise from 15-501 for the townhomes.  
**Applicant Response:** Confirmed. Please refer to the attached plans for proposed landscaping to serve as a visual buffer as well as to assist with some noise reduction. Also, there is no fence proposed along this trail/15-501 section.
- e. Appears to have condos over parking decks; concern about the character of the ground plane and location of driveways and how people will enter buildings.

**Applicant Response:** Please refer to the proposed plans and associated building elevations for updated designs. Pedestrian flow into/out of the buildings along with guest parking and streetscape considerations were incorporated into plans as well as updated grading thoughts about optimal ways to access the parking decks.

- f. With parking decks, looks like you have some seven (7) story buildings. How does that height relate to the area?

**Applicant Response:** Please refer to proposed plans and associated building elevations for updated designs. With the overall grading approach for site, the stepping of the grade down from 15-501 to Wilson Creek will allow the parking decks to be optimally integrated into the condo buildings. The resulting visual impact ensures that the community will have a low-rise aesthetic. Moreover, the Hyatt Place hotel on the other side of 15-501 from our site will sit up much higher than any of our buildings.

- g. What are the lengths and widths of the buildings?

**Applicant Response:** Please refer to the proposed plans and associated building elevations

- h. Likes the look and feel of buildings in renderings but concerned about the targeted price point and ability to keep them attainable.

**Applicant Response:** Additional market studies have been performed since the review of the Concept Plan specifically focusing on the relevant condo projects in the Durham and Raleigh submarkets. Thoughtful consideration has been given to potential unit square footages in order to focus price points from the \$300Ks to the \$700Ks and to address the need for “missing middle” housing.

- i. Don't see a lot of park space on the plans; still feels like an adult development; what about small kids? The open space across from the proposed Sumac intersection has an opportunity to be expanded and be a unique focal point.

**Applicant Response:** Agree; an amenity study was performed to determine how to best provide programmed amenities within the building footprints (e.g., fitness, clubroom, scenic overlooks, community gathering centers, etc). There are two primary open space nodes that will be programmed for a variety of user demographics. A local, but nationally recognized landscape architecture firm has been engaged to assist with this design. Furthermore, we are excited about the opportunity to collaborate with local organizations to best determine how to properly interpret the former Watts Hotel/Restaurant site into our open space development plan.

- j. From the public (a resident of Founders Ridge Road, an adjoining neighborhood): Concerned about pedestrian connectivity to Southern Village

**Applicant Response:** Understood. While residents are already crossing 15-501 at the northern Southern Village entrance to access the bus get to campus, we are dedicated to working with the Town and NC DOT to improve and enhance movements for connectivity to Southern Village and Sumac and Market streets at grade. Multiple meetings with Town staff and DOT have occurred since the review of the Concept Plan and we are awaiting DOT confirmation on a spacing variance to allow Sumac to be a full movement intersection as well as allowable crossing details at grade.

Town Council Review of Concept Plan (1/12/22)

- a. Grateful for different ideas and thoughtful approach; however, please make sure to review the work done by the Compass Committee on the previous approved project

**Applicant Response:** Confirmed

- b. Please work with Urban Designer regarding placemaking opportunities

**Applicant Response:** Confirmed and we have had several productive discussions with the Urban Designer to adapt and adjust the site plan accordingly.

- c. Request to try to stay out of the RCD

- Applicant Response:** Extensive review in analyzing the RCD including a site visit with the Town stormwater staff was performed. Due to some of its current condition, it was agreed that some of our proposed encroachment could enhance the perpetual state of that condition.
- d. Consider the Town’s Climate Action Integration Plan  
**Applicant Response:** Confirmed
- e. Concern about street widths being too narrow and building heights too high  
**Applicant Response:** Understand, and we will balance it with the objective to provide a streetscape that is more pedestrian and human scale while meeting the necessary street width standards.
- f. Desires to see as many price points below \$700K as possible.  
**Applicant Response:** Understood. Our updated thoughts on a unit segmentation strategy should provide for a majority of the units to be below \$700K assuming normal economic conditions
- g. Consider intermixing some of the townhomes with the condos so that there does not appear to be two separate developments  
**Applicant Response:** Confirmed. Our revised site plan added a mixed-used building and open space to an area where there were townhomes to provide a varied and organic feel to the community.
- h. Consider mixing proposed retail locations so it is not clustered in one spot.  
**Applicant Response:** Understood. Our revised site plan adjusted the retail areas based on overall plan modifications while balancing the demand for a neighborhood retail environment. Included in the proposal is an amount of retail/mixed-use for this project to serve its residents and surrounding community.
- i. Is the nature preserve area going to be put in a conservation easement?  
**Applicant Response:** While separate from this rezoning application, Beechwood intends to work with a local conservancy group to hold the +/- 80 preserve area in a conservation easement.
- j. Desires to see affordable housing integrated within the site plan.  
**Applicant Response:** Confirmed. Please refer to the Affordable Housing Plan for more details.
- k. Would like to see housing opportunities for those earning below 60% AMI  
**Applicant Response:** Understood. Please refer to the Affordable Housing Plan for more details.
- l. Likes the thought to have an affordable housing developer work with a supportive housing group like HOPE  
**Applicant Response:** Understood. Please refer to the Affordable Housing Plan for more details.
- m. Question about who maintains the stream buffer  
**Applicant Response:** The underlying owner of the land—which could be the property owners’ association, a conservancy group, or Beechwood—would be responsible for the maintenance of stream buffer based on how the conservation/mitigation plans are finalized. Construction plans would include any necessary maintenance programs for the stream buffer and/or stormwater management devices.
- n. Consideration for connectivity to internal spaces and external (i.e. Southern Village) especially for pedestrians  
**Applicant Response:** Understood. While residents are already crossing 15-501 at the northern Southern Village entrance to access the bus get to campus, we are dedicated to working with the Town and NC DOT to improve and enhance movements for connectivity to Southern Village and Sumac and Market streets at grade. Multiple meetings with Town staff and DOT have occurred since the review of the Concept Plan and we are awaiting DOT confirmation on a spacing variance to allow Sumac to be a full movement intersection as well as allowable crossing details at grade.
- o. From the public: Concern about potential noise from open spaces  
**Applicant Response:** Any of our programmed spaces will comply with the appropriate Town ordinances.
- p. From the public: Concern about density  
**Applicant Response:** We understand that the previously approved development plan called for much more density and intensity of uses. While we will not be building to the same density or scale, our revised



proposal will incorporate many of the best features from those guidelines as well as consideration of design successes from other projects along the 15-501 corridor in order to appropriately position South Creek as a southern gateway to Town that is welcoming and uniquely Chapel Hill.

- q. From the public: Concern about stormwater runoff and stream buffers  
**Applicant Response:** The Town imposes rigorous stormwater regulations and we have committed to meeting those requirements.
- r. Concern about preserve area to be used as amenity for local residents and public  
**Applicant Response:** While not part of this rezoning application, Beechwood will work with the entity that will ultimately own and manage the preserve area to cover potential maintenance and nuisance items (e.g., trash).
- s. Appreciated the thoughtful approach and desires for supportive housing to be a part of this development

**5. AFFORDABLE HOUSING PROPOSAL**

Beechwood understands the Town of Chapel Hill’s objectives for providing affordable housing and is committed to developing the appropriate mix of offerings that meet the intent of the Town’s Inclusionary Zoning Ordinance.

Background

Beechwood and its team have had a variety of discussions with several local affordable housing providers since the Concept Plan review to offer a plan that attempts to align with the Town’s objectives. There have also been discussions with town officials and community members to consider how our proposed residential development in the southern part of Chapel Hill could creatively assist with a variety of workforce, supportive and affordable housing needs for the community. The South Creek development proposes to have an extremely diverse mix of housing types totaling 688 units. These units are divided into the following categories: 526 for-sale condominiums consisting of a variety of sizes (e.g., studios, 1 BD, 2 BD, and 3BD); 60 rental apartment units consisting of the same variety as the condos, and 102 for-sale townhomes (consisting of 2, 3, and 4 BD units).

Proposal Terms

Beechwood proposes to provide a combination of condo, apartment (rental) and townhome units in order to supply the Town with 88 affordable housing units. Recognizing the significant quantity of units, Beechwood is willing to work with the right affordable housing organization(s) to provide the appropriate mix of needs as well as ensuring permanent affordability (i.e., 99 year term). One potential allocation of the units could be:

	<b>Apartment (Rental)</b>	<b>Condos</b>	<b>Townhomes</b>
<b>65% AMI or less</b>	15	30	
<b>80% AMI or less</b>		30	13
<b>Totals</b>	<b>15</b>	<b>60</b>	<b>13</b>

This totals 88 housing units. In speaking with one of the local affordable housing organizations, a need for office space in the southern part of Chapel Hill was expressed. Accordingly, Beechwood could provide the +/-1000 SF of office space in lieu of two (2) affordable housing units. Therefore, this combination of office space and 88 housing units would be the equivalent of 90 affordable housing units which would be fifteen percent (15%) of the total market rate housing units proposed for South

Creek (e.g., 600). Another way of looking at the mix of proposed affordable housing units is the percentage of each type which is represented in the table below:

	<b>Apartment (Rental)</b>	<b>Condos</b>	<b>Townhomes</b>
<b>65% AMI or less</b>	17%	34%	
<b>80% AMI or less</b>		34%	15%
<b>Totals</b>	<b>17%</b>	<b>68%</b>	<b>15%</b>

The affordable housing units will be provided as the market rate units come on-line. They will be floating (i.e., not a fixed location) and indistinguishable from the market rate units (in terms exterior materials, location within the community and access to community amenities). Upon Beechwood’s selection of the affordable housing organization(s), Beechwood will update the Town of Chapel Hill Planning Department, including any additional details of the proposal.

**6. DESCRIPTION OF PUBLIC ART PROPOSAL**

Beechwood has engaged a local and nationally renowned landscape architect to assist with its open space planning. As shown on the submitted plans, there are two proposed locations for public art and will be incorporated into the overall design of the spaces. Beechwood will update the Town of Chapel Hill and all appropriate boards, commissions, staff as deemed appropriate as we progress through the process. Beechwood deems the public art plan as a collaborative process with the community, Town, and design team.

**7. ENERGY MANAGEMENT PLAN**

Beechwood has engaged an energy management partner to utilize energy modeling tools and green building expertise for the South Creek development. The following preliminary Energy Management Plan (EMP) incorporates Beechwood’s best efforts to incorporate as much of the Town’s guidance as commercially reasonable prior to building design development. Moreover, it is Beechwood’s intent to evaluate building strategies and materials for each building type in the community to support healthy indoor environments. Ultimately, during the construction drawing phase, Beechwood shall provide an EMP to the Town.

Town of Chapel Hill Energy Management Plan Guidance and applicant comments:

1. The energy management plan should indicate how the project will meet the Council’s policy expectation of an energy performance that is 20% better than ASHRAE 90.1 (e.g., pre and post construction energy models will be used to verify performance). The project is required to use the most recent version of ASHRAE 90.1 for its baseline to achieve the "20% more energy efficient" standard.

**Response:** Acknowledged. Beechwood has engaged an energy management partner to utilize energy modeling tools and green building expertise for the South Creek development. Some of the tools South Creek could employ include a design assistance program by Duke Energy to have whole building energy modeling done to analyze energy saving opportunities for its buildings.

The modeling would assist with design decisions and automating multiple baselines—including American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1 standards – to allow South Creek’s energy efficiency measures to hit targeted goals. South Creek intends to evaluate 3rd party insulation and air sealing inspections on its units along with sample testing of unit infiltration (blower door) and HVAC air leakage testing to confirm units achieve 20% increased efficiency over the ASHRAE 90.1 baseline.

2. The energy management plan should indicate whether or not a green building standard is being used and whether or not the applicant is pursuing a particular level of certification for that standard (e.g., LEED Gold, SB 668 for State Buildings, EarthCraft House).

**Response:** South Creek will evaluate green program certification opportunities as part of preliminary building design based on what programs are available at that time.

3. The energy management plan should describe the expected savings (as a percentage) from both building and site related water conservation measures (e.g., WasterSense fixtures and toilets, xeriscaping, cisterns, graywater reuse, constructed wetland, rain garden, soil and moisture irrigation sensors).

**Response:** Percent of projected savings will be determined in conjunction with energy modeling analysis. Project will implement the following water conservation measures at minimum: watersense qualified fixtures for lavatory faucets and toilets, landscape with native and regionally appropriate plant species, and utilize advanced SWM described per original submittal.

4. The energy management plan should indicate what forms of sustainable energy are being utilized in this project (e.g., solar hot water, geothermal, solar photovoltaics, radiant heating/cooling, thermal energy storage).

**Response:** South Creek plans to perform a solar feasibility study for the community, identifying best fit opportunities for photovoltaic installations, production estimates, considerations for metering and installation of electric utilities with relationship to solar, and related incentives to support a cost / benefit analysis for utilization of renewable energy systems.

5. The energy management plan should describe how the project aims to lower transportation-related energy consumption (e.g., project will build a bus shelter with solar-powered LED lighting).

**Response:** Beechwood is committed to building a transit shelter integrating energy conscious lighting and construction. South Creek is prioritizing the pedestrian, mass transit, and cycling experience to minimize dependence on automobiles for daily and work activities.

6. The energy management plan should describe how the design aims to mitigate the urban heat-island effect (e.g., project will include a vegetative roof).

**Response:** Acknowledged; Project will utilize high SRI (solar reflective index) materials for flat roof structures and shading strategies (such as street trees and ground integrated parking structures) will be incorporated into design to reduce opportunities for heat island effect.

7. The energy management plan should indicate how the site design will enhance water and/or energy conservation (e.g., xeriscaping, tree shading, solar orientation).

**Response:** The eastern +/- 80 acres (almost 70% of the property) is intended to be preserved as natural space protecting Wilson Creek with recreational opportunities open to the public. Landscaping will comprise of native and regionally appropriate plant species, and utilize advanced SWM described per original submittal.

8. The energy management plan should indicate if the site is reducing life-cycle and transportation related energy consumption based on its location and previous condition (e.g., brownfield redevelopment, grayfield redevelopment, urban infill).

**Response:** South Creek is prioritizing the pedestrian, mass transit, and cycling experience to minimize dependence on automobiles for daily and work activities; Providing connectivity and access to trails will promote active transportation via walking and biking to reduce vehicle use and emissions, therefore reducing carbon footprint and improving air quality. In addition, we intend to include electric vehicle and bike charging stations in various locations in the community.

9. The energy management plan should describe how the design of the project demonstrates a commitment to long term energy efficiency and reduced greenhouse gas emissions (e.g., durable materials, high-efficiency equipment, xeriscaping).

**Response:** Project will utilize high performance building envelope strategies to ensure units perform efficiently over time, require minimal maintenance, and can adapt to the latest energy efficient technologies. Landscaping will minimize potable water needs through commitment to native and regionally appropriate plantings.

10. The energy management plan should describe how the lighting design will reduce energy consumption (e.g., high efficiency interior/exterior lighting, clerestory, passive solar, photocells, occupancy sensors, automated shades).

**Response:** Acknowledged. The project will demonstrate adequate access to natural lighting and a lighting plan to take advantage of natural lighting to reduce energy consumption; at minimum high efficiency lighting strategies will be utilized throughout lighting design.

11. The energy management plan should indicate what percentage of the occupied rooms/office will have direct access to a reasonable amount of natural light.

**Response:** Acknowledged. Adequate access to natural light will be incorporated into design for occupied rooms and office spaces.

12. The energy management plan should describe how the building envelope will reduce energy consumption (e.g., low-e glazing, R-38 insulation in the attic, north-south glazing orientation, thermal massing).

**Response:** Acknowledged. Building envelope will incorporate strategies to reduce energy consumption while also providing for healthy living environments. Specific envelope strategies will be detailed as part of the building energy modeling analysis and reflected in building plans.

13. The energy management plan should describe how the building materials reduce life-cycle energy costs by their sourcing location/condition (e.g., recycled, locally sourced, certified sustainable, low VOC paints).

**Response:** Acknowledged. South Creek will evaluate building materials for each building type in the community to support healthy indoor environments and incorporate locally sourced and sustainable certified materials where commercially feasible.

14. The energy management plan should indicate how the mechanical equipment will offer better energy performance than the minimum allowed by code (e.g., SEER 15 HVAC unit, enthalpy wheel).

**Response:** Acknowledged. Mechanical equipment efficiencies will be determined in conjunction with the energy modeling analysis to achieve overall energy efficiency targets for the project.

15. The energy management plan should describe the various health and safety features that complement the energy efficient design (e.g., carbon dioxide monitors, frequency of air exchanges, access to natural light, low VOC building materials).

**Response:** Acknowledged. Various health and safety features will be detailed on building plans. Strategies include but are not limited to access to natural spaces and trails for all occupants, low VOC paints and finishes, CRI Indoor air quality certified carpets, and fresh air ventilation for occupants.

16. The energy management plan should describe what construction-phase steps will be taken to assure the building will perform as specified (e.g., envelope/duct air leakage test at dried in but unfinished phase, commissioning, etc.)

**Response:** South Creek intends to incorporate 3rd party insulation and air sealing inspections on its units along with sample performance testing of units prior to occupancy, including infiltration (blower door) and HVAC air leakage testing, to confirm units are constructed and performing as designed.

## 8. REQUESTED MODIFICATIONS TO REGULATIONS AND JUSTIFICATIONS

- a) Maximum Disturbance Ratio in an RCD (Upland Zone)

The ratio for the amount of proposed disturbance in the RCD (Upland Zone) is 0.535 which exceeds the Town's maximum ratio of 0.400. Extensive review in analyzing the existing conditions of the RCD included a site visit with the Town stormwater staff and our stormwater professionals. The majority of disturbances in the Upland Zone are associated with the installation of stormwater management facilities on the western side of Wilson Creek. These stormwater facilities will provide water quality treatment and water quality controls from the project's runoff. Furthermore, watercourses that have been identified by the Town that the RCD buffers are based on have been created by NCDOT construction and are not naturally occurring. (Note: The Town stream classifications differ from Army Corps of Engineers stream classifications.) The use/inclusion of the Town stream classification increases the area of the

RCD and thus our disturbance ratio. As site design progresses, we anticipate a small reduction of disturbance in the upland zone; however, we do not anticipate this will be enough to provide compliance under the LUMO. Therefore, our request is for a ratio that ranges between 0.52 and 0.545 of the amount to be disturbed in the Upland Zone of the RCD. Additionally, these disturbances only occur on the western banks of Wilson Creek; the applicant intends to preserve the eastern banks, as well as the additional acreage to the east for conservation—while formally not part of this submittal—and a future greenway/trail. The nature of these disturbances have been located and designed in keeping with the goals of the RCD: preserve the water quality of the town's actual or potential water supply sources, to minimize danger to lives and properties from flooding in and near the watercourses, to preserve the water-carrying capacity of the watercourses, and to protect them from erosion and sedimentation, to retain open spaces and greenways and to protect their environmentally-sensitive character, to preserve urban wildlife and plant life habitats from the intrusions of urbanization, to provide air and noise buffers to ameliorate the effects of development, and to preserve and maintain the aesthetic qualities and appearance of the town.

- b) Streets, bridges, and other similar transportation facilities ~~(including parking lots)~~ where there is a practical necessity to their location within the Resource Conservation District (Upland Zone)  
Justification: Streets and other similar transportation facilities are proposed in order to provide vehicular and emergency access to all buildings within the project, as well as vehicular parking and access to existing landlocked parcels, future greenways, semi-public active recreation areas as well as pedestrian access via sidewalks. These uses will all be tributary to stormwater management facilities which will be located between the streets/transportation facilities and Wilson Creek; these facilities will provide stormwater treatment of runoff that complies with Town and State environmental regulations and will help to mitigate the impact of the uses.
  
- c) Minimum Tree Canopy Coverage  
The current tree canopy coverage proposed is  $\pm 13.0$  acres ( $\pm 30\%$ ) which below the 40% limits. The current tree canopy is comprised of a combination of existing tree canopy to be preserved, as well as proposed tree canopy as required by code planting. We anticipate meeting the 40% coverage requirement as we progress our landscape plan beyond the required code planting. Supplemental planting on site will likely result in overall tree canopy coverage meeting the 40% requirement.
  
- d) Eastern Landscape Buffer
  - a. Minimum Required = Type B Buffer
  - b. Proposed = Utilize Existing Vegetation to Remain
  - c. Justification: The applicant requests in lieu of the installation of a Type B Buffer, which would require an increase in disturbances to the RCD, that the existing vegetated riparian buffer be utilized to satisfy this requirement. The Lot 1 vegetation/tree canopy that will remain, located between the proposed development and Wilson Creek, will provide adequate buffer due to its variable width in excess of the required 10-foot Type B buffer.
  
- e) Western Landscape Buffer
  - a. Minimum Required = Type D Buffer
  - b. Proposed = Variable Width

- c. Justification: Modification is requested for the 30-foot Type D Buffer requirement along US 15-501. Due to variable width right-of-way, as well as existing site constraints, a uniform 30' width buffer along the entire US 15-501 property frontage is not feasible. Every attempt has been made to provide a 30' buffer width along this frontage where possible. Additionally, as currently proposed, the developed portion of the site sits below the line of sight from US 15-501. This condition will aid greatly in viewshed buffering as otherwise not provided by landscape material in specific areas of the buffer.
  
- f) Interior Landscape Buffer
  - a. Minimum Required = Type B Buffer
  - b. Proposed = Variable Width
  - c. Justification: Modification is requested for the 10-foot Type B Buffer requirement adjacent to the Strata Solar building. Due to the required grading and underground infrastructure required in the vicinity of this parcel, additional shrub plantings were provided in lieu of trees. Existing vegetation on the Strata Solar parcel will remain; this will complement the onsite plantings. Additionally, as currently proposed, the developed portion of the site sits below the line of sight from the Strata Solar Parcel. This condition will aid greatly in viewshed buffering as otherwise not provided by landscape material in specific areas of the buffer.
  
- g) Maximum Allowable Disturbance to Slopes >25%
 

The total amount of Disturbance to Slopes>25% is 48.1% which is larger than the 25% threshold in the LUMO. Therefore, our request is for a modification to allow between 47% and 50% of Disturbance to Slopes>25%. We are requesting this range to allow for some flexibility as we prepare final construction drawings. As noted throughout the course of this submittal process, a thoughtful approach to the existing topography has been considered as our intentions are to “terrace” the grade of the buildings, streetscape and open spaces from 15-501 down to Wilson Creek. Moreover, by incorporating this grade change into building footprints with parking garages, an immense amount of character in the streetscape will be created as the grade is transitioned. Approximately 10% of Proposed Lot 1 contains slopes in excess of 25%; although the scope of the project will disturb a majority of Proposed Lot 1—as did the plan for the currently approved project—the proposed disturbances are concentrated on the project’s western side, which is further upland from Wilson Creek. Grading will be in conformance with all Town and State erosion and sediment control requirements.
  
- h) Minimum Commercial Floor Area in an MU-V-CZD
 

The total amount of non-residential floor area proposed is approximately 3% with the minimum required for a MU-V-CZD being 25%. A request to modify that regulation so that it can be between 2% to 5% is hereby included in this application accordingly. Due to the tremendous need for housing, especially housing for a diverse variety of demographics—including the Missing Middle—the site plan focuses primarily on residential use. Office/commercial, however, is an important part of the overall sense of place for the community and there is intended to be sufficient retail, office and restaurant establishments in South Creek for its residents to walk or bike to on a regular basis. By doing so, the commercial areas will be provided in a quality way that creates excellence in the public realm especially considering online retail’s continuing impact on the

commercial/retail real estate industry and should be complimentary to the commercial development at neighboring Southern Village.

- i) NCDOT Landscaping
  - a. Justification: Applicant requests a modification to the MU-V-CZD for any landscaping work that is required by NCDOT within their right-of-way that conflicts with the MU-V-CZD buffer requirements.
  
- j) OWASA Landscaping
  - a. Justification: Applicant requests a modification to the MU-V-CZD for any landscaping work that is required by OWASA outside of their right-of-way that conflicts with the MU-V-CZD buffer requirements.