

# SPECIAL USE PERMIT MINOR CHANGE APPLICATION



**TOWN OF CHAPEL HILL**  
**Planning Department**  
405 Martin Luther King Jr. Blvd  
phone (919) 968-2728 fax (919) 969-2014  
www.townofchapelhill.org

Parcel Identifier Number (PIN): 9799-14-1643

Date: 2021-0121

## Section A: Project Information

Project Name: Signature Healthcare Addition / Renovatio

Property Address: 1602 East Franklin Street Zip Code: 27514

Use Groups (A, B, and/or C): I-2 Existing Zoning District: R-5

Project Description: Project consist of a new 9,600 sf additi

## Section B: Applicant, Owner and/or Contract Purchaser Information

### Applicant Information (to whom correspondence will be mailed)

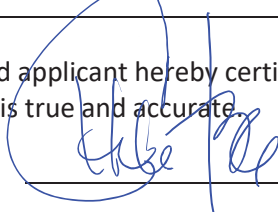
Name: Chuck Trimble

Address: 501 Darby Creek Road, Suite 62

City: Lexington State: Kentucky Zip Code: 40509

Phone: 859-806-4751 Email: chuck@thewaymakergroup.com

The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.

Signature: 

Date: 1/25/2021

### Owner/Contract Purchaser Information:

**Owner**

**Contract Purchaser**

Name: JD Ferrell

Address: 12201 Bluegrass Parkway

City: Louisville State: Kentucky Zip Code: 40299

Phone: 561-762-9816 Email: jdferrell@signaturehealthcarellc.com

The undersigned applicant hereby certifies that, to the best of his knowledge and belief, all information supplied with this application is true and accurate.

Signature: 

Date: 1/25/2021



**SPECIAL USE PERMIT MINOR CHANGE APPLICATION  
SUBMITTAL REQUIREMENTS  
TOWN OF CHAPEL HILL  
Planning Department**

This application is for minor change to an existing Special Use Permit as defined by Subsection 4.5.4(b)(1-7) of the Land Use Management Ordinance. The following must accompany your application. Failure to do so will result in your application being considered incomplete. For assistance with this application, please contact the Chapel Hill Planning Department at (919)968-2728 or at [planning@townofchapelhill.org](mailto:planning@townofchapelhill.org). For detailed information, please refer to the Description of Detailed Information handout.

x	<b>Application fee</b> ( <a href="#">refer to fee schedule</a> )	Amount Paid \$	12,689.50
	<b>Digital Files</b> - provide digital files of all plans and documents		
	<b>Written Narrative describing the proposal</b>		
	<b>Statement of Justification</b>		
	<b>Copy of recorded Special Use Permit</b>		
	<b>Approved plans and proposed changes to approved plans</b>		
	<b>Reduced Site Plan Set (reduced to 8.5"x11")</b>		

January 27, 2021

Anya Grahn  
405 Martin Luther King Jr. Blvd.  
Chapel Hill, NC 27514

Re: Limited Scope Modification Request for Signature Healthcare SUP

Dear Ms Grahn,

On behalf of Signature Healthcare, we would like to request a Limited Scope Modification Request for the start date of the project. The project which consist of a 9,600 square foot addition and renovation to Signature Healthcare Property at 1602 East Franklin Street. As a result of the COVID Conditions for Healthcare we were not able to start the project within the timeframe that had been approved. We have resubmitted the drawings to Building Inspection for approval and are ready to start as soon as approval has been granted.

Thank you for your consideration of this petition and we would be happy to answer any questions you may have.

Thank You,



Chuck Trimble  
President

**PROJECT NARRATIVE**  
**AND**  
**STATEMENT OF JUSTIFICATION**

**Special Use Permit Modification Application**

**For:**



Facility Expansion  
1602 East Franklin Street  
Chapel Hill, NC

PIN #9799-14-1643

**Applicant:**

SHC Construction Services, LLC  
12201 Bluegrass Parkway  
Jeffersontown, Kentucky 40299  
(502) 568-7951

**Civil Engineer:**



**Ballentine**  
**Associates, P.A.**

221 Providence Road  
Chapel Hill, NC 27514  
(919) 929-0481

<u>Issue Dates</u>	<u>Description</u>
23 Nov 2016	SUP Modification Submittal
14 Mar 2017	SUP Mod. Submittal #2
3 May 2017	SUP Mod. Submittal #3



## **PROJECT NARRATIVE**

Signature HealthCARE of Chapel Hill plans to expand the existing group home facility located at 1602 East Franklin Street. The existing development was approved under a Special Use Permit (SUP) issued in 1979. The property is 5.10 acres and the existing building is 40,046 square feet. Expansion plans will add 9,600 square feet of floor area, bringing the finished building to 49,646 square feet, and because the expansion will add more than 5% to the overall floor area, approval of this SUP modification will be required. The project will also feature an enhanced occupant drop-off and pick-up area at the front, southwest corner of the building. The existing parking lot contains 79 parking spaces. A portion of the existing parking will be removed in order to provide space for the building expansion, while remaining existing parking will be reconfigured and expanded in order to meet current town standards. The new parking area has been designed with the goal of maximizing the preservation of existing specimen and rare trees. To meet Town stormwater requirements, an underground stormwater management facility will be constructed underneath the existing parking lot island to the south of the new building entrance. Existing landscaping will be preserved to the extents practicable and supplemental new landscaping will be provided in order to meet Town requirements.

There are two vehicular access points to the site; with primary access off East Franklin Street, and a connection to a common drive to the east, which terminates at South Elliott Road. These connection points will be maintained, and pedestrian walkway connectivity on the site will be improved to provide for enhanced circulation through and around the site. Existing refuse and recycling will remain in its current location within a bay on the southern side of the building. A dumpster enclosure meeting Town standards will be provided around the existing concrete dumpster pad at the southeast corner of the existing parking area.

Utilities on site, including site lighting will be updated to suit the project needs. No public water or sanitary sewer improvements are anticipated.

**Public Art Proposal** – During the development review process, Signature HealthCARE will consult with the Town of Chapel Hill Public Arts Office for guidance in determining the right project and artist for our site.

## STATEMENT OF JUSTIFICATION

As required by the Land Use Management Ordinance Section 4.5.2 *Standards and Findings of Fact*, in order to receive recommendation of SUP modification approval by the town manager, the following findings shall be made concerning the Signature HealthCARE facility expansion:

1. The proposed Signature HealthCARE facility expansion will be ***designed and operated so as to maintain and promote public health, safety, and general welfare.*** Currently at its Chapel Hill facility, Signature provides health maintenance and recovery services to those in need. In recent years, they have recognized the need for additional space, where short term recovery patients can take advantage of new therapy opportunities on site. Signature HealthCARE is well known for providing exemplary care, and by evolving and expanding their existing building, they can continue to provide a highly functional group care facility in a safe environment for employees, patients and visitors.
  
2. Proposed modifications to the existing SUP will be designed to ***comply with all required regulations and standards of the Land Use Management Ordinance, including all applicable provisions of articles 3 and 5, and applicable specific standards contained in the supplemental use regulations (article 6), and all other applicable regulations.*** Several examples of compliance are as follows, with one exception to current parking standards:

### ***Compliance with Article 3:***

- The existing *group care facility* use is a permitted use within the existing R-5 zoning district.
- The proposed building expansion will be in compliance with required building setbacks.
- Existing landscape buffers will be maintained or improved so as to meet Town approval.
- The combined expansion & existing building square footage will add up to be less than the allowable floor area for this site under the existing R-5 zoning.
- The existing & proposed parking totals are in compliance with the existing SUP, however these numbers exceed the maximum allowed per the LUMO. The existing SUP states that 104 parking spaces are allowed, while the current LUMO allows for 54 spaces (max. 1 per 2 beds under Group Care Facility). We are asking for an exception to section 5.9 of the LUMO, given that the existing parking count has been found to be sufficient for the existing building's needs for many years. And, given that we are expanding rehabilitation services, we are proposing to increase the parking total by 3 spaces (from 79 to 82).

### ***Compliance with Article 5:***

- Existing landscape buffers will be maintained or improved so as to meet Town approval.
- Stormwater management will be designed to be in compliance with Section 5.4 of the LUMO.
- Bicycle parking will be added to bring the site up to Town standards.

- A noted in the narrative, the new parking area has been designed with the goal of maximizing the preservation of existing specimen and rare trees. There are 50 existing specimen trees, 33 of which will be preserved...and there are 12 rare trees, 11 of which will remain. The one rare tree to be removed is a 26” sweet gum located in the parking island south of the new entrance. Eleven rare willow oaks ranging in size from 30 inches to 54 inches at breast height will remain. Several of these are located along the Franklin Street frontage, with the 54 inch being located to the south of the driveway.
- Tree canopy coverage requirements will be met by a combination of existing trees to remain and proposed new trees.

***Compliance with Article 6:***

- Signature HealthCARE has been in operation (though in the past under different title and management) since the late 1970s. Per GIS research, The Signature HealthCARE facility is currently not located within 500 feet of a zoning lot containing another existing group care facility.
3. The existing facility is ***located*** where it helps to ***enhance the value of contiguous property***, as it is surrounded by businesses on 3 sides, and therefore our employees, patients and visitors help to boost patronage in the area. Likewise, the proposed improvements to the site are ***designed to maintain and enhance the value of contiguous property***, because we will be improving upon our appearance. In support of this finding, it should also be stated that our ***use & development is a public necessity***, because Signature HealthCARE provides a very valuable service to our community.
  4. The development modifications ***conform with the general plans for the physical development of the town as embodied in*** the LUMO, Town Design Guidelines, ***and in the comprehensive plan:***

***Compliance with Town Design Guidelines:***

The existing facility is located near the intersection of Elliott Road & East Franklin Street. The building addition has been designed to be congruous with the existing architectural elements as well as to enhance the appearance of the structure from street and neighboring views.

As noted in the narrative, the project will include an underground stormwater facility, which will be designed to meet the Town Guidelines.

Also as noted in the narrative, the new parking layout has been designed with the goal of preserving many of the large, rare and specimen trees on site. Landscaping will be bolstered to comply with stipulations in the original SUP as well as in accordance with the Town’s design manual.

Vehicular and pedestrian access and circulation will be improved to accommodate the needs of the expanded building. Existing and new parking areas will be designed to meet current Town standards, while walkways will be enhanced to create continuous routes from the building to each site access point (East Franklin Street and the common drive to Elliott Road). In addition, bicycle parking will be provided in compliance with the current design manual, including addition of required enclosed bicycle parking (locations will be finalized with Special Use Permit Modification plans). And, inside the building, shower and locker facilities will be made available to cyclists.

As noted in the Project Narrative, improvements to public water and sewer are not anticipated as part of this project. However, site lighting will be designed to accommodate proposed site amenities.

### ***Compliance with the Comprehensive Plan:***

Below is a brief outline expressing several ways in which Signature Healthcare (SHC) of Chapel Hill does and will continue to embrace & conform to the ideas and themes driving the Comprehensive Plan:

#### *A Place for Everyone*

- The existing facility provides much needed services for everyone, including long-term care and short-term rehabilitation for both residents and local patients.
- The facility expansion will provide additional space, which will bolster SHC's ability to provide essential services to residents and patients, whether local or from out of Town.

#### *Community Prosperity and Engagement*

- Care facilities like SHC of Chapel Hill are crucial to any community's prosperity.
- Community involvement has been and will continue to be a goal of SHC of Chapel Hill.

#### *Facilitate Getting Around*

- Planned improvements to the site will enhance the walkability & bike-ability within the site as well as to and from the site.

#### *Good Places, New Spaces*

- SHC of Chapel Hill is located close to local businesses, including restaurants, Whole Foods, etc.

#### *Nurturing Our Community*

- SHC provides an exemplary working environments; SHC was named as one of Modern Healthcare's 2015 "Best Places to Work in Healthcare."
- The facility's in town location with nearby living opportunities and restaurants helps to reduce vehicular traffic and thus improve air quality.
- To control runoff, stormwater best management practices will be designed for this project.

#### *Town and Gown Collaboration*

- SHC of Chapel Hill provides internship and job opportunities for UNC students and graduates. SHC of Chapel Hill collaborates with UNC hospital.

23 Nov 2016

Ms. Kay Pearlstein  
Town of Chapel Hill Planning Department  
405 Martin Luther King Jr. Blvd.  
Chapel Hill, NC 27514-5705



Subject: Signature HealthCARE of Chapel Hill  
SUP Modification  
Responses to Town Council & CDC Comments

221 Providence Road  
Eastowne Office Park  
Chapel Hill, NC 27514

919/929-0481 Chapel Hill  
919/489-4789 Durham  
919/489-2803 Fax

Dear Kay,

Thank you for assisting us with the review process for the Signature HealthCARE facility expansion. This letter is written to provide responses to both the Town Council and Community Design commission comments. Below please find comments followed by our responses:

**Community Design Commission – 28 June 2016**

1. The majority of the commissioners were in favor of our plans to enhance the existing building and site. A number of members noted that the existing building sits down below the elevation of the adjacent Franklin Street and they were very pleased with the new presence that we are looking to create by enhancing the entrance to the building.

**Response: Acknowledged**

2. Several commissioners pointed out that the rendering we showed at the meeting indicated a much lighter brick than what's currently on the existing building exterior. They asked if we would be changing exterior materials.

**Response: Although exterior materials will not be presented for formal review until the ZCP phase, the intent for the expansion is to match existing exterior materials.**

3. The board asked that we consider revising our plans to show a more interesting building elevation as seen from the Franklin Street perspective.

**Response: We refined building elevation renderings since the 28 June CDC meeting, and as noted below, the updated elevations were well received at our Town Council Public Hearing on 19 Sep 2016. We will present our building elevations to the CDC during the ZCP phase.**

4. We received mixed reviews about our parking layout. The majority of the CDC spoke in favor of our plan based on the intent to minimize impacts to existing rare and specimen trees, while several members asked that we consider shifting our new parking area further east back into our site.

**Response: New parking is configured with the goal to minimize impacts to existing rare and specimen trees, many of which are located further into our site. The area bordering Franklin Street – where we are showing new parking – largely contains vines & kudzu...and smaller trees being choked by the former. New landscaping will be installed to screen the new parking as required by the Town**

**Design Manual. In addition to the parking lot screening, the landscape buffer will be enhanced to include new buffer plantings in place of the vines/kudzu.**

5. The board was in favor of our proposal to provide enhance pedestrian connectivity on site. Chairman Gualtieri asked that we consider limiting what we do to change existing pedestrian and vehicular travel patterns so as not to encourage excessive public traffic through our site.

**Response: We are providing minimal changes to pedestrian connectivity; shifting our existing walkway out to Franklin Street to the south so that it borders our existing driveway. Walkways within the site will be improved to provide enhanced connectivity between parking (existing and new) and building entrances (existing and new).**

**Town Council Public Hearing – 19 Sep 2016**

1. Council Member Palmer mentioned that she was very familiar with the Singature HealthCARE facility, and that she was in favor of the expansion; noting that the double rooms, which Signature intends to reduce or eliminate pose concerns.

**Response: Acknowledged.**

2. Council Member Palmer and others asked that we consider providing an entryway similar to the existing, with an area for patients to sit outside “and engage the public.” Council members liked the enclosed courtyard but suggested that we also consider providing a space for patients to be outside and have the potential to interact with people coming and going from the facility...and/or to simply observe public activity along Franklin Street.

**Response: The new entry area will have a space under a canopy that will be similar to the existing entryway in that it will provide an area for patients and visitors to congregate. In addition, we have revised our plans to show a series of benches/seating areas along the new walkway to the west of the building to provide another space for patients to be outside.**

3. Council Member Parker asked if the entire site would be subjected to new Town rules and regulations put into effect since the original SUP...or would new rules and regulations only apply to proposed improvements. Planning Director, Ben Hitchings noted that typically existing elements are grandfathered.

**Response: Acknowledged, new improvements will be designed to comply with current Town rules and regulations.**

4. Several Council Members discussed an Ephesus Fordham District exhibit as presented by Ben Hitchings, which indicated the potential for a future road connection through our site, essentially from our Franklin Street driveway connection, through our main parking drive aisle, and on to the existing driveway connection toward South Elliott Road. Council members broadly agreed that a public road through our existing site would not be practical. Council Member Gianciolo suggested that we be sure to have good site lines at our Franklin Street driveway. Mayor recommended that we focus are review with the staff on addressing Ephesus Fordham compliance issues such as the roadway shown on the exhibit noted above.

**Response:** Acknowledged, we agree that a public road through our site would not be practical. We are outside of the EF Zoning District, and we are not intending to rezone to EF. If our site were to be redeveloped in the future, our SUP modification should not impact whether this site could be rezoned to EF down the road. We will provide required site triangles at our driveway with ZCP plans.

Please let me know if you feel that I may have left anything out.

Yours very truly,  
BALLENTINE ASSOCIATES, PA



Dave Ballentine



14 Mar 2017

Ms. Kay Pearlstein  
Town of Chapel Hill Planning Department  
405 Martin Luther King Jr. Blvd.  
Chapel Hill, NC 27514-5705



221 Providence Road  
Eastowne Office Park  
Chapel Hill, NC 27514

Subject: Signature HealthCARE of Chapel Hill  
1602 East Franklin Street  
Responses to TRT Comments

919/929-0481 Chapel Hill  
919/489-4789 Durham  
919/489-2803 Fax

Dear Kay,

This letter is written to provide responses to your comments as received on 12 Jan 2017. Below are each of your comments followed by our responses:

**ENERGY MANAGEMENT PLAN**

1. Although an energy management plan is not required for this development, the applicant is encouraged to submit an energy management plan that highlights efficiency and sustainability features that will provide the property owner with years of utility savings.  
(*Sustainability*)

**Response: A preliminary Energy Management Plan (EMP) has been provided. Although it will not be economically feasible to make significant changes to the energy systems of the existing facility, we understand and agree with the importance of conserving energy, and we are looking to provide energy saving elements that are within our means for this project.**

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).  
(*Sustainability*)

**Response: A green building standard/certification is not being used/pursued for this project, however elements that fall under green standards are being used in the design.**

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) (*Sustainability*)

**Response: There are no building or site related water conservation measures proposed for this project.**



4. The energy management plan should indicate how the project will meet the Council 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). *(Sustainability)*

**Response: It will not be feasible (and it is not a requirement) for this project to meet an energy performance that is 20% better than the most recent version of ASHRAE 90.1**

5. 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). *(Sustainability)*

**Response: Signature HealthCARE intends to make use of LED lighting on this project wherever there is an opportunity. In addition, heat recovery HVAC units will be used as noted in the attached EMP.**

6. The energy management plan should indicate what types of carbon offsets or credits are being utilized in this project (e.g., project will purchase carbon offsets from NC GreenPower for common area lighting). *(Sustainability)*

**Response: Carbon offsets or credits are not being utilized for this project.**

7. 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). *(Sustainability)*

**Response: Increased bicycle parking options on site should help to reduce transportation related energy consumption.**

8. 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). *(Sustainability)*

**Response: The reconfigured parking areas have been designed to minimize impacts to existing trees. Existing and new landscaping will combine to provide parking lot shading and therefore help to mitigate the urban heat-island effect.**

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

**Response: As noted in response to comment #8, existing tree canopies will be preserved to extents practicable...and shading will be supplemented by new plantings.**

10. 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). *(Sustainability)*

**Response: This is not a redevelopment project, however the site is a highly central location that is walkable and bikeable to many nearby neighborhoods and businesses, which should help to mitigate transportation related energy consumption.**

11. 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). (*Sustainability*)

**Response: The existing building was constructed with a brick façade and the same durable materials will be used on the exterior of the new addition.**

12. 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). (*Sustainability*)

**Response: The new clerestory windows at the top of the lobby will provide daylighting, and the cantilevered portecochere roof provides solar protection for all the lobby front glass.**

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

**Response: The configuration of the existing building and proposed addition will allow for all patient rooms to have window(s) providing natural light. Note that the finished product will have multiple courtyard areas**

14. 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). (*Sustainability*)

**Response: The new lobby will feature a clerestory window with south facing windows.**

15. 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) (*Sustainability*)

**Response: Further consideration will be given to this comment with Zoning Compliance Permit drawings.**

16. 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). (*Sustainability*)

**Response: Further consideration will be given to this comment with Zoning Compliance Permit drawings.**

17. 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). (Sustainability)

**Response: Further consideration will be given to this comment with Zoning Compliance Permit drawings.**

18. 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.) (Sustainability)

**Response: Further consideration will be given to this comment with Zoning Compliance Permit drawings.**

### **RECREATION:**

19. No comments from Parks and Recreation (Parks and Recreation)

**Response: Acknowledged.**

### **FIRE PROTECTION:**

20. AUTOMATIC FIRE SPRINKLER SYSTEM REQUIRED: Town Ordinance 7 - 56. An automatic fire sprinkler system meeting the requirements of NFPA Standard #13 is required to be installed in non-residential construction, as follows. (1) In new non-residential structures if: a. The building has more than 6,000 square feet of floor area; b. Twenty (20) per cent or more of the total floor area is more than two hundred (200) feet of travel distance from the nearest access point for a fire truck; or c. The building exceeds two (2) stories or twenty-four (24) feet in height from the average grade of the lot to the windows on the topmost occupied floor. (2) In a structural addition to a non-residential building of more than six thousand (6,000) square feet where the cost of the addition exceeds fifty (50) per cent of the value of the building. Fire sprinklers are required in the addition. (3) In a non-residential building of more than six thousand (6,000) square feet which is either renovated at a cost greater than fifty (50) per cent of value or which is damaged and rebuilt at a cost greater than fifty (50) per cent of value. In addition, all connections shall be located on the street side of each building, and activation of the sprinkler system shall activate both a local building alarm and a supervisory alarm at a twenty-four (24) hour certified and licensed alarm monitoring service. (Fire)

**Response: The building addition will have an automatic sprinkler system meeting NFPA Standard #13. Connections and alarms will be provided as required.**

21. FIRE HYDRANT LOCATIONS; Indicate the locations of existing and proposed fire hydrants. (Fire)

**Response: Existing fire hydrants are shown on the Area Map. It will be determined at ZCP whether or not new fire hydrants will be required.**

22. FIRE HYDRANTS; The addition of any required hydrants to serve the submitted building must flow a minimum of 2500 gpm per Town Engineering Standards unless approved by the fire code official. The farthest hydrant serving a proposed structure must be no more than 500' distant. A maximum distance of 500' spacing between hydrants must be maintained unless otherwise approved by the fire code official. Lesser spacing distances may be required. A minimum working space of 3' must be maintained around all hydrants. Where hydrants are subject to physical impact, physical protection may be required, NC FPC 2012, 507.5.6. The minimum number of required hydrants and their spacing must meet NC FPC 2012, Appendix C, table C 105.1 (Fire)

**Response: Acknowledged, it will determined at ZCP if new hydrants will be required.**

23. FIRE DEPARTMENT CONNECTIONS, LOCATIONS; Any required FDC's for any buildings shall meet the design and installation requirements for the current, approved edition of NFPA 13, 13D, 13R, or 14 of the NC FPC 2012 and Town Ordinances; 7-38 for location. FDC's shall be installed on the street/ address side of the building and within 100' of a hydrant or unless otherwise approved by the fire code official and shall not be obstructed or hindered by parking or landscaping. FDC's shall be equipped with NST. (Fire)

**Response: Acknowledged, it will determined at ZCP if FDC improvements are required.**

### **CONSTRUCTION/DEMOLITION:**

24. FIRE WATCH; During construction and demolition where hot work, materials subject to spontaneous combustion, or other hazardous construction or demolition is occurring, the owner or their designee shall be responsible for maintaining a fire watch. The fire watch shall consist of at least one person with a means of communicating an alarm to 911, shall have a written address posted in a conspicuous location and shall maintain constant patrols. NC FPC 2012 Section 1404 (Fire)

**Response: Acknowledged.**

25. CONSTRUCTION/DEMOLITION; All Construction and demolition conducted shall be in compliance of the current edition of Chapter 14 of the NC FPC. (Fire)

**Response: Acknowledged.**

**[NO CATEGORY]:**

26. Additional ADA parking spaces are required on this site according to Chapter 11 of the NC Building Code. 20% of the spaces shall meet these standards for rehab facilities.  
(Inspections)

**Response: The renovated facility (like the existing facility) will have a combination of uses including rehab. (approx. 10% of the facility) and primarily group care (approx. 90%). We have calculated ADA parking needs based on the mixture of these uses. We are proposing ADA parking as follows:**

**We applied NC Building Code – Chapter 11 – Table 1106.1 to 75% of the renovated facility’s 82 total parking spaces; 90% of 82 = 74+/- parking spaces; 3 ADA spaces required.**

**We applied Section 1106.4 to the remaining 10% of the renovated facility’s parking spaces: 20% of 8 spaces = 2 ADA spaces.**

**Total required ADA spaces = 5 (incl. 2 van accessible)**

**Note: The existing facility currently has 2 ADA spaces on site, therefore we are increasing the total by 3 spaces.**

27. Accessibility Requirements: That prior to issuance of a Certificate of Occupancy, the applicant shall provide the minimum required handicapped parking spaces and design all handicapped parking spaces, ramps, and crosswalks, and associated infrastructure according to Americans with Disabilities Act standards, North Carolina Building Code, American National Standards Institute (ANSI) Code, and Town standard. Parking - number of spaces to comply with NCBC 2012 section 1106.1, 1 per 6 compliant spaces or portion thereof must be van accessible, No slope to exceed 2% in any direction. Signage per NC requirements, MUT-CD and ICC A 117.1. Curb cuts and accessible routes Per ICC A117.1 2009 Ed. Cross slope limited to 2%, call for inspection before placement of concrete. Slope greater than 5% requires construction as a ramp. (Inspections)

**Response: Acknowledged.**

28. Canopy near front entrance must be at least 13 feet 6 inches clear height (Inspections)

**Response: Acknowledged, we are showing 14 feet 6 inches clear height (refer to exterior elevation 1/A-9).**

29. A single electrical service shall be provided to serve the structure with the exception of the fire pump. Article 230.2 (A) 2014 edition of North Carolina Electric Code. (Inspections)

**Response: Acknowledged.**

30. A zone for fire department ladders and firefighting operations must be provided. This will require all lines to be buried around the structure. Article 225.19 (E) 2014 edition of North Carolina Electric Code (Inspections)

**Response: Acknowledged.**

31. Address numbers must be a minimum of 4 inches high and of contrasting color to their background. Reflective numbers are preferred on front and rear doors. When the distance from the street or fire department access lane to the front or address side of the building exceeds 25 feet, larger numbers are required. 26 feet to 50 feet shall have 8 inch numbers, 51-75 feet shall have 12 inch numbers and over 75 feet shall have 18 inch numbers. Where access is by private means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. (Inspections)

**Response: Acknowledged.**

32. Fire sprinklers will be required in the new addition per local ordinance. OWASA requires a lead-free RPZ backflow preventor to protect the potable water. (Inspections)

**Response: Acknowledged.**

33. What is the size of the fuel cell (gallons) on the on-site generator? Will it be expected to pick up emergency circuits in the new 9,000 sf addition? (Inspections)

**Response: The existing generator will be used to power the addition, and it has a new above ground 450 gallon fuel tank.**

34. The Landscape Protection Plan is incomplete. Critical root zones for all trees surveyed must be shown on the plan. (Urban Forestry)

**Response: The Landscape Protection Plan has been revised to show critical root zones for all surveyed trees.**

35. Canopy coverage calculations should be revised to eliminate canopy that does not exist over the Franklin Street right-of-way due to the maintenance of adjacent overhead utility lines. Proposed shade trees can be counted to make up any canopy deficit. (Urban Forestry)

**Response: Upon further review by MDG, the Canopy Coverage Calculations presented on Sheet L-1001 (Landscape Plan), which show 68,220 SF of canopy to remain, did NOT include any of the tree canopy located with the Franklin Street R.O.W. There was an oversight in the drawing-production process by MDG – the shaded area shown on the submitted, revised plan is the area that was used to calculate the SF of 68,220. The previously submitted L-1001 Landscape Plan did not transfer the shading/graphic of the area used to complete the calculations from the draft document to the**



**final Landscape Plan Drawing. The revised PDF shows the canopy area that was used to make these SF calculations, as requested.**

36. We recommend that the applicant submit information on the projected increase in solid waste generated by the proposed increase in floor area. Current service provided by the Town is for 2 dumpsters emptied 3 times per week. (Urban Forestry)

**Response: There will be no or very minimal projected increase in solid waste generated by the proposed increase in floor area, as the bed count will not be increased as a result of the renovations.**

37. We recommend that an area for construction parking, staging and storage be designated on the plan. (Urban Forestry)

**Response: The new parking area will be used for construction parking, staging and storage. A detailed Construction Management Plan will be provided with ZCP.**

38. We recommend that information be submitted regarding the second site for existing dumpsters on the property near the eastern lot line. This location appears to be nonconforming with regard to screening and enclosure. We would also recommend that it be relocated to allow the 6 adjacent proposed parking spaces to be installed outside of the critical root zone for the rare 44 inch Willow Oak which includes slopes 10-15 percent according to the existing conditions plan. (Urban Forestry)

**Response: The existing dumpster pad located near the eastern access will be removed. As recommended, the proposed parking spaces to the south of the eastern access have been shifted toward the property line in order to minimize impacts to existing trees. An existing concrete dumpster pad at the eastern edge of the existing parking area will be improved with a refuse/recycling enclosure per Town standards.**

39. We recommend that non-invasive plant species be substituted for Nandina and Chinese ligustrum. (Urban Forestry)

**Response: As requested, 'Nandina' has been replaced with 'Indian Hawthorne' in the revised plans and plant list. As requested, 'Chinese Ligustrum' has been replaced with 'Diana Camellia'.**

40. In Appendix B "Stormwater Design Calculations, Water Quality Design Volume Calculations, at the end there is a WQV adj calculation (does not pertain to proposed design) and a WQV-provided that do not match the plans and other calculations. Please revise. (Stormwater)

**Response: Per the new NCDEQ Stormwater Design Manual, Section D-1 StormFilter by Contech, minimum design criteria (MDC 1) – sizing for the StormFilter**

**system is in conjunction with upstream closed detention based on designing the system to provide capture and treatment of 75% of the first 1.0" rainfall.**

41. Appendix B Stormwater Design Calculations, 2-year Delta Volume and Bioretention Drawdown Calculations - H<sub>0</sub> does not reflect sizing of proposed detention pipes on plan set (plans show 54"; calcs show H<sub>0</sub> as 2.5 ft). Please clarify or revise. (Stormwater)

**Response: The 2 year Delta Volume and Drawdown Calculations have been revised:**

- **Corrected title from Bioretention to simply 2-year Delta Draw Down**
- **The 2 yr drawdown volume is at a depth of 30" deep inside the 54" detention (see attached detention pipe incremental area table), and therefore our drawdown calc. has been revised to show H<sub>0</sub> as 2.5'.**

42. Appendix B Stormwater Design Calculations, 2-year Delta Volume and Bioretention Drawdown Calculations - Per the BMP manual, H<sub>0</sub>/2 is recommended to reflect falling head conditions during drawdown. Please revise calculations. (Stormwater)

**Response: Per section 3.5.2 of the 2009-2016 BMP manual, the orifice equation implies that H<sub>0</sub>/3 should be used to compute drawdown through an orifice to reflect that head is decreasing as drawdown occurs.**

43. For final plans, please provide means of preventing clogging of the small diameter orifice outlet. (Stormwater)

**Response: Acknowledged.**

44. What is stored in the trailers? Can the storage take place in the main building and trailers removed? (Current Development)

**Response: The Conex trailers are used for storage purposes. These trailers will be removed from the site, and the storage capacity will be replaced inside a shed / accessory structure, which is shown on the Site Plan. Landscape screening for the shed will be provided as required.**

45. Pedestrian crosswalk at south end of property to access existing sidewalk in front of State Employees Credit Union. (Current Development)

**Response: N/A – we are not proposing a walkway along the south side of our driveway in this vicinity and therefore there is no need for a crosswalk.**

46. Ways to create a brighter building along E. Franklin Street? (Current Development)

**Response: We have made efforts to enhance & brighten the building appearance with our new entrance (which adds height), with new landscaping, and with other site improvements. Changes to the existing building design &**



**materials other than what is proposed with this submittal would make the project economically not feasible.**

Please don't hesitate to call me should you have any questions or if you require additional information.

Yours very truly,  
BALLENTINE ASSOCIATES, PA



George J. Retschle, PE, LEED AP  
President

EX  
MB

EX  
NA

*ml*



20150903000177740 DEED  
Bk:RB6011 Pg:11  
09/03/2015 10:47:14 AM 1/7

FILED Mark Chilton  
Register of Deeds, Orange Co., NC  
Recording Fee: \$26.00  
NC Real Estate TX: \$.00

*of*

**GENERAL WARRANTY DEED**

Excise Tax: \$0.00; Exempt per NCGS 105.228.29(6)

Tax Parcel ID No. 9799-14-1643 *DB* Verified by \_\_\_\_\_ County  
on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ By: \_\_\_\_\_

~~Mail/Box to: Ryan Smith, Mayer Brown LLP, 71 S. Wacker, Chicago, IL 60606~~

This instrument was prepared by: Ryan Smith, Mayer Brown LLP, 71 S. Wacker, Chicago, IL 60606

Brief description for the Index: 1602 E Franklin Street, Chapel Hill, NC

THIS DEED (the "Deed"), made this the 1 day of August, 2015, by and between

**GRANTOR: VENTAS REALTY, LIMITED PARTNERSHIP**, whose address is: 10350 Ormsby Park Place, Suite 300, Louisville, KY 40223 (herein referred to as **Grantor**) and

**GRANTEE: CCP CHAPEL HILL 0806 LP**, whose address is: 353 N. Clark, Suite 2900, Chicago, IL 60654 (herein referred to as **Grantee**)

**WITNESSETH:**

For valuable consideration from Grantee to Grantor, the receipt and sufficiency of which is hereby acknowledged, Grantor hereby gives, grants, bargains, sells and conveys unto Grantee in fee simple, subject to the Exceptions and Reservations hereinafter provided, if any, the following described property, located in the City of Chapel Hill, County of Orange, State of North Carolina, more particularly described as follows:

See Exhibit A attached hereto and incorporated herein by reference (the "Property").

RETURN TO: LAND SERVICES USA, INC.  
1 SOUTH CHURCH STREET  
SUITE 300  
WEST CHESTER, PA 19382

Said property having been previously conveyed to Grantor by instrument(s) recorded in Book 1831, Page 578 in the Orange County Public Registry.

TO HAVE AND TO HOLD unto Grantee, together with all privileges and appurtenances thereunto belonging, in fee simple, subject to the Exceptions and Reservations hereinafter and hereinabove provided, if any.

And Grantor hereby warrants that Grantor is seized of the Property in fee and has the right to convey same in fee simple, that title is marketable and is free and clear of encumbrances other than as set forth herein, and that Grantor will forever warrant and defend the title against the lawful claims of all persons or entities whomsoever, subject to the exceptions herein stated.

All or a portion of the Property herein conveyed does not include the primary residence of Grantor.

**THIS DEED and CONVEYANCE** is expressly made subject to: (1) taxes not yet due and payable, (2) all matters shown on Schedule B of the existing owner's title insurance policy described on **Exhibit B** attached hereto, (3) all encumbrances and defects of title arising after the date of the existing owner's title insurance policy that (x) were not created, caused or permitted by the named Grantor, or (y) do not have a material adverse effect on the operation of the Property for its current use on the date this Deed is executed and delivered (including, without limitation, the facility lease, if any), and (4) those matters set forth on the schedules to the assignments of leases related to the Property that are being executed and delivered on or about the date of this Deed.

**GRANTOR WARRANTS** to Grantee that there are no matters affecting the Property that would cause a loss to, or result in a claim against, Grantee as to which matters Grantor has received insurance against such loss or claims by endorsement to its owner's title insurance policy or which Grantor otherwise has received insurance against loss or claims under the terms of its owner's title insurance policy.


**THE WARRANTIES** and covenants contained herein shall be solely for the benefit of and enforceable by Grantee hereunder and for no other party including heirs, successors and assigns of Grantee and under no circumstances shall such warranties and covenants be deemed to run with the Property conveyed by this Deed. Any claim against Grantor by Grantee shall be limited to the extent of any amounts recovered by Grantor under its title insurance policy on account of such claim.



IN WITNESS WHEREOF, Grantor has executed this Deed as of the day and year first above written.

Ventas Realty, Limited Partnership,  
a Delaware limited partnership

By: Ventas, Inc., its general partner

By:   
Name: **Brian K. Wood**  
Title: **Sr. Vice President & Chief Tax Officer**

Return to:  
Land Services USA, Inc.  
1 South Church Street, Suite 300  
West Chester, PA 19382

**Land Services USA, Inc.**  
Accommodation Recording  
File No. NCPA15-2647  
**THIS DOCUMENT NOT INSURED**

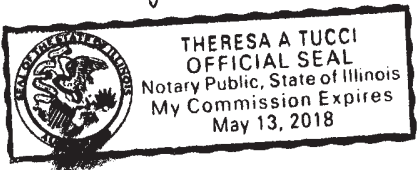


STATE OF Illinois )  
COUNTY OF Cook ) SS.

I, Theresa A. Tucci, the undersigned Notary Public of the County and State aforesaid, do hereby certify that BRIAN K WOOD, being personally known to me, personally appeared before me this day and acknowledged that he/she is the SVP & CHIEF TAX OFFICER of VENTAS REALTY, LIMITED PARTNERSHIP a Delaware LIMITED PARTNERSHIP, and that he/she, as SVP & CHIEF TAX OFFICER, being authorized to do so, voluntarily executed the foregoing instrument for the purposes therein expressed on behalf of VENTAS REALTY, LIMITED PARTNERSHIP. Witness my hand and official stamp or seal this 7<sup>th</sup> day of August, 2015.

Notary Public: Theresa A. Tucci  
Print Name: Theresa A. Tucci  
My Commission Expires: May 13, 2018

Seal/Stamp:



The foregoing Certificate(s) of \_\_\_\_\_  
Is/are certified to be correct. This instrument and certificate are duly registered at the date and time and in the Book and page shown on the first page hereof.  
\_\_\_\_\_ Register of Deeds for \_\_\_\_\_ County  
By: \_\_\_\_\_ Deputy/Assistant – Register of Deeds



Exhibit A

Lying and being in Orange County, North Carolina and being more particularly described as follows:

Beginning at an iron pipe situated on the South side of US 15-501A in the Town of Chapel Hill, corner with the property of Jr. W. Thompson, which said pipe is also located 168 feet from the intersection of the center line of Couch Lane with the southern right of way line of said Highway; running thence from said beginning point with Thompson's line South 53°45' East 167.61 feet to an iron pipe in the line of J.N. Couch; running thence North 46°50' East 25.09 feet to an iron pipe; running thence South 62°12' East 277.39 feet to an iron pipe in the line of the property of Graham R. Creal; running thence North 9°34' East 154.32 feet to an iron pipe; running thence South 60°41' East 221.14 feet to an iron pipe in the line of O.R. Yeager; running thence with the Yeager and Proctor property line North 2°45' East 425.23 feet to an iron pipe; running thence North 69°51' West 308.66 feet to an iron pipe in the southern right of way line of US 15-501A; running thence along and with the southern right of way line of said Highway South 43°44' West 503.31 feet to an iron pipe to the point and place of Beginning, and containing approximately 5.096 acres, more or less.

Chapel Hill Rehab & Healthcare Center  
1602 E Franklin St, Chapel Hill, NC  
Site No. 806



Exhibit B

Policy Date: April 30, 2002  
Issuer: First American Title Insurance Company  
Policy No: FA-32-110815

1. Discrepancies, conflicts in boundary lines, shortage of area, encroachments, and any facts that a current survey or inspection of the land would disclose, which are not shown by the public record
2. Rights of parties in possession, as tenants only, under prior unrecorded written leases
3. Liens for materials and labor used for improvements to the land commenced prior to the effective date hereof
4. Covenants, Reservations, Easements and Restrictions appearing of record in Book 307, Page 553 NOTE: Any covenant, condition or restriction indicating a preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status, or national origin are hereby deleted to the extent such covenants, conditions or restrictions violate 42 USC 3604 ( c )
5. Special Use Permit recorded in Book 307, Page 553
6. Easement(s) in favor of the Orange Water and Sewer Authority recorded in Book 364, Page 424
7. Right of way in favor of Duke Power Company recorded in Book 411, Page 467
8. Rights of Vencor Operating, Inc., pursuant to an unrecorded lease, a Memorandum evidencing same being recorded in Book 1730, Page 93, as supplemented and amended by unrecorded Amended and Restated Lease in favor of Vencor Operating, Inc., evidenced by the Memorandum recorded in Book 2257, Page 146
9. Deed of Trust in favor of Bank of America, N.A., as Administrative Agent, recorded in Book 2052, Page 1, in the Orange County Registry as amended and restated by Amended and Restated Deed of Trust and Security Agreement in favor of Bank of America, N.A., dated April 17, 2002, recorded in Book 2574, Page 220, Orange County Registry
10. Assignment of Leases and Rents in favor of Bank of America, N.A., as Administrative Agent, recorded in Book 2052, Page 38 in the Orange County Registry as amended and restated by that certain Amended and Restated Assignment of Leases and Rents among Ventas Realty Limited Partnership and Bank of America, N.A., as administrative agent recorded in Book 2574, page 248
11. UCC Financing Statement in favor of Bank of America, N.A., as Administrative Agent, recorded at UCC File No 2000-292 in the Orange County Registry
12. Subordination, Non-Disturbance and Attornment Agreement between Vencor, Inc , Vencor Operating. Inc and Ventas Realty Limited Partnership and Bank of America, N.A., recorded in Book 2257, Page 156



13. Senior leasehold deed of trust from Vencor Operating, Inc in favor of Morgan Guaranty Trust Company of New York recorded in Book 2257, Page 168 (Affects Leasehold Only)
14. Second priority leasehold deed of trust from Vencor Operating, Inc in favor of Morgan Guaranty Trust Company of New York recorded in Book 2257, Page 220 (Affects Leasehold Only)
15. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-520 (Affects Leasehold Only)
16. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-521 (Affects Leasehold Only)
17. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-519 (Affects Leasehold Only)
18. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-527 (Affects Leasehold Only)
19. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-518 (Affects Leasehold Only)
20. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-525 (Affects Leasehold Only)
21. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-524 (Affects Leasehold Only)
22. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-523 (Affects Leasehold Only)
23. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-528 (Affects Leasehold Only)
24. UCC Financing Statement in favor of Morgan Guaranty Trust Company of New York recorded at UCC File No 2001-522 (Affects Leasehold Only)





TOWN OF CHAPEL HILL

ORANGE COUNTY

NORTH CAROLINA

SPECIAL USE PERMIT

KNOW ALL MEN BY THESE PRESENTS, that the undersigned property owner(s) Hillhaven, Incorporated having applied to the Town of Chapel Hill for a Special Use Permit for the use and development of the property hereinafter described, the same was granted by the Town of Chapel Hill on November 13, 1978, the terms of which are as follows:

NAME OF PROJECT: Hillhaven Nursing Home

TYPE OF SPECIAL USE: Nursing Home

NAME OF DEVELOPER: Hillhaven, Inc.

DESCRIPTION OF PREMISES

LOCATION: 1602 East Franklin Street

TAX MAP REFERENCE: Chapel Hill Township Tax Map 46, Block B, Lot 4

AREA OF PROPERTY: approximately 5.1 acres

DESCRIPTION OF DEVELOPMENT

NUMBER OF BUILDINGS: 2 NUMBER OF DWELLING UNITS: 56

FLOOR AREA: NA NUMBER OF PARKING SPACES: 104

SPECIAL TERMS AND CONDITIONS

Refer to plans dated August 11, 1978 and approved by the Board of Aldermen on November 13, 1978 subject to the following:

Traffic and Safety

1. That a paved sidewalk be constructed between 1) the nursing facility and Elliott Road, 2) the residential structure and Elliott Road, and 3) the nursing facility and the proposed sidewalk along Franklin St.
2. That all sidewalks be constructed in compliance with the North Carolina Handicapped Code for wheelchair access.
3. That markings and/or warning signals be provided where paved sidewalks cross internal streets. Such markings or devices shall be approved by the Town Manager.
4. That a paved access drive from Elliott Road be provided.
5. That the access drive at Elliott Road be appropriately signed to indicate its restricted use for nursing home residents and their guests.
6. That one parking space for each residential unit be provided.
7. That the proposed sidewalk along Franklin Street be paved to Town standards.

Appearance

8. That detailed architectural elevations, and a site plan showing the location of landscaped areas, signs, lighting and other site elements be submitted to and approved by the Appearance Commission prior to issuance of a building permit.
9. That a detailed landscape/planting plan including detailed sign and lighting plans be submitted to and approved by the Appearance Commission prior to issuance of a certificate of occupancy.



Hillhaven Special Use Permit Stipulations (continued)

10. That the bulk trash containers be screened and that this screening be shown on the detailed landscape/planting plan.
11. That any and all planting which dies during the life of the special use permit be replaced with planting of the same species and approximately the same size by the end of the next planting season.
12. That the off-street parking area be screened from the abutting properties to the north, west and south by a solid six-foot high screen consisting of vegetation and/or fencing. The detailed design of such screen shall be shown on the landscape plan.
13. That as much significant planting as possible be retained and that such planting be shown on the landscape plan. Existing planting shall be protected during construction by appropriate fencing or barriers. Provisions for such protection shall be shown on the landscape plan.
14. That paved areas be set back as far as possible from trees to be retained.
15. That the applicant identify on the landscape plan those trees which require a tree feeder system to ensure the continued provision of proper tree nourishment, including adequate water, air, and nutrients to the root system of said trees. The design specifications for such a tree feeder system and the proposed specifications for its installation shall be shown on the landscape plan, and shall be reviewed and approved as part of the landscape plan.

Other Stipulations

16. That a drainage plan be submitted to and approved by the Town Manager prior to issuance of a grading permit or building permit. Improvements included in the drainage plan shall be completed prior to issuance of a certificate of occupancy.
17. That provision for garbage collection be approved by the Town Manager.
18. That construction begin by December 1, 1980 and be completed by December 1, 1982.
19. That fire hydrants as required by the Town Manager be provided within the proposed development. The number, location, and installation of such hydrants shall be approved by the Town Manager.
20. That the applicant provide open space for the residential units, as required by ordinance, of not less than 1,200 square feet per dwelling unit.
21. That there be no left-turn access onto Franklin Street.
- ✓22. And that the residential structure contain not more than 56 units.

\* \* \* END \* \* \*



NORTH CAROLINA  
ORANGE COUNTY

IN WITNESS WHEREOF, the Town of Chapel Hill has caused this instrument to be executed in its name as evidence of the issuance of said permit, and the undersigned being all of the property owners of the property above described, have executed this instrument in evidence of their acceptance of said Special Use Permit as a covenant running with the land.

ATTEST

David B. Roberts  
Town Clerk

The Town of Chapel Hill

BY Raymond E. Johnson

ACCEPTED

\_\_\_\_\_  
Owner (Seal)

\_\_\_\_\_  
Owner (Seal)

ATTEST

Neil Smith  
Secretary

David R. Betz  
Corporate Name  
BY President  
Title

NORTH CAROLINA  
ORANGE COUNTY

I, Maria Langford, a Notary Public in and for said County and State do hereby certify that Raymond E. Johnson, Town Manager of the Town of Chapel Hill, and David B. Roberts, Town Clerk, duly sworn says each for himself that he knows the corporate seal of the Town of Chapel Hill and that the seal affixed to the foregoing instrument is the corporate seal of the Town of Chapel Hill, that Raymond E. Johnson, Town Manager of said Town of Chapel Hill, and David B. Roberts, Town Clerk for the Town of Chapel Hill, subscribed their names thereto; that the corporate seal of the Town of Chapel Hill was affixed thereto, all by virtue of a resolution of the Board of Aldermen, and that said instrument is the act and deed of the Town of Chapel Hill.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal this the 5th day of January, 19 79.

Maria Langford  
Notary Public  
My commission expires: 7-14-80

NORTH CAROLINA  
ORANGE COUNTY

I, \_\_\_\_\_, a Notary Public in and for said State and County do hereby certify that \_\_\_\_\_ owners, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my Hand and Notarial Seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_.

\_\_\_\_\_  
Notary Public  
My commission expires: \_\_\_\_\_

Washington  
NORTH CAROLINA  
ORANGE COUNTY

THIS 23rd day of January, 19 79, personally came before me, Mary K. Kirk, a Notary Public of Orange County, North Carolina, who being by me duly sworn, says that he knows the common seal of the Hickman Corporation, and is acquainted with David R. Betz, who is President of said corporation and he, Neil Smith, who is Secretary of said corporation, and saw the President sign the foregoing instrument and he, the said secretary, signed his name in attestation of the execution of said instrument in the presence of said President of said corporation.

WITNESS my Hand and Notarial Seal, this the 23rd day of January, 19 79.

Mary K. Kirk  
Notary Public  
My commission expires: 2/11/82



# Orange County Solid Waste Management Plan



All development applications must provide a detailed solid waste management plan, including a recycling plan and a plan for management of construction debris. The following form must be completed to fulfill this requirement. This form must be completed and approved to satisfy the requirement of a plan for management of construction debris. Please complete all information in its entirety. Assistance in completing this form is available from the Orange County Solid Waste Staff at (919) 968-2788 x107 or x109.

### **COMPLETE ALL INFORMATION BELOW**

(Incomplete contact information will delay plan review and approval.)

Project Name     Signature HealthCARE of Chapel Hill facility expansion

Property ID #:   9799-14-1643                      Permit: TBD

Project Location   1602 East Franklin Street  
                           Chapel Hill, NC 27514

Project Owner     LP Chapel Hill, LLC (leasehold)

Contact Person    Tony Waldron

Address            12201 Bluegrass Parkway  
                           Jeffersontown, Kentucky 40299

Telephone         ( 502 ) 568 - 7951

Fax/Mobile        ( 561 ) 596 - 8162                      / (    )    -    

Design Firm        Ballentine Associates, P.A.

Contact Person    Dave Ballentine

Address            221 Providence Road  
                           Chapel Hill, NC 27514

Telephone         ( 919 ) 929 - 0481

Fax/Mobile        (    )    -                          / (    )    -    

Date                23 Nov 2016

**Provide a brief description of the work to be performed under this application:**

(For example: construct a new commercial building [include use/sq. ft.], apartment complex [# units], place of worship, horizontal improvements for subdivision, etc.)

Expansion of existing 40,046 sq. ft. one-story group care facility (add 9,600 sq. ft.)

Demo existing parking & add new parking.

\_\_\_\_\_

\_\_\_\_\_

**1. Site Preparation Wastes (landclearing, demolition, deconstruction)**

During site preparation for a project the amount of waste destined for a construction waste landfill or an inert debris landfill should be minimized or diverted for reuse or recycling. Many materials can be reused, recycled, or salvaged, provided that materials are kept separate. This approach may also reduce overall project waste disposal costs. **Regulated Recyclable Materials (clean wood waste, scrap metal and corrugated cardboard) generated in Orange County must be recycled.** During demolition activities, metal and wood are often not “reasonably possible to separate” or doing so may present health and safety concerns (asbestos, lead paint, etc.). In these cases only, are regulated materials not required to be separated for recycling. Consider whether the following materials will be generated on this project, *in any quantity*, and indicate the management method(s).

<input checked="" type="checkbox"/> 1. Trees and Plant Materials:	
<input type="checkbox"/>	No tree/plant wastes will be produced (proceed to # 2)
<input checked="" type="checkbox"/>	Tree waste will be salvaged as timber, mulch, or boiler fuel
<input type="checkbox"/>	Valuable plants will be removed for replanting
<input checked="" type="checkbox"/>	Landclearing and inert debris landfill (LCID)
<input type="checkbox"/>	Construction and demolition debris landfill (C&D)
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> 2. Dirt, Rock, Clean Fill, Inert materials to be removed from site:	
<input type="checkbox"/>	No inert materials will be removed from the site (proceed to # 3)
<input type="checkbox"/>	Site Needs Fill
<input checked="" type="checkbox"/>	Will be hauled to site needing fill.
<input type="checkbox"/>	Construction and demolition debris landfill (C&D)
<input type="checkbox"/>	Landclearing and inert debris landfill (LCID)
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> 3. Asphalt Paving:	
<input type="checkbox"/>	No asphalt wastes will be produced (proceed to # 4)
<input type="checkbox"/>	Recycled at asphalt-paving producer
<input type="checkbox"/>	Used on or off site. Describe use:
<input checked="" type="checkbox"/>	Disposed in an approved landfill (Orange County Landfill charges no tipfee if clean)
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> 4. Concrete, Brick, Block, other Aggregate materials:	
<input type="checkbox"/>	No aggregate materials will be removed from the site (proceed to # 5)
<input type="checkbox"/>	Recycled as scrap at an aggregate producer
<input type="checkbox"/>	Used on or off site: Describe use:
<input checked="" type="checkbox"/>	Construction and demolition debris landfill (C&D)
<input type="checkbox"/>	Landclearing and inert debris landfill (LCID)
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> <b>5. Metal Scrap</b> (metal wastes are required by ordinance to be recycled)	
<input type="checkbox"/>	No metal waste will be produced (proceed to # 6)
<input type="checkbox"/>	Segregated for on-site recycling collection
<input checked="" type="checkbox"/>	Recycle at Orange County Landfill (no tip fee charged)
<input type="checkbox"/>	Segregated for hauling to scrap dealer by general contractor
<input type="checkbox"/>	Segregated for hauling to scrap dealer by sub-contractor
<input type="checkbox"/>	Certified Commingled Recycling Facility
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> <b>6. Clean Wood Wastes</b> (clean wood wastes are required to be recycled)	
<input type="checkbox"/>	No clean wood wastes will be produced (proceed to # 7)
<input type="checkbox"/>	Segregated for on-site recycling collection
<input checked="" type="checkbox"/>	Recycle at Orange County Landfill (reduced tip fee charged)
<input type="checkbox"/>	Saved and used on future jobs
<input type="checkbox"/>	Separated for private salvage or charity
<input type="checkbox"/>	Certified Commingled Recycling Facility
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> <b>7. Demolition/Salvage of Buildings or Structures on the Site:</b>	
<input type="checkbox"/>	No structure(s) will be removed (proceed to Construction Waste section)
<input checked="" type="checkbox"/>	Structure(s) must be removed. Please describe (include square footage for each structure): Several entry canopies & portions of the building soffit to be demolished.
If any structure described above is greater than 500 ft <sup>2</sup> , it must be assessed for deconstruction possibilities. Please call Solid Waste Staff at (919) 968-2788 x107 or x109 to arrange an assessment.	
Could the structure(s) be moved from the site?	YES <input checked="" type="radio"/> NO <input type="radio"/> Don't Know <input type="radio"/>
Has the sale or donation of the structures been considered? Please explain: Yes, but no feasible sale or donation has been identified.	YES <input type="radio"/> NO <input checked="" type="radio"/>
How will the structure be removed otherwise? Demolition.	
What is the timetable on removal of the structure(s)? Immediately upon approval of required permits.	
Are there salvageable materials (hardwood floors, fixtures, molding, that can be removed for reuse prior to demolition)? If Yes, Please list (use a separate sheet if necessary):	YES <input checked="" type="radio"/> NO <input type="radio"/> Don't Know <input type="radio"/>
Have, or will, these materials been offered for sale or donation?	YES <input type="radio"/> NO <input checked="" type="radio"/>



## 2. Construction Wastes

During the construction phase there are multiple options for recycling building materials. **Regulated Recyclable Materials (clean wood waste, scrap metal and corrugated cardboard) generated in Orange County must be recycled.** Although other materials are not required to be recycled, you are highly encouraged to do so. One of the best methods of recycling is to separate the materials on the jobsite. You may also combine materials for delivery to a certified recycling facility. Specifying waste reduction/recycling practices on a project will assure better performance.

<input checked="" type="checkbox"/> 1. Clean Wood Wastes (clean wood wastes are required by ordinance to be recycled)	
<input type="checkbox"/>	No clean wood wastes will be produced (proceed to # 2)
<input type="checkbox"/>	Segregated for on-site recycling collection
<input checked="" type="checkbox"/>	Recycle at Orange County Landfill (reduced tip fee charged)
<input checked="" type="checkbox"/>	Saved and used on future jobs
<input type="checkbox"/>	Separated for private salvage or charity
<input type="checkbox"/>	Certified Commingled Recycling Facility
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> 2. Metal Scrap (metal wastes are required by ordinance to be recycled)	
<input type="checkbox"/>	No metal waste will be produced (proceed to # 3)
<input type="checkbox"/>	Segregated for on-site recycling collection
<input checked="" type="checkbox"/>	Recycle at Orange County Landfill (no tip fee charged)
<input type="checkbox"/>	Segregated for hauling to scrap dealer by general contractor
<input type="checkbox"/>	Segregated for hauling to scrap dealer by sub-contractor
<input type="checkbox"/>	Certified Commingled Recycling Facility
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> 3. Concrete, Brick, Block, other Aggregate materials:	
<input type="checkbox"/>	No aggregate materials will be removed from the site (proceed to # 4)
<input type="checkbox"/>	Recycled as scrap at an aggregate producer
<input type="checkbox"/>	Used on or off site: Describe use:
<input checked="" type="checkbox"/>	Construction and demolition debris landfill (C&D)
<input type="checkbox"/>	Landclearing and inert debris landfill (LCID)
<input type="checkbox"/>	Other (specify):

<input checked="" type="checkbox"/> 4. Corrugated Cardboard (cardboard wastes are required to be recycled)	
<input type="checkbox"/>	No cardboard waste will be produced (proceed to # 5)
<input type="checkbox"/>	Segregated for on-site recycling collection
<input checked="" type="checkbox"/>	Recycle at Orange County Landfill (no tip fee charged)
<input type="checkbox"/>	Segregated for hauling to paper dealer by general contractor
<input type="checkbox"/>	Segregated for hauling to paper dealer by sub-contractor
<input type="checkbox"/>	Certified Commingled Recycling Facility
<input type="checkbox"/>	Other (specify):

<b><input checked="" type="checkbox"/> 5. Drywall</b>	
<input type="checkbox"/>	No drywall waste will be produced (proceed to # 6)
<input type="checkbox"/>	Segregated for on-site recycling collection
<input type="checkbox"/>	Used on site as agricultural supplement
<input checked="" type="checkbox"/>	Disposed in an approved landfill
<input type="checkbox"/>	Certified Commingled Recycling Facility
<input type="checkbox"/>	Other (specify):

<b><input checked="" type="checkbox"/> 6. Other Materials</b>	
<input type="checkbox"/>	No other wastes will be produced (proceed to # 7)

Please specify other wastes that will be produced and how they will be managed:

Plastics (including vinyl and shrink-wrap):
Carpet and padding:
Shingles:
Fixtures (sinks, tubs, lighting, etc):
Other (specify): All materials generated by demo shall be disposed of in an approved landfill, or recycled if appropriate.
Other (specify):
Other (specify):

<b>7. Bulk Containers (Dumpsters)</b>	
County ordinance requires that any bulk waste container be labeled to define what materials are intended or prohibited from being deposited in them and be serially numbered. Hauling Licenses are required for vehicles greater than 9000 GVW in Orange County. Ensure that your waste haulers is licensed. You may contact Orange County Solid Waste for a list of licensees at (919) 968-2788 x107 or x109.	
<input checked="" type="checkbox"/>	There will be one or more bulk containers at the site for construction wastes.
<input type="checkbox"/>	Contractors will be required to remove own wastes without the use of bulk containers.
<input type="checkbox"/>	Corral or similar system will be used.



### 3. Recycling After Occupancy

Depending on the eventual use of the structure, different waste materials will be produced and available for recycling. Recyclable materials must be separated into categories based on collection methods.

#### PLANNING REQUIREMENTS:

- Indicate location of all bulk waste containers for refuse and recycling. Plan must show location of all containers, even if using existing refuse/recycling enclosures. Standard details/notes for any of the following are available from Orange County Solid Waste Management (919-968-2788 x107 or x109).
- All refuse/recycling containers are required to be on concrete pads.
- Provide a detailed and scaled plan of all bulk waste containers areas that show: each container labeled, required screening, lighting, overhead clearances, bollards, and concrete pad.
- Indicate whether refuse/recycling area will be gated. Any doors/gates will need retainers to be latched open for refuse/recycling collection.
- Ensure adequate collection vehicle access to all containers for deposit and collection. Access templates are available from Orange County Solid Waste Management.
- Sharing of exterior recycling locations is acceptable if a joint access/shared-use agreement is filed and the deeds of all properties amended.

<input checked="" type="checkbox"/> Check materials that will be generated once the structure is ready for occupancy:	
X	Standard: glass bottles, metal cans, newspaper, glossy magazines, #1 plastics, #2 plastics
X	Corrugated Cardboard (not including waxed or single layer cardboard)
X	Mixed Paper: junk mail, cereal boxes
X	Office Paper: white or colored copy paper, confidential papers
X	Restaurant: food wastes, cooking oil, disposable dining ware
X	Other Plastics: #5, #7
	Business specific wastes (please describe):
	<b>Note: No anticipated change in generated materials from existing occupancy &amp; conditions</b>

#### Cardboard Recycling Requirement

Orange County Ordinance requires recyclable corrugated cardboard to be kept separate from all other refuse. All developments must provide for cardboard recycling. If the facility's garbage will be collected from a bulk container (dumpster), a second waste container is likely to be required for cardboard. Public recycling drop-off sites can accommodate a very limited amount of commercial use (no > 50 boxes per week).

	Site Plan includes space for cardboard recycling container on Sheet # <u>C0101 Ex. Conditions</u>
	Corrugated Cardboard will be handled in an alternate manner. Description Required:

#### Collection Type: This project will be served by the following collection methods. Check all that apply.

	<b>Exterior individual or cooperative-use bulk waste container site.</b> May be suitable for apartment complexes, restaurants, places of worship, educational facility, office building, retail/office/restaurant combinations
X	Garbage dumpster <b>Existing</b>
	Garbage compactor
X	Cardboard dumpster <b>Existing</b>
	Cardboard compactor
X	Recycling carts for glass, cans, plastic bottles, newspaper, magazines, office paper (co-mingled) <b>Existing</b>
	Cooking grease rendering container (required for any commercial kitchen facility)
	Food waste collection container (If qualify based on volume; contact OCSW staff for details of program)
	<b>Standard "curbside" recycling collection.</b> May be suitable for single-family developments and subdivisions, including some duplex, triples, and townhome developments.



**Ballentine  
Associates, P.A.**

221 Providence Road  
Eastowne Office Park  
Chapel Hill, NC 27514

919/929-0481 Chapel Hill  
919/489-4789 Durham  
919/489-2803 Fax

23 Nov 2016

**SIGNATURE HEALTHCARE FACILITY EXPANSION  
*Preliminary TRANSPORTATION MANAGEMENT PLAN (TMP)***

***BACKGROUND:*** Signature HealthCARE of Chapel Hill is an existing 1-story, 40,646 sf group care facility. Current plans to expand the facility include an additional 9,600 of building and square footage, and reconfigured parking and pedestrian routes.

**OBJECTIVES OF TMP:** This preliminary program is designed to decrease the amount of traffic generated by the Signature HealthCARE facility expansion by promoting policies that will result in the reduced use of automobiles, particularly single occupant vehicles, and support the Town's efforts to reduce carbon emissions, while promoting wellness through use of transit, bicycle and pedestrian movement. This TMP is primarily oriented toward employees, however it will also provide options for patients and visitors to the facility.

**ADMINISTRATION AND REPORTING**

**1.1 Go Chapel Hill Transportation Management Plan Coordinator:** A Go Chapel Hill Transportation Management Site Coordinator will be designated by the leaseholder LP, Chapel Hill, LLC and the Coordinator will be responsible for administering, communicating, and reporting the plan and surveys to the individual Go Chapel Hill business and agency coordinators located in the building.

**1.2 Responsibilities of Coordinator:**

1. Promote participation in the Go Chapel Hill Transportation Management Plan Program;
2. Provide individual business/agency name, coordinators name and contact information including email, address and phone number to the Town's TDM Coordinator;
3. Forward information sent by the Town to those located at the Signature HealthCARE site.
4. Conduct biannual Go Chapel Hill Mobility Business and Employee surveys. This survey form, provided by the Town of Chapel Hill, will show travel behavior of employees;
5. Prepare and submit an annual report on the status and implementation of the Transportation Management Plan;
6. Attend Town Go Chapel Hill Transportation Demand Management Active Business annual training workshop.

### 1.3 Reporting Dates:

1. The coordinator will need to submit an Occupancy Survey (provided by the Town of Chapel Hill) within 90 days of issuance of the Certificate of Occupancy.
2. The Transportation Coordinator will also be responsible for submitting the annual report and employee surveys to the Town of Chapel Hill by September 30th of each survey year.

### 1.4 Plan Goals:

1. Quantifiably reduce the use of Single Occupancy Vehicles (SOVs).
2. Promote the use of the available local transportation alternatives.
3. Educate employees on alternatives available to traveling by SOV.
4. Encourage pedestrian and bike traffic around Chapel Hill.

### 1.5 Plan Components:

The Transportation Management Plan will include a variety of incentives designed to encourage the use of alternative modes of transportation and reduce total vehicle trips by use of the following components:

#### 1. A Transportation Coordinator will communicate and promote alternate modes of transportation including:

- Transit
    - Patients & employees will be given the nearest Bus Shelters locations
    - Schedules, maps, etc. will be made available to patients, visitors & employees for Chapel Hill Transit, Triangle Transit and PART
  - Pedestrian Movement
    - Sidewalk construction – new sidewalks will be added to improve pedestrian flow throughout the site and to maintain connections to walkways inside the public right-of-way.
    - Tenant/employee awareness on nearby housing, business, dining facilities, etc.
  - Bicycle Use - Bicycle racks will be provided for employees and patrons
    - 80% Class I spaces
    - 20% Class II spaces
  - Car Pooling and Rideshare programs
    - Tenants/employees will be encouraged to car pool with others to minimize the use of SOV's as they travel to and from work.
    - Information on TTA RideShare Programs will be made available to tenants & employees and the use of these programs will be encouraged.
  - Tenant/Employee Wellness and Transportation
    - Wellness information packets will be available for employees
    - Information packets will be updated annually
2. **Occupancy Survey** – The Coordinator will submit an Occupancy Survey to the Town within 90 days after issuance of Certificate of Occupancy;
  3. **Annual Report** – The Coordinator will submit an updated Transportation Management Plan Report annually.

4. **Surveys** – The Coordinator will submit Go Chapel Hill Mobility Business and Employee Surveys during survey years.
5. **Trip Reduction Measures** – Trip reduction measures will be implemented to gradually attain the goals of the program.
6. **Incentives Programs:** The following additional measures and incentives will be included in the Signature HealthCARE TMP to assist in achieving the TMP's Goals:
  - Promote transit use, distribute transit service schedule and other information.
  - The facility will contain shower facilities to encourage employees & visitors to bike or walk to work and to exercise during meal break hours;
  - The Coordinator will work with employees to set up ride sharing match-up programs;
  - A transit information display will be installed and maintained at a central location near the building lobby.
  - Other measures:
    - The Coordinator will work with merchants in the nearby Village Plaza, Eastgate Crossing, University Place, and other nearby areas to promote local businesses (restaurants, hotels, etc.); in an effort to encourage employees, patients & visitors to walk or bike (when able) to these facilities for meals and other services, including nearby hotel accommodations for out of town visitors;
    - Join air quality coalition;
    - The Coordinator will encourage direct deposit of paychecks in tenant communications;
    - The Coordinator will encourage employee use of mailroom facilities.



**Ballentine  
Associates, P.A.**

221 Providence Road  
Eastowne Office Park  
Chapel Hill, NC 27514

919/929-0481 Chapel Hill  
919/489-4789 Durham  
919/489-2803 Fax

14 March 2017

**SIGNATURE HEALTHCARE FACILITY EXPANSION  
*Preliminary ENERGY MANAGEMENT PLAN (EMP)***

**BACKGROUND:** *Signature HealthCARE of Chapel Hill is an existing 1-story, 40,646 sf group care facility. Current plans to expand the facility include an additional 9,600 of building and square footage, and reconfigured parking and pedestrian routes.*

**OBJECTIVES OF THE EMP:** This preliminary program is designed to reduce/conservate energy to the extents practicable in association with this expansion project. Below is an outline and description of site design elements and strategies being implemented and/or considered:

Note:

- It will not be feasible (and it is not a requirement) for this project to meet an energy performance that is 20% better than the most recent version of ASHRAE 90.1.
- A green building standard/certification is not being used/pursued for this project, however elements that fall under green standards are included in the design and/or are under consideration.

**SITE EMP FEATURES:**

1. A Stormwater Control Measure (SCM) designed to meet the latest NCDWQ Minimum Design Criteria, will be used to treat & remove total suspended solids for the first 1" of precipitation from the project's net increase of impervious areas.
2. Increased bicycle parking options on site should help to reduce transportation related energy consumption.
3. The reconfigured parking areas have been designed to minimize impacts to existing trees. Existing and new landscaping will combine to provide parking lot shading and therefore help to mitigate the urban heat-island effect.
4. New LED powered site lighting shall be provided.
5. Energy efficient heating and air conditioning units will be used on the addition (HVAC units recover energy from exhaust air).
6. Energy efficient natural lighting will be provided in the lobby through a new clerestory window above the new entrance.
7. The new cantilevered porte-cochere roof will provide solar protection for the south facing lobby glass.



**Ballentine  
Associates, P.A.**

# Storm Water Impact Analysis

For

## Signature HealthCARE of Chapel Hill Facility Expansion

1602 East Franklin Street  
Chapel Hill, North Carolina

(PIN: 9799-14-1643)

Prepared by:

### **Ballentine Associates, P.A.**

Consulting Engineers  
221 Providence Road  
Chapel Hill, NC 27514  
(919) 929-0481

BA Project # 116009.00



<u>Issue Dates</u>	<u>Description</u>
23 Nov 2016	SUP Mod. Submittal
3 Mar 2017	SUP Mod. Submittal #2



## Project Overview:

Signature HealthCARE of Chapel Hill is an existing group home facility with plans to expand their existing building in order to accommodate the evolving needs of their patients. The existing development was approved under a Special Use Permit (SUP) issued in 1978, and because the expansion will add more than 5% to the overall floor area, Town of approval of an SUP modification is required. In addition to the increase in square footage, the expansion will include an enhanced occupant drop-off and pick-up area at the front, southwest corner of the building. The building will be expanded toward Franklin Street in an area where there is currently a paved parking lot. In order to maintain the parking space count necessary to accommodate the facility, a new parking area will be constructed near the western corner of the site.

## Existing Site Description:

The site is located at 1602 East Franklin Street on an irregular shaped parcel that generally slopes from the Franklin Street frontage on the northwest side of the property down to the southeast. The existing one-story group home building, parking areas and walkways make up a total of 96,689 square feet (2.220 acres) of impervious surface.

No streams or water bodies exist on site. The site lies in the Upper New Hope basin, as depicted in NCDENR's Jordan Lake Nutrient Strategy Nonpoint Source Delivery Factors Map (see appendix A).

A copy of FIRM map 3710979900K is included in Appendix A and confirms that no portion of the site lies within a special flood hazard area.

The NRCS Soils Survey map included in Appendix A shows that 99% of the soils on site are WwC, White Store-Urban land complex (2 to 8% slopes), which belongs to hydrologic soils group "D", while 1% are AuC, Appling-Urban land complex (2 to 10% slopes), which belongs to hydrologic soils group "B".

## Proposed Project Description:

The expansion will add 9,600 square feet of floor area, bringing the finished building to 49,646 square feet. The project will also feature an enhanced occupant drop-off and pick-up area at the front, southwest corner of the building. A portion of the existing parking will be removed in order to provide space for the building expansion, while remaining existing parking will be reconfigured and expanded in order to meet current town standards. The site currently includes 97,381 square feet (2.236 AC) of impervious cover. Approximately 18,484 square feet (0.424 AC) of existing impervious parking and walkways will be demolished, while the proposed improvements will ultimately result in a post-developed impervious cover of 113,336 SF (2.602 AC) within the site's Net Land Area, which represents a net increase of 15,955 SF (0.366 AC) over existing conditions.

## Stormwater Management Requirements:

This project must meet the town of Chapel Hill's current stormwater requirements, which include:

### Water Quality Requirements:

- Net increase of impervious surfaces shall be treated for 85% total suspended solids (TSS) removal for first 1" of precipitation from net increase in impervious areas.

### Detention Requirements:

- Post-developed peak flows cannot exceed pre-developed peak flows during the 1, 2, and 25-year storms.
- The increase in runoff volume ("Delta") for the 2-year, 24-hour storm (3.6" depth) must be managed. (i.e. released over a 2-5 day period).

## Proposed Stormwater Management:

### Water Quality Treatment:

The project as proposed includes one Stormwater Control Measure (SCM) to provide the required water quality treatment. The proposed SCM is a Storm Filter system (including underground WQV Detention) which is designed according to the new NCDWQ Stormwater Design Manual. The manner in which the Storm Filter provides the required water quality treatment is described below:

- 85% TSS Removal – The proposed Storm Filter system (including the WQV Detention) has been designed to treat 18,109 SF (0.416 AC) of impervious cover, which exceeds the net added impervious areas. Refer to Appendix B for SCM sizing calculations and to Appendix A for drainage area mapping.

### Detention:

- 2-Year Storm Volume Management – The proposed Storm Filter (including the WQV Detention) and the main underground detention have been designed to manage a combined volume of 2,728 CF, which exceeds the "2-Year Delta" Volume of 2,469 CF resulting from the development of this site. The main detention will feature a 1-inch orifice, which will draw down the 2-Year Delta Volume in just under 18 ¾ hours. Although drawdown time over a period of 2-5 days is preferred, the Town of Chapel Hill limits stormwater SCM orifice sizing to a minimum of 1" dia. and with this exception, we have satisfied the 2-year storm volume management requirement. The calculations included in Appendix B support this conclusion.

Summary of Results:

The following table compares the pre-developed and post-developed peak flows and the required 2-yr, increased runoff volume “Delta” to be managed from the site’s drainage area:

	1-Year (cfs)			2-Year (cfs)			25-Year (cfs)		
	Pre	Post Un-detained	Post Detained	Pre	Post Un-detained	Post Detained	Pre	Post Un-detained	Post Detained
Study Point A	13.41	14.43	12.64	17.50	18.55	16.36	36.96	40.99	36.87

2-Year Vol. (CF)			
Pre	Post	2-yr Volume Required	2-yr Volume Managed
42,215	44,601	2,469	2,728

Conclusion:

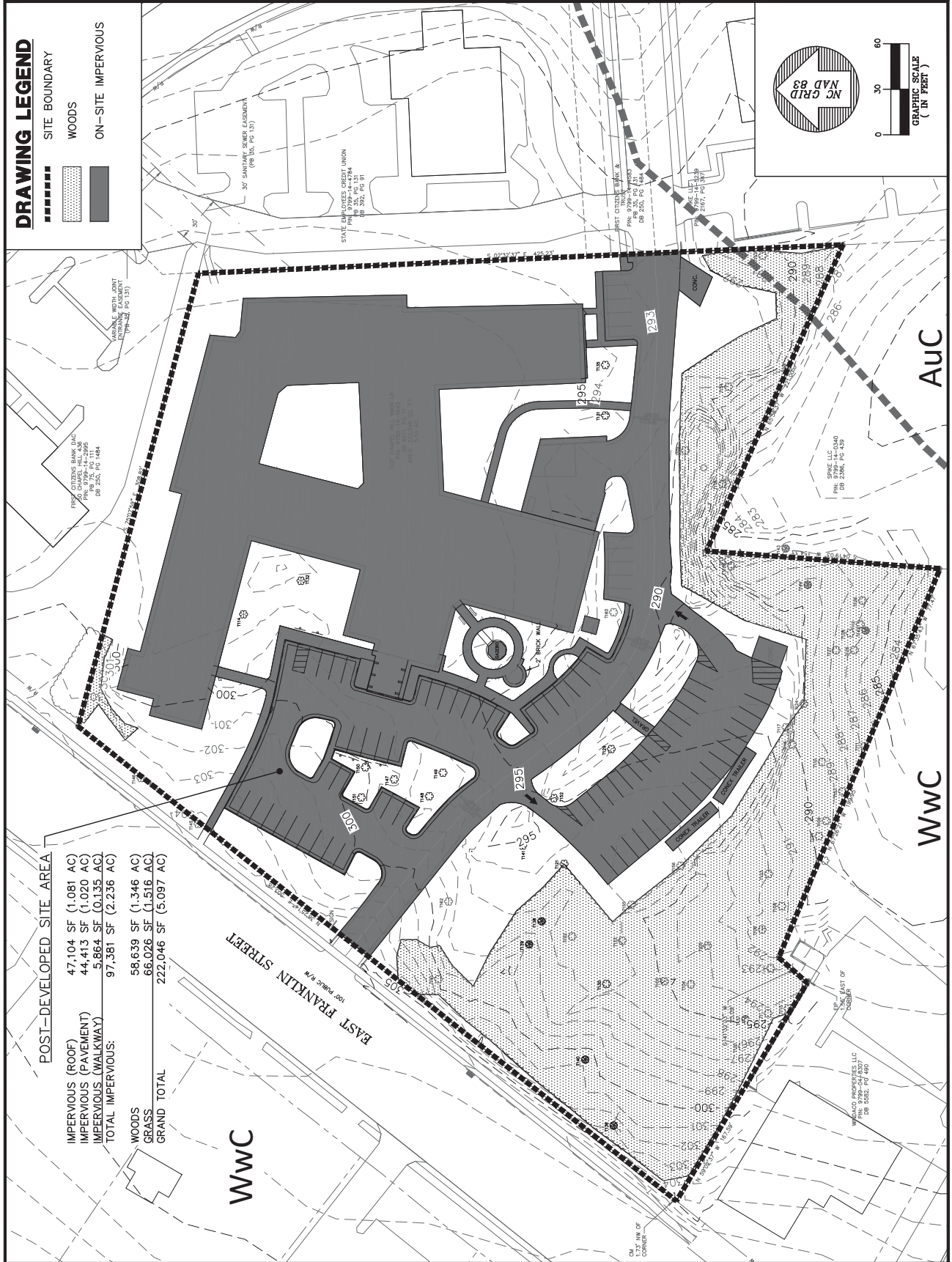
This project as proposed, will comply with the Town of Chapel Hill’s current stormwater management regulations.

## List of Appendices:

- Appendix A - Maps
  - DA-1 Pre-Developed Site Area Map
  - DA-2 Post-Developed Site Area Map
  - DA-3 Post-Developed Drainage Area Map
  - NRCS Soils Map
  - NRCS Hydrologic Soil Group Map
  - NRCS Hardbound Soil Map
  - USGS Topographic Map
  - FIRM Panel
  
- Appendix B – Stormwater Design Calculations
  - Water Quality Design Volume Calculations (WQV)
  - Storm Filter WQV Storage Pipe Incremental Area for Round Pipe – 54”
  - 2-yr Delta Volume Calculations
    - Pre Developed 2-yr Volume Calculation
    - Post Developed & 2-yr Delta Volume Calculation
    - 2-Year Delta Volume Draw Down Calculations
  - Detention Storage Pipe Incremental Area for Round Pipe – 54”
  
- Appendix C – 1, 2, 25 & 100-yr Stormwater Management Calculations (PondPack)
  - Stormwater Management Schematic Map
  - Table of Contents
  - Master Network Summary
  - Supporting Calculation
  
- Appendix D – Environmental
  - RCD, Floodplain, Jordan Buffer Determination

- **Appendix A - Maps**

- DA-1 Pre-Developed Site Area Map
- DA-2 Post-Developed Site Area Map
- DA- 3 Post-Developed Drainage Area Map
- NRCS Soils Map
- NRCS Hydrologic Soil Group Map
- NRCS Hardbound Soil Map
- USGS Topographic Map
- FIRM Panel



**DRAWING LEGEND**

	SITE BOUNDARY
	WOODS
	ON-SITE IMPERVIOUS

**POST-DEVELOPED SITE AREA**

IMPERVIOUS (ROOF)	47,104 SF (1.081 AC)
IMPERVIOUS (PAVEMENT)	44,413 SF (1.020 AC)
IMPERVIOUS (WALKWAY)	5,864 SF (0.135 AC)
<b>TOTAL IMPERVIOUS:</b>	<b>97,381 SF (2.236 AC)</b>
WOODS	58,639 SF (1.346 AC)
GRASS	66,026 SF (1.516 AC)
<b>GRAND TOTAL</b>	<b>222,046 SF (5.097 AC)</b>

**SIGNATURE HEALTHCARE  
PRE-DEVELOPED SITE AREA MAP  
CHAPEL HILL, NC**

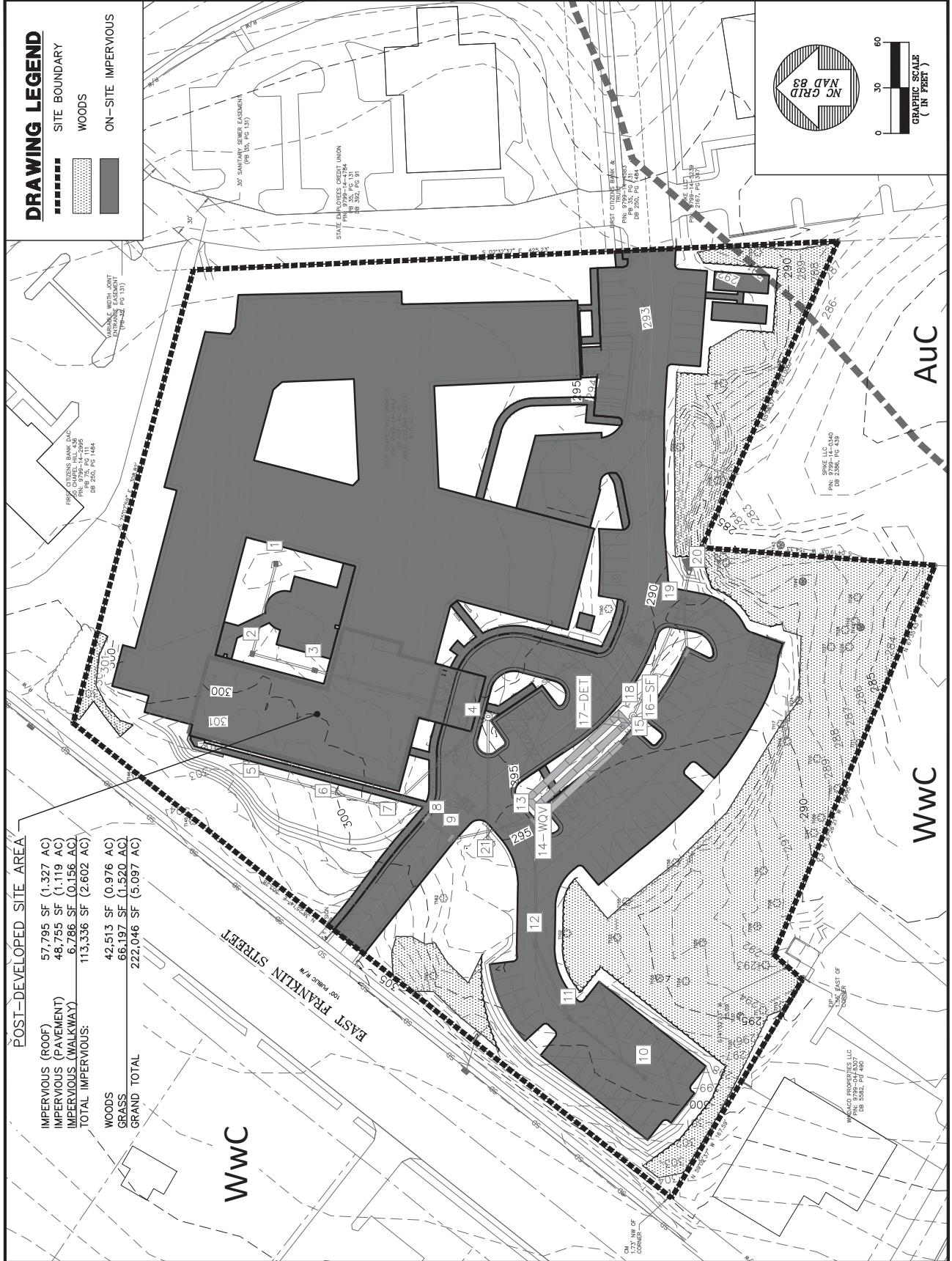
NUM	REVISION	DATE	ISSUED
			SUP MODIFICATION
		23 NOV 16	SUP MODIFICATION
		3 MAR 17	DATE

**BALLENTINE ASSOCIATES, P.A.**  
 ARCHITECTS, ENGINEERS, PLANNERS  
 1000 W. GOLF COURSE RD., SUITE 200  
 CHAPEL HILL, NC 27514  
 (919) 929-0461 (919) 485-4788

SCALE: AS NOTED  
 DATE: 23 NOV 16  
 JOB NUMBER: 116009.00  
 DRAWN BY: DBB  
 REVIEWED BY: GJR

**DA  
1**





**DRAWING LEGEND**

	SITE BOUNDARY
	WOODS
	ON-SITE IMPERVIOUS

**POST-DEVELOPED SITE AREA**

IMPERVIOUS (ROOF)	57,795 SF (1.327 AC)
IMPERVIOUS (PAVEMENT)	48,755 SF (1.119 AC)
IMPERVIOUS (WALKWAY)	6,786 SF (0.156 AC)
<b>TOTAL IMPERVIOUS:</b>	<b>113,336 SF (2.602 AC)</b>
WOODS	42,513 SF (0.976 AC)
GRASS	66,197 SF (1.520 AC)
<b>GRAND TOTAL</b>	<b>222,046 SF (5.097 AC)</b>

NUM	REVISION	DATE	ISSUED	DATE
			SUP MODIFICATION #2	23 NOV 16
			SUP MODIFICATION #2	3 MAR 17

**SIGNATURE HEALTHCARE**  
**POST-DEVELOPED SITE AREA MAP**  
**CHAPEL HILL, NC**

**BALLENTINE ASSOCIATES, P.A.**  
CHAPEL HILL, NC 27514  
(919) 292-0441 (919) 481-4788

SCALE: AS NOTED  
DATE: 23 NOV 16  
JOB NUMBER: 116009.00  
DRAWN BY: DBB  
REVIEWED BY: GJR

**DA 2**

# SIGNATURE HEALTHCARE POST-DEVELOPED DRAINAGE AREA MAP

## CHAPEL HILL, NC





NUM	REVISION	DATE	ISSUED
			SUP. MODIFICATION #2
			SUP. MODIFICATION #2
			3 MAR 17

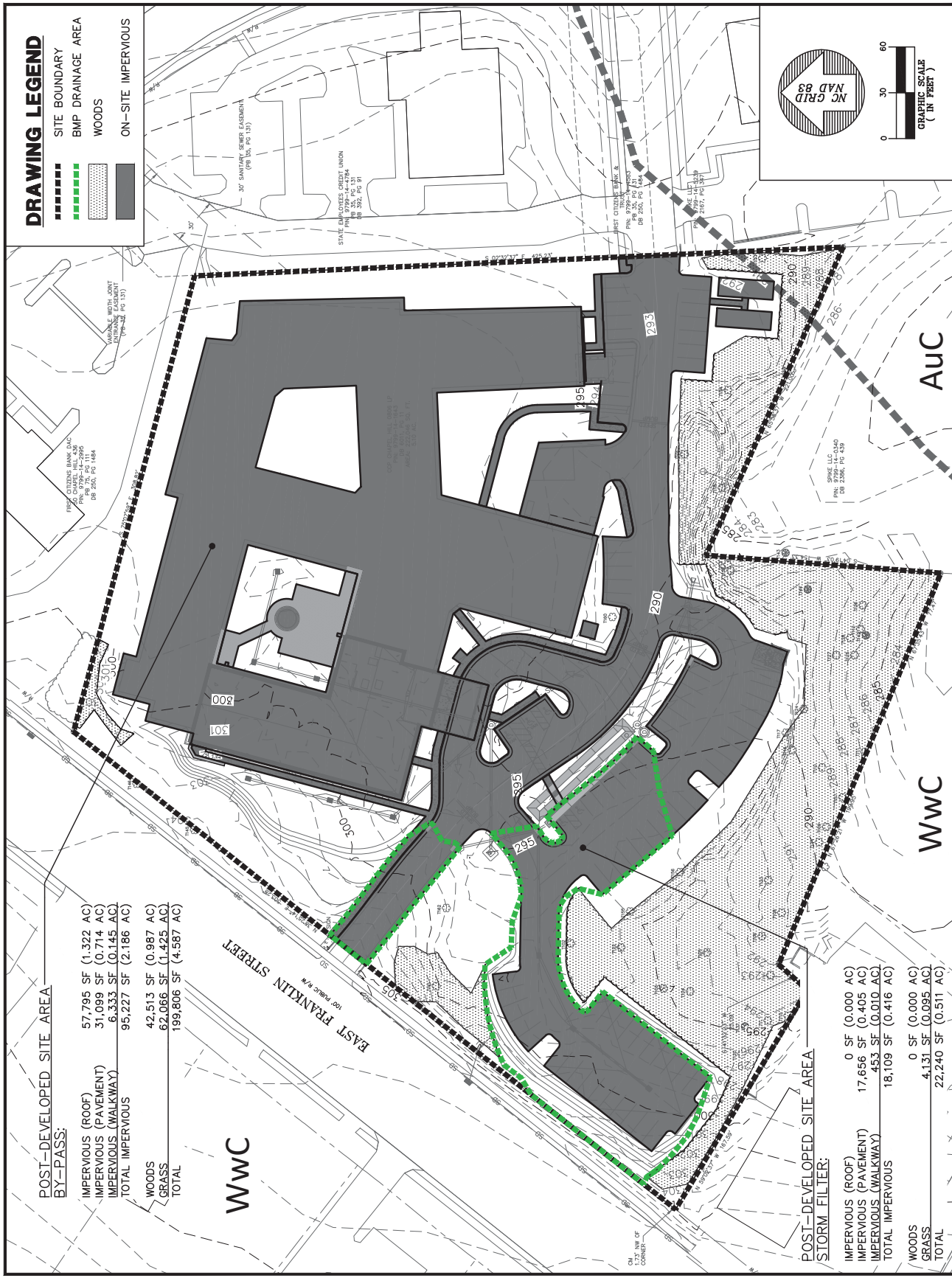
**BALLENTINE ASSOCIATES, P.A.**  
 101 W. HARRIS STREET, SUITE 200  
 CHAPEL HILL, NC 27514  
 (919) 292-0441 FAX (919) 481-4788

SCALE: AS NOTED  
 DATE: 23 NOV 16  
 JOB NUMBER: 116009.00  
 DRAWN BY: DBB  
 REVIEWED BY: GJR

**DA  
3**

**DRAWING LEGEND**

	SITE BOUNDARY
	BMP DRAINAGE AREA
	WOODS
	ON-SITE IMPERVIOUS



**POST-DEVELOPED SITE AREA BY-PASS:**

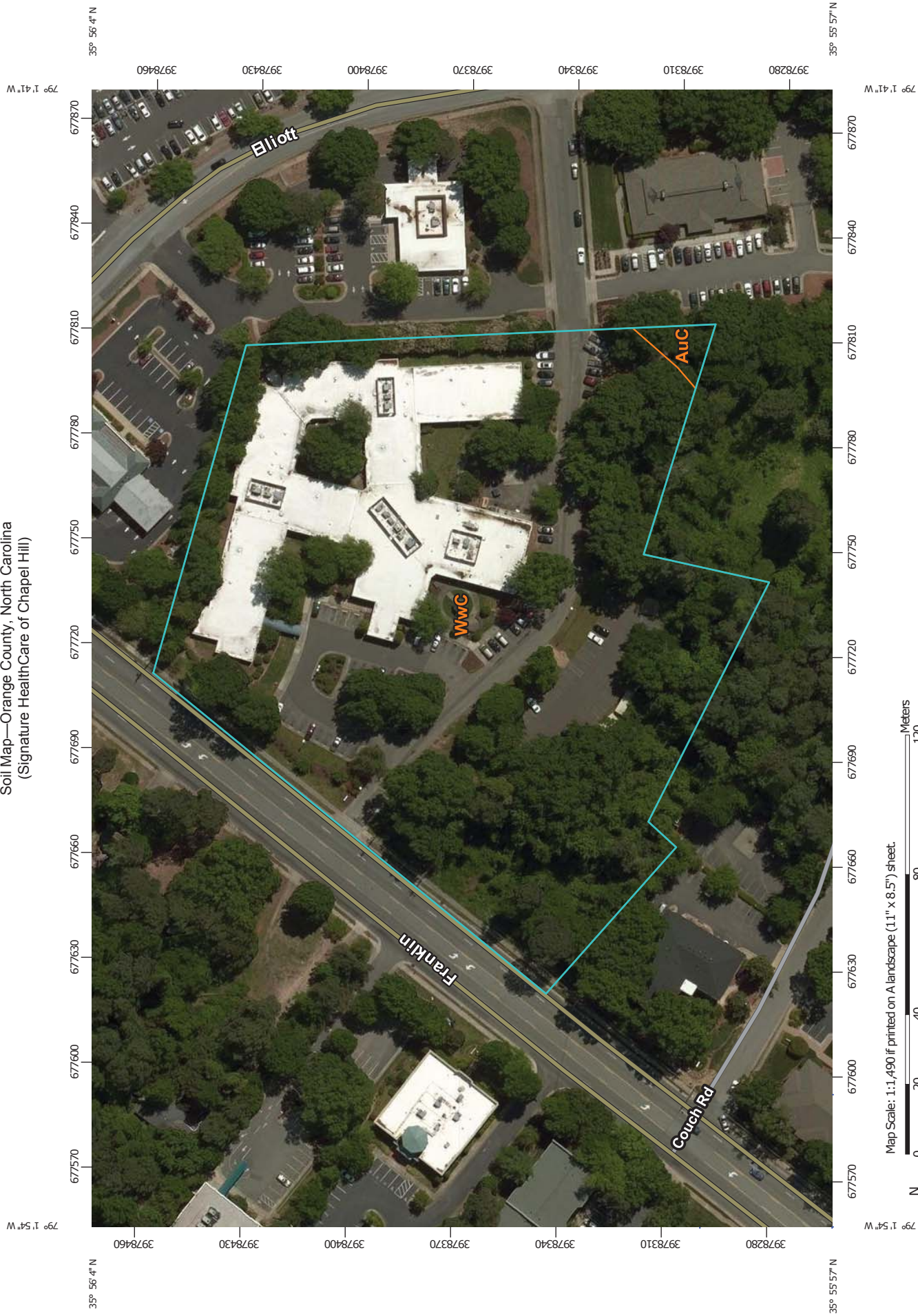
IMPERVIOUS (ROOF)	57,795 SF (1.322 AC)
IMPERVIOUS (PAVEMENT)	31,099 SF (0.714 AC)
IMPERVIOUS (WALKWAY)	6,333 SF (0.145 AC)
<b>TOTAL IMPERVIOUS</b>	<b>95,227 SF (2.186 AC)</b>
WOODS	42,513 SF (0.987 AC)
GRASS	62,066 SF (1.425 AC)
<b>TOTAL</b>	<b>199,806 SF (4.587 AC)</b>

**POST-DEVELOPED SITE AREA STORM FILTER:**










































IMPERVIOUS (ROOF)	0 SF (0.000 AC)
IMPERVIOUS (PAVEMENT)	17,656 SF (0.405 AC)
IMPERVIOUS (WALKWAY)	453 SF (0.010 AC)
<b>TOTAL IMPERVIOUS</b>	<b>18,109 SF (0.416 AC)</b>
WOODS	0 SF (0.000 AC)
GRASS	4,131 SF (0.095 AC)
<b>TOTAL</b>	<b>22,240 SF (0.511 AC)</b>



Soil Map—Orange County, North Carolina  
(Signature HealthCare of Chapel Hill)



## MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Water Features
 Borrow Pit	 Streams and Canals
 Clay Spot	 Transportation
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	 Background
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County, North Carolina  
Survey Area Data: Version 15, Sep 16, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 27, 2014—May 6, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Orange County, North Carolina (NC135)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AuC	Appling-Urban land complex, 2 to 10 percent slopes	0.1	1.0%
WwC	White Store-Urban land complex, 2 to 8 percent slopes	5.3	99.0%
<b>Totals for Area of Interest</b>		<b>5.3</b>	<b>100.0%</b>

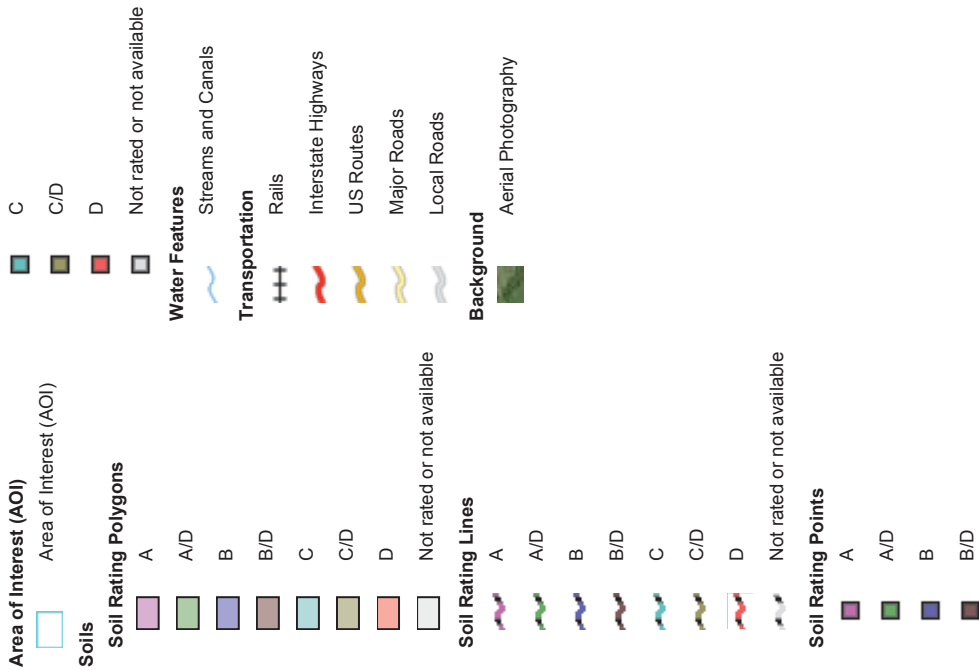


Hydrologic Soil Group—Orange County, North Carolina  
(Signature HealthCare of Chapel Hill)





## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County, North Carolina  
 Survey Area Data: Version 15, Sep 16, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 27, 2014—May 6, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Orange County, North Carolina (NC135)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AuC	Appling-Urban land complex, 2 to 10 percent slopes	B	0.1	1.0%
WwC	White Store-Urban land complex, 2 to 8 percent slopes	D	5.3	99.0%
<b>Totals for Area of Interest</b>			<b>5.3</b>	<b>100.0%</b>

### Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



ORANGE COUNTY, NORTH CAROLINA - SHEET NUMBER 26

26



(Join sheet 23)

ApC

GeB

TaD

IpB

1:20,000 FEET

1 Mile

(Join sheet 25)

Scale 1:20,000

(Join sheet 27)

TaD

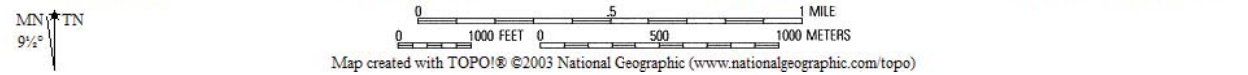
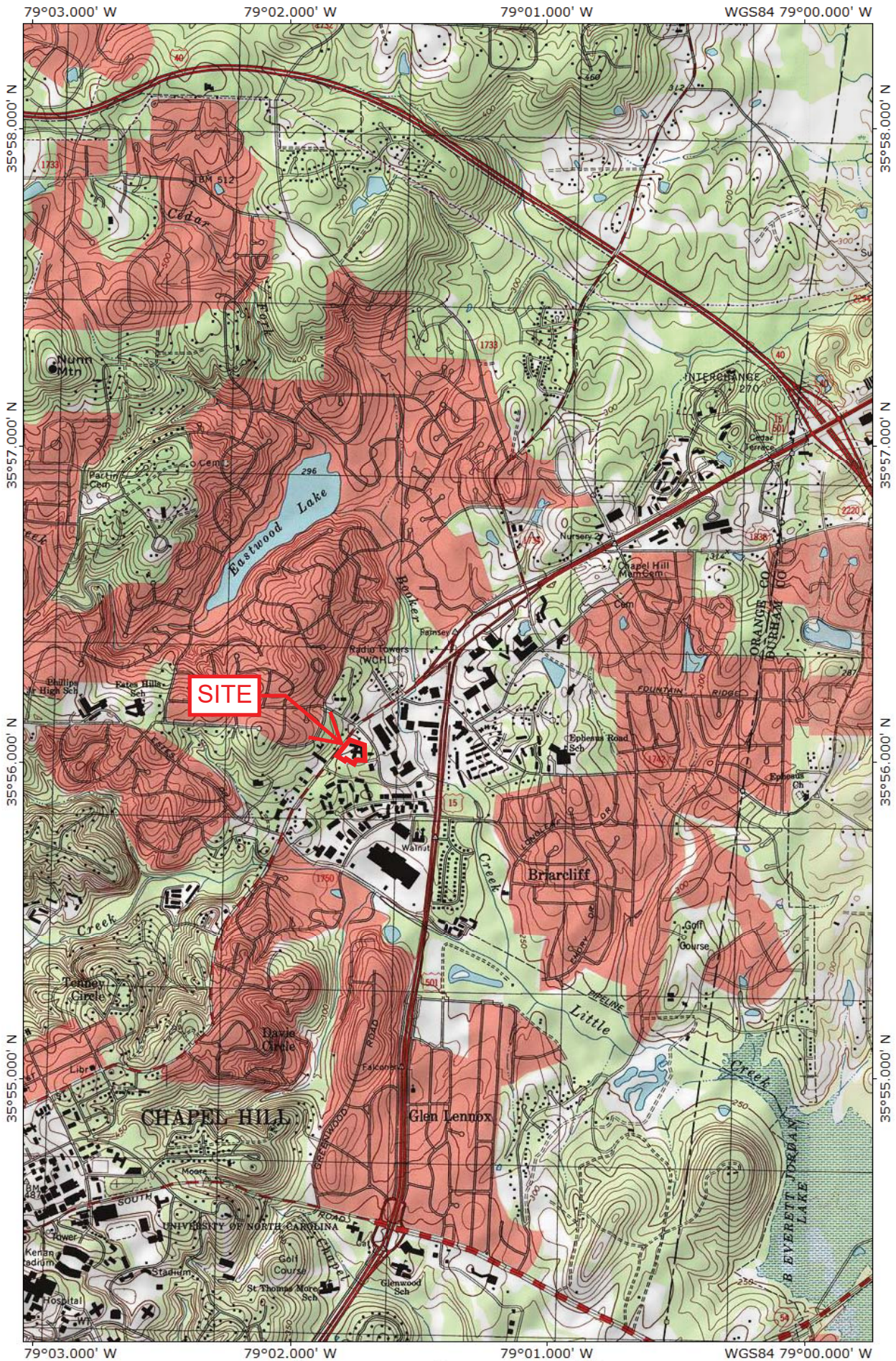
TaD

EnC TaD

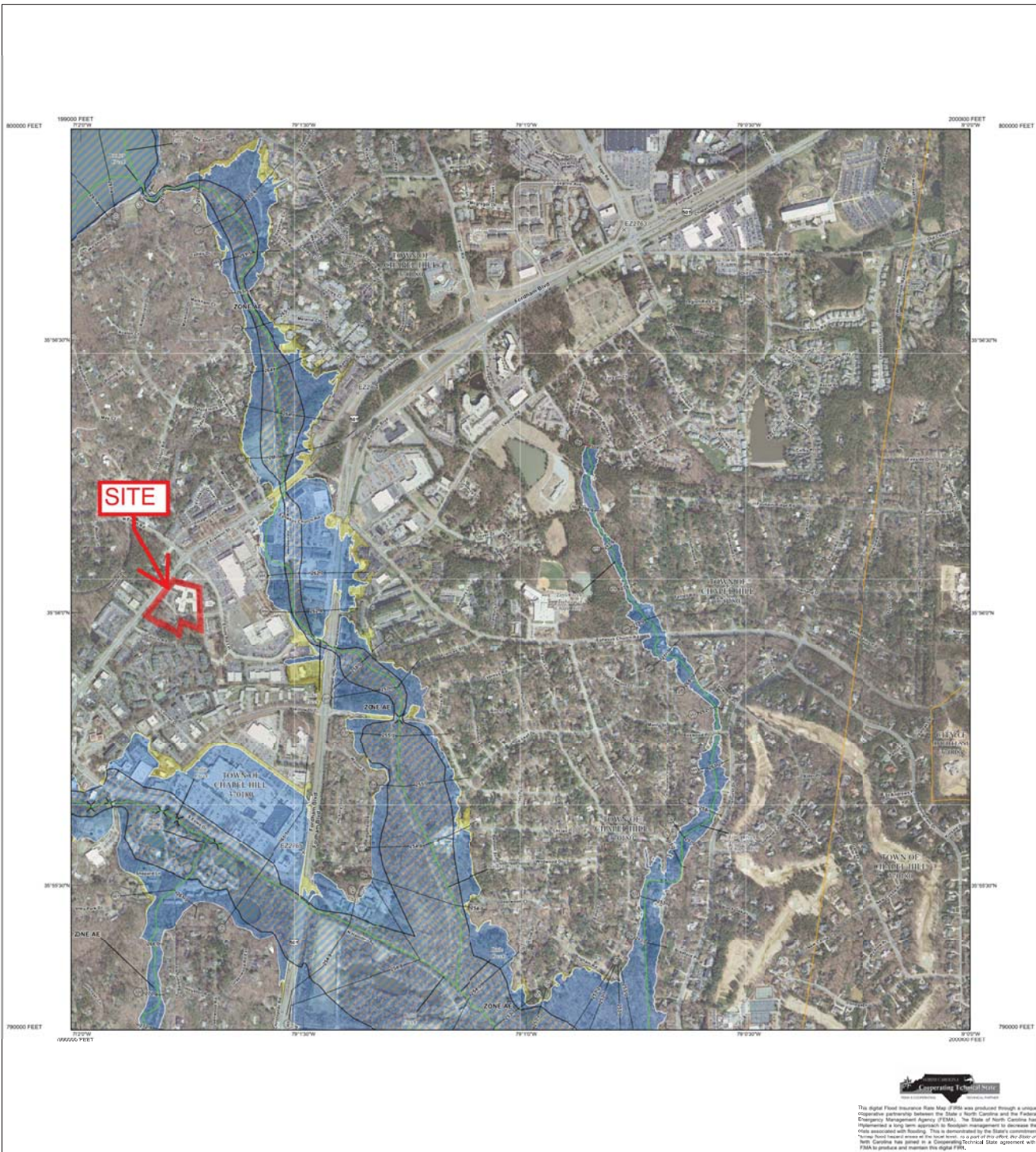
(Join sheet 30)

1:20,000 FEET

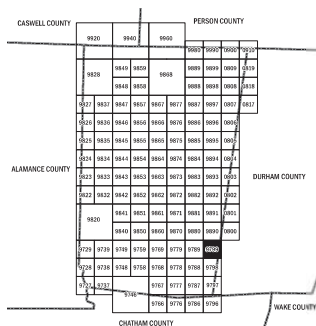
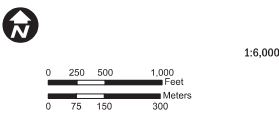
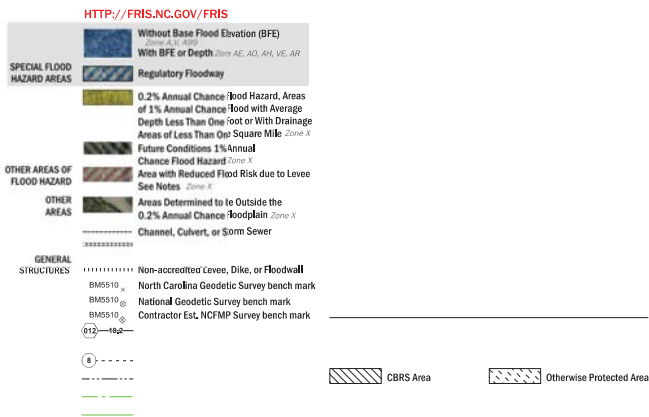








**FLOOD HAZARD INFORMATION**



**FEMA** NATIONAL FLOOD INSURANCE PROGRAM

**National Flood Insurance Program**

9799

Panel Contains:

COMMUNITY: CHAPEL HILL, TOWN OF  
SUBURVA CITY OF

CD: 370190  
PANEL: 9799  
SUFFIX: K

3710979900K

02/02/07



- **Appendix B – Stormwater Design Calculations**

- Water Quality Design Volume Calculations (WQV)
- Storm Filter WQV Storage Pipe Incremental Area for Round Pipe – 54”
- 2-yr Delta Volume Calculations
  - Pre Developed 2-yr Volume Calculation
  - Post Developed & 2-yr Delta Volume Calculation
  - 2-Year Delta Volume Draw Down Calculations
- Detention Storage Pipe Incremental Area for Round Pipe – 54”

## Water Quality Design Volume Calculations (WQV)

PROJECT: Signature HealthCARE  
PROJECT NO.: 116009.00  
DATE: 2-Nov-16  
LATEST PRINT DATE: 3-Mar-08



### Storm Filter

The following calculations are based on the new NCDEQ Stormwater Design Manual.

- 1) Calculate  $I_a$ , the impervious fraction of area draining to SCM:

$$\begin{aligned} \text{Drainage Area} &= 0.51 \text{ acres} \quad 22240 \text{ sf} \\ \text{Impervious Area} &= 0.42 \text{ acres} \quad 18109 \text{ sf} \\ I_a &= \underline{0.81} \end{aligned}$$

- 2) Find the volume of the 1" storm using the "Simple Method" (Shueler 1987):

$$\begin{aligned} R_v &= 0.05 + 0.9(I_a) \\ R_v &= \text{runoff coefficient (ratio of runoff to rainfall in inches)} \\ I_a &= \text{percent impervious} \\ R_v &= 0.05 + 0.9(0.81) = \underline{0.782828} \text{ in/in} \end{aligned}$$

Volume of 1" storm:

$$\begin{aligned} \text{volume} &= R_v \times \text{design rainfall} \times \text{drainage area} \\ &= 0.78282824 \times 1" \times 1/12 \text{ ft/in} \times 0.51 = 0.033 \text{ acre feet} \\ &= \underline{1450.8} \text{ cubic feet} \end{aligned}$$

The following calculations are based on Section D-1 of the new NCDEQ Stormwater Design Manual.

- 1) Water Quality Volume (See separate WQV Calcs):

$$\begin{aligned} WQV &= 1450.8 \text{ cubic ft.} \\ WQV_{adj} &= 0.75 \times WQV = 0.75 \times 1450.8 = \mathbf{1088} \text{ cubic ft. (Required)} \\ &= \mathbf{1113} \text{ cubic ft. (*Provided)} \end{aligned}$$

(\*see attached Storm Filter WQV Storage Pipe - Incremental Area for Round Pipe - 54")

**Storm Filter WQV Storage Pipe  
Incremental Area for Round Pipe - 54"**

Enter Pipe I.D. = **54** in.      Total Volume/LF      Total      Invert  
 Enter Desired Increment = **1** in.      **15.90**      Feet      70      287.5

<i>Inc Num</i>	<i>Water Level (in.)</i>	<i>Inc Area (sq. ft.)</i>	<i>Hyd Rad (ft.)</i>	<i>Top Width (ft.)</i>	<i>Staged Volume (Cu ft)</i>	<i>Elevation</i>
1	1	0.07	0.06	1.21	4.74	287.5833
2	2	0.19	0.11	1.70	13.32	287.6667
3	3	0.35	0.16	2.06	24.33	287.75
4	4	0.53	0.21	2.36	37.24	287.8333
5	5	0.74	0.27	2.61	51.75	287.9167
6	6	0.97	0.32	2.83	67.62	288
7	7	1.21	0.37	3.02	84.70	288.0833
8	8	1.47	0.41	3.20	102.85	288.1667
9	9	1.74	0.46	3.35	121.96	288.25
10	10	2.03	0.51	3.50	141.95	288.3333
11	11	2.32	0.55	3.62	162.72	288.4167
12	12	2.63	0.60	3.74	184.21	288.5
13	13	2.95	0.64	3.85	206.36	288.5833
14	14	3.27	0.68	3.94	229.09	288.6667
15	15	3.61	0.72	4.03	252.35	288.75
16	16	3.94	0.76	4.11	276.10	288.8333
17	17	4.29	0.80	4.18	300.28	288.9167
18	18	4.64	0.84	4.24	324.85	289
19	19	5.00	0.87	4.30	349.76	289.0833
20	20	5.36	0.91	4.35	374.98	289.1667
21	21	5.72	0.94	4.39	400.46	289.25
22	22	6.09	0.98	4.42	426.15	289.3333
23	23	6.46	1.01	4.45	452.04	289.4167
24	24	6.83	1.04	4.47	478.06	289.5
25	25	7.20	1.07	4.49	504.20	289.5833
26	26	7.58	1.10	4.50	530.41	289.6667
27	27	7.95	1.12	4.50	556.65	289.75
28	28	8.33	1.15	4.50	582.90	289.8333
29	29	8.70	1.18	4.49	609.10	289.9167
30	30	9.07	1.20	4.47	635.24	290
31	31	9.45	1.22	4.45	661.27	290.0833
32	32	9.82	1.24	4.42	687.15	290.1667
33	33	10.18	1.26	4.39	712.85	290.25
34	34	10.55	1.28	4.35	738.32	290.3333
35	35	10.91	1.30	4.30	763.54	290.4167
36	36	11.26	1.31	4.24	788.45	290.5
37	37	11.61	1.32	4.18	813.02	290.5833
38	38	11.96	1.34	4.11	837.20	290.6667
39	39	12.30	1.35	4.03	860.95	290.75
40	40	12.63	1.35	3.94	884.22	290.8333
41	41	12.96	1.36	3.85	906.95	290.9167
42	42	13.27	1.37	3.74	929.09	291
43	43	13.58	1.37	3.62	950.58	291.0833
44	44	13.88	1.37	3.50	971.35	291.1667
45	45	14.16	1.37	3.35	991.34	291.25
46	46	14.44	1.36	3.20	1010.45	291.3333
47	47	14.69	1.36	3.02	1028.61	291.4167
48	48	14.94	1.35	2.83	1045.68	291.5
49	49	15.17	1.34	2.61	1061.56	291.5833
50	50	15.37	1.32	2.36	1076.06	291.6667
51	51	15.56	1.30	2.06	1088.97	291.75
52	52	15.71	1.27	1.70	1099.98	291.8333
53	53	15.84	1.23	1.21	1108.57	291.9167
54	54	15.90	1.13	0.00	1113.30	292

>1,088 cf, OK

**2-Year Delta Volume Calculations**

PROJECT: Signature HealthCARE  
 PROJECT NO.: 116009.00  
 DATE: 7-Oct-16  
 LATEST PRINT DATE: 3-Mar-17



**Pre-Development Volume:**

1) Find the volume of the pre-developed 2-yr storm:

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

$$S = \frac{1000}{CN} - 10$$

Where: Q = run off, in inches  
 P = Rainfall, in inches (P = 3.6 inches for 2-yr storm)  
 S = potential max. retention after rainfall begins, inches  
 CN = SCS Curve Number for water shed area

CN for Existing Site

Area (AC) Area (SF)  
 5.10 222,046

Pre-Developed Site, CN = 87.102

S = 1.481 inches

Q = 2.281 inches

CF (Impervious portion)

Volume of 2-yr storm = 42,213

**Total Drainage Area Existing Site = 5.10 AC**

**Total Vol. 2-yr, Pre-dev. storm = 42,213 CF**

Area			CN
Impervious	97,381	sq ft	98
Grass D	66,026	sq ft	80
Woods D	58,639	sq ft	77
Composite CN Value			87.10186628

**2-Year Delta Volume Calculations**

PROJECT: Signature HealthCARE  
 PROJECT NO.: 116009.00  
 DATE: 7-Oct-16  
 LATEST PRINT DATE: 3-Mar-17



**Post-Development Volume & Delta**

2) Find the volume of the post-developed 2-yr storm:

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

$$S = \frac{1000}{CN} - 10$$

Where: Q = run off, in inches  
 P = Rainfall, in inches (P = 3.6 inches for 2-yr storm)  
 S = potential max. retention after rainfall begins, inches  
 CN = SCS Curve Number for water shed area

CN for Proposed Site Development

Post-Developed Site, CN =	88.613	Area (AC)	5.10	Area (SF)	222,046
---------------------------	--------	-----------	------	-----------	---------

S = 1.285 inches  
 Q = 2.415 inches

Volume of 2-yr storm = 44,683 CF (Impervious portion)

**Total Site Area = 5.10 AC**

**Total Vol. 2-yr, post-dev. storm = 44,683 CF**

**3) The 2-yr Delta:**

(Post)		(Pre)	
44,683	-	42,213	= 2,469 CF

Area		CN	
Impervious	113336 sq ft	98	
Grass D	66197 sq ft	80	
Woods D	42,513 sq ft	77	
Composite CN Value		88.6131207	

**2-year Delta Volume Draw Down Calculations**

PROJECT: Signature HealthCARE  
 PROJECT NO.: 116009.00  
 DATE: 24-Oct-16  
 LATEST PRINT DATE: 3-Mar-17



**Ballentine  
 Associates, P.A.**

**2-year Delta Volume**

2-Year Delta Volume Required: **2,469 cf**

\*WQV Volume Provided: Storm Filter **1,113 cf** \*See Storm Filter WQV Storage Pipe...54"  
 Additional 2-Year Volume Required: **1,356 cf**  
 \*\*Additional 2-Year Volume Provided: UG Detention **1,615 cf** \*\*See Detention Storage Pipe...54"

**2-Year Delta Volume Draw Down Calculations:**

**$Q = C_d A \sqrt{2gH_o}$ , where:**

- Q = Discharge (cfs)
- C<sub>d</sub> = Coefficient of discharge (0.60 is common for stormwater orifices)
- A = Cross-sectional area of flow at orifice entrance (sq. ft.)
- A = Acceleration from gravity (32.2 ft/sec<sup>2</sup>)
- g = Driving Head (ft) - measured from centroid of orifice area to water surface
- H<sub>o</sub> = [Use H<sub>o</sub>/3 to reflect that head is falling as drawdown occurs]

Desired Drain Time = **72 hrs. & 120 hrs, max.**  
 2-Year Delta Volume Provided = **1,615 cu. ft. (UG Detention portion of 2-yr volume)**  
 Therefore, required Q = **0.006 cfs (max)**  
 H<sub>o</sub>, Total Draw Down Depth = **2.500 ft. (Per Detention pipe incremental area table)**

H<sub>o</sub>/3 = **0.833 ft.**  
 C<sub>d</sub> = **0.60**  

$$A = \frac{Q}{C_d \sqrt{2gH_o}}$$

Recommended A = **0.001418 s.f.**  
 Recommended Orifice Diameter = **0.042494 in.**  
 = **0.51 inches**  
 Diameter Chosen = **1.000 inches** A = **0.00545** Calculated Area  
 Actual Average Flow = **0.024 cfs**  
 Drain Time = **18.72 hrs. (Based on 1" minimum orifice size)**



**Detention Storage Pipe  
Incremental Area for Round Pipe - 54"**

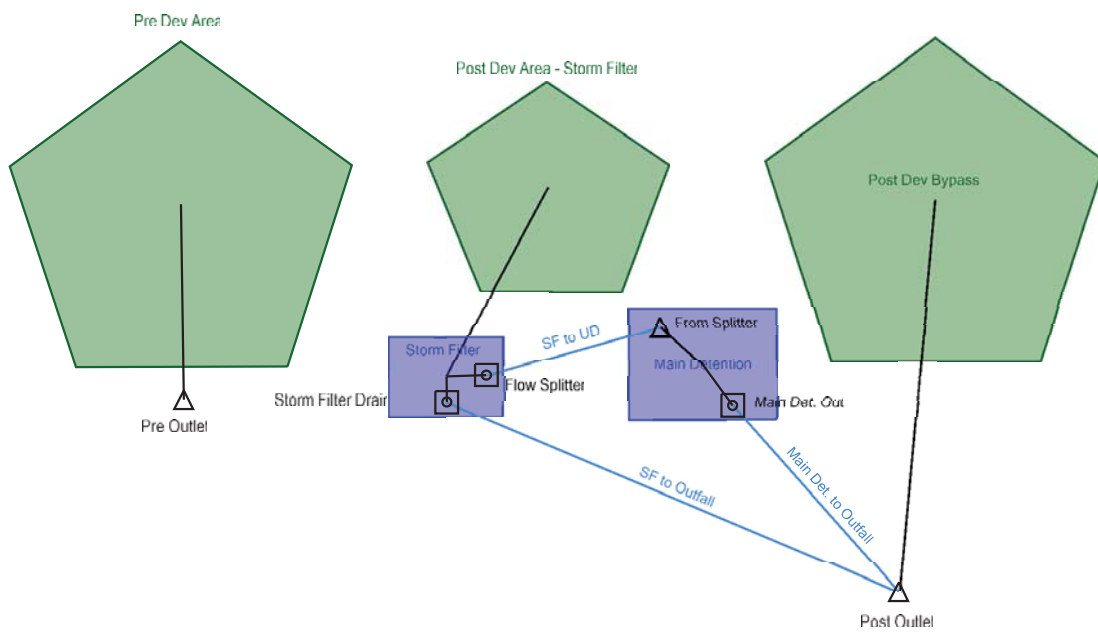
Enter Pipe I.D. =  in.      Total Volume/LF      Total      Invert  
 Enter Desired Increment =  in.            Feet      178      287.5

<i>Inc Num</i>	<i>Water Level (in.)</i>	<i>Inc Area (sq. ft.)</i>	<i>Hyd Rad (ft.)</i>	<i>Top Width (ft.)</i>	<i>Staged Volume (Cu ft)</i>	<i>Elevation</i>
1	1	0.07	0.06	1.21	12.04	287.5833
2	2	0.19	0.11	1.70	33.87	287.6667
3	3	0.35	0.16	2.06	61.87	287.75
4	4	0.53	0.21	2.36	94.71	287.8333
5	5	0.74	0.27	2.61	131.58	287.9167
6	6	0.97	0.32	2.83	171.94	288
7	7	1.21	0.37	3.02	215.37	288.0833
8	8	1.47	0.41	3.20	261.52	288.1667
9	9	1.74	0.46	3.35	310.13	288.25
10	10	2.03	0.51	3.50	360.96	288.3333
11	11	2.32	0.55	3.62	413.78	288.4167
12	12	2.63	0.60	3.74	468.43	288.5
13	13	2.95	0.64	3.85	524.73	288.5833
14	14	3.27	0.68	3.94	582.53	288.6667
15	15	3.61	0.72	4.03	641.69	288.75
16	16	3.94	0.76	4.11	702.08	288.8333
17	17	4.29	0.80	4.18	763.57	288.9167
18	18	4.64	0.84	4.24	826.05	289
19	19	5.00	0.87	4.30	889.40	289.0833
20	20	5.36	0.91	4.35	953.52	289.1667
21	21	5.72	0.94	4.39	1018.30	289.25
22	22	6.09	0.98	4.42	1083.65	289.3333
23	23	6.46	1.01	4.45	1149.46	289.4167
24	24	6.83	1.04	4.47	1215.64	289.5
25	25	7.20	1.07	4.49	1282.10	289.5833
26	26	7.58	1.10	4.50	1348.75	289.6667
27	27	7.95	1.12	4.50	1415.48	289.75
28	28	8.33	1.15	4.50	1482.22	289.8333
29	29	8.70	1.18	4.49	1548.86	289.9167
30	30	9.07	1.20	4.47	1615.32	290
31	31	9.45	1.22	4.45	1681.51	290.0833
32	32	9.82	1.24	4.42	1747.32	290.1667
33	33	10.18	1.26	4.39	1812.67	290.25
34	34	10.55	1.28	4.35	1877.45	290.3333
35	35	10.91	1.30	4.30	1941.57	290.4167
36	36	11.26	1.31	4.24	2004.92	290.5
37	37	11.61	1.32	4.18	2067.40	290.5833
38	38	11.96	1.34	4.11	2128.89	290.6667
39	39	12.30	1.35	4.03	2189.27	290.75
40	40	12.63	1.35	3.94	2248.43	290.8333
41	41	12.96	1.36	3.85	2306.23	290.9167
42	42	13.27	1.37	3.74	2362.54	291
43	43	13.58	1.37	3.62	2417.18	291.0833
44	44	13.88	1.37	3.50	2470.01	291.1667
45	45	14.16	1.37	3.35	2520.83	291.25
46	46	14.44	1.36	3.20	2569.44	291.3333
47	47	14.69	1.36	3.02	2615.60	291.4167
48	48	14.94	1.35	2.83	2659.03	291.5
49	49	15.17	1.34	2.61	2699.39	291.5833
50	50	15.37	1.32	2.36	2736.26	291.6667
51	51	15.56	1.30	2.06	2769.10	291.75
52	52	15.71	1.27	1.70	2797.10	291.8333
53	53	15.84	1.23	1.21	2818.92	291.9167
54	54	15.90	1.13	0.00	2830.97	292

>1,356 cf, OK

- **Appendix C – 1, 2, 25 and 100-yr Stormwater Management Calculations (PondPack)**
  - Stormwater Management Schematic Map
  - Table of Contents
  - Master Network Summary
  - Supporting Calculation

# Scenario: Town of Chapel Hill Design Scenarios



---

Project Summary

---

Title	Signature HealthCARE of Chapel Hill Facility Expansion
Engineer	George J. Retschle, PE
Company	Ballentine Associates
Date	11/23/2016

---

---

Notes	Revised: 3 Mar 2017
-------	---------------------

---

## Table of Contents

	Master Network Summary	2
Town of Chapel Hill Design Storms		
	Time-Depth Curve, 1 years	4
	Time-Depth Curve, 2 years	6
	Time-Depth Curve, 25 years	8
	Time-Depth Curve, 100 years	10
Post Dev Area - Storm Filter		
	Runoff CN-Area, 1 years	12
Post Dev Bypass		
	Runoff CN-Area, 1 years	13
Pre Dev Area		
	Runoff CN-Area, 1 years	14

Subsection: Master Network Summary

**Catchments Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Pre Dev Area	Chapel Hill - 1 yr	1	0.738	11.900	13.41
Pre Dev Area	Chapel Hill - 2 yr	2	0.964	11.900	17.50
Pre Dev Area	Chapel Hill - 25 yr	25	2.084	11.900	36.96
Pre Dev Area	Chapel Hill - 100 yr	100	2.737	11.900	47.91
Post Dev Area - Storm Filter	Chapel Hill - 1 yr	1	0.104	11.900	1.82
Post Dev Area - Storm Filter	Chapel Hill - 2 yr	2	0.129	11.900	2.23
Post Dev Area - Storm Filter	Chapel Hill - 25 yr	25	0.247	11.900	4.12
Post Dev Area - Storm Filter	Chapel Hill - 100 yr	100	0.315	11.900	5.18
Post Dev Bypass	Chapel Hill - 1 yr	1	0.694	11.900	12.61
Post Dev Bypass	Chapel Hill - 2 yr	2	0.901	11.900	16.32
Post Dev Bypass	Chapel Hill - 25 yr	25	1.918	11.900	33.83
Post Dev Bypass	Chapel Hill - 100 yr	100	2.508	11.900	43.66

**Node Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)
Pre Outlet	Chapel Hill - 1 yr	1	0.738	11.900	13.41
Pre Outlet	Chapel Hill - 2 yr	2	0.964	11.900	17.50
Pre Outlet	Chapel Hill - 25 yr	25	2.084	11.900	36.96
Pre Outlet	Chapel Hill - 100 yr	100	2.737	11.900	47.91
Post Outlet	Chapel Hill - 1 yr	1	0.751	11.900	12.64
Post Outlet	Chapel Hill - 2 yr	2	0.980	11.900	16.36
Post Outlet	Chapel Hill - 25 yr	25	2.104	11.900	36.87
Post Outlet	Chapel Hill - 100 yr	100	2.759	11.900	47.33

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Storm Filter (IN)	Chapel Hill - 1 yr	1	0.104	11.900	1.82	(N/A)	(N/A)
Storm Filter (OUT)	Chapel Hill - 1 yr	1	0.075	11.900	1.91	292.22	0.031
Storm Filter (IN)	Chapel Hill - 2 yr	2	0.129	11.900	2.23	(N/A)	(N/A)
Storm Filter (OUT)	Chapel Hill - 2 yr	2	0.100	11.950	2.17	292.25	0.031



Subsection: Master Network Summary

**Pond Summary**

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft <sup>3</sup> /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Storm Filter (IN)	Chapel Hill - 25 yr	25	0.247	11.900	4.12	(N/A)	(N/A)
Storm Filter (OUT)	Chapel Hill - 25 yr	25	0.218	11.950	4.02	292.47	0.033
Storm Filter (IN)	Chapel Hill - 100 yr	100	0.315	11.900	5.18	(N/A)	(N/A)
Storm Filter (OUT)	Chapel Hill - 100 yr	100	0.285	11.900	5.19	292.56	0.034
Main Detention (IN)	Chapel Hill - 1 yr	1	0.058	11.900	1.89	(N/A)	(N/A)
Main Detention (OUT)	Chapel Hill - 1 yr	1	0.040	12.550	0.13	290.02	0.036
Main Detention (IN)	Chapel Hill - 2 yr	2	0.083	11.950	2.16	(N/A)	(N/A)
Main Detention (OUT)	Chapel Hill - 2 yr	2	0.062	12.050	1.09	290.20	0.039
Main Detention (IN)	Chapel Hill - 25 yr	25	0.198	11.950	4.01	(N/A)	(N/A)
Main Detention (OUT)	Chapel Hill - 25 yr	25	0.167	12.000	3.58	290.89	0.049
Main Detention (IN)	Chapel Hill - 100 yr	100	0.265	11.900	5.17	(N/A)	(N/A)
Main Detention (OUT)	Chapel Hill - 100 yr	100	0.230	12.000	4.33	291.30	0.054

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 1 years  
 Storm Event: TypeII 24hr (3.0 in)

---

Time-Depth Curve: TypeII 24hr (3.0 in)

---

Label	TypeII 24hr (3.0 in)
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	1 years

---

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.0
1.500	0.0	0.1	0.1	0.1	0.1
2.000	0.1	0.1	0.1	0.1	0.1
2.500	0.1	0.1	0.1	0.1	0.1
3.000	0.1	0.1	0.1	0.1	0.1
3.500	0.1	0.1	0.1	0.1	0.1
4.000	0.1	0.1	0.2	0.2	0.2
4.500	0.2	0.2	0.2	0.2	0.2
5.000	0.2	0.2	0.2	0.2	0.2
5.500	0.2	0.2	0.2	0.2	0.2
6.000	0.2	0.2	0.3	0.3	0.3
6.500	0.3	0.3	0.3	0.3	0.3
7.000	0.3	0.3	0.3	0.3	0.3
7.500	0.3	0.3	0.3	0.3	0.4
8.000	0.4	0.4	0.4	0.4	0.4
8.500	0.4	0.4	0.4	0.4	0.4
9.000	0.4	0.5	0.5	0.5	0.5
9.500	0.5	0.5	0.5	0.5	0.5
10.000	0.5	0.6	0.6	0.6	0.6
10.500	0.6	0.6	0.6	0.7	0.7
11.000	0.7	0.7	0.8	0.8	0.8
11.500	0.8	0.9	1.1	1.3	1.7
12.000	2.0	2.0	2.1	2.1	2.2
12.500	2.2	2.2	2.3	2.3	2.3
13.000	2.3	2.3	2.4	2.4	2.4
13.500	2.4	2.4	2.4	2.4	2.4
14.000	2.5	2.5	2.5	2.5	2.5
14.500	2.5	2.5	2.5	2.5	2.6
15.000	2.6	2.6	2.6	2.6	2.6
15.500	2.6	2.6	2.6	2.6	2.6
16.000	2.6	2.6	2.7	2.7	2.7
16.500	2.7	2.7	2.7	2.7	2.7
17.000	2.7	2.7	2.7	2.7	2.7

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 1 years  
 Storm Event: TypeII 24hr (3.0 in)

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.500	2.7	2.7	2.7	2.8	2.8
18.000	2.8	2.8	2.8	2.8	2.8
18.500	2.8	2.8	2.8	2.8	2.8
19.000	2.8	2.8	2.8	2.8	2.8
19.500	2.8	2.8	2.8	2.8	2.9
20.000	2.9	2.9	2.9	2.9	2.9
20.500	2.9	2.9	2.9	2.9	2.9
21.000	2.9	2.9	2.9	2.9	2.9
21.500	2.9	2.9	2.9	2.9	2.9
22.000	2.9	2.9	2.9	2.9	2.9
22.500	2.9	3.0	3.0	3.0	3.0
23.000	3.0	3.0	3.0	3.0	3.0
23.500	3.0	3.0	3.0	3.0	3.0
24.000	3.0	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 2 years  
 Storm Event: TypeII 24hr (3.6 in)

---

Time-Depth Curve: TypeII 24hr (3.6 in)

---

Label	TypeII 24hr (3.6 in)
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	2 years

---

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.1
1.500	0.1	0.1	0.1	0.1	0.1
2.000	0.1	0.1	0.1	0.1	0.1
2.500	0.1	0.1	0.1	0.1	0.1
3.000	0.1	0.1	0.1	0.1	0.1
3.500	0.1	0.2	0.2	0.2	0.2
4.000	0.2	0.2	0.2	0.2	0.2
4.500	0.2	0.2	0.2	0.2	0.2
5.000	0.2	0.2	0.2	0.2	0.3
5.500	0.3	0.3	0.3	0.3	0.3
6.000	0.3	0.3	0.3	0.3	0.3
6.500	0.3	0.3	0.3	0.3	0.3
7.000	0.4	0.4	0.4	0.4	0.4
7.500	0.4	0.4	0.4	0.4	0.4
8.000	0.4	0.4	0.4	0.5	0.5
8.500	0.5	0.5	0.5	0.5	0.5
9.000	0.5	0.5	0.6	0.6	0.6
9.500	0.6	0.6	0.6	0.6	0.6
10.000	0.7	0.7	0.7	0.7	0.7
10.500	0.7	0.8	0.8	0.8	0.8
11.000	0.8	0.9	0.9	0.9	1.0
11.500	1.0	1.1	1.3	1.6	2.0
12.000	2.4	2.5	2.5	2.6	2.6
12.500	2.6	2.7	2.7	2.7	2.8
13.000	2.8	2.8	2.8	2.8	2.9
13.500	2.9	2.9	2.9	2.9	2.9
14.000	3.0	3.0	3.0	3.0	3.0
14.500	3.0	3.0	3.0	3.1	3.1
15.000	3.1	3.1	3.1	3.1	3.1
15.500	3.1	3.1	3.1	3.2	3.2
16.000	3.2	3.2	3.2	3.2	3.2
16.500	3.2	3.2	3.2	3.2	3.2
17.000	3.2	3.3	3.3	3.3	3.3

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 2 years  
 Storm Event: TypeII 24hr (3.6 in)

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.500	3.3	3.3	3.3	3.3	3.3
18.000	3.3	3.3	3.3	3.3	3.3
18.500	3.3	3.4	3.4	3.4	3.4
19.000	3.4	3.4	3.4	3.4	3.4
19.500	3.4	3.4	3.4	3.4	3.4
20.000	3.4	3.4	3.4	3.4	3.4
20.500	3.5	3.5	3.5	3.5	3.5
21.000	3.5	3.5	3.5	3.5	3.5
21.500	3.5	3.5	3.5	3.5	3.5
22.000	3.5	3.5	3.5	3.5	3.5
22.500	3.5	3.5	3.5	3.6	3.6
23.000	3.6	3.6	3.6	3.6	3.6
23.500	3.6	3.6	3.6	3.6	3.6
24.000	3.6	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 25 years  
 Storm Event: TypeII 24hr (6.4 in)

---

Time-Depth Curve: TypeII 24hr (6.4 in)

---

Label	TypeII 24hr (6.4 in)
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	25 years

---

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.1	0.1
1.000	0.1	0.1	0.1	0.1	0.1
1.500	0.1	0.1	0.1	0.1	0.1
2.000	0.1	0.1	0.2	0.2	0.2
2.500	0.2	0.2	0.2	0.2	0.2
3.000	0.2	0.2	0.2	0.2	0.3
3.500	0.3	0.3	0.3	0.3	0.3
4.000	0.3	0.3	0.3	0.3	0.3
4.500	0.4	0.4	0.4	0.4	0.4
5.000	0.4	0.4	0.4	0.4	0.4
5.500	0.5	0.5	0.5	0.5	0.5
6.000	0.5	0.5	0.5	0.5	0.6
6.500	0.6	0.6	0.6	0.6	0.6
7.000	0.6	0.6	0.7	0.7	0.7
7.500	0.7	0.7	0.7	0.7	0.8
8.000	0.8	0.8	0.8	0.8	0.8
8.500	0.8	0.9	0.9	0.9	0.9
9.000	0.9	1.0	1.0	1.0	1.0
9.500	1.0	1.1	1.1	1.1	1.1
10.000	1.2	1.2	1.2	1.2	1.3
10.500	1.3	1.3	1.4	1.4	1.5
11.000	1.5	1.6	1.6	1.7	1.7
11.500	1.8	2.0	2.3	2.8	3.6
12.000	4.2	4.4	4.5	4.6	4.6
12.500	4.7	4.8	4.8	4.9	4.9
13.000	4.9	5.0	5.0	5.1	5.1
13.500	5.1	5.2	5.2	5.2	5.2
14.000	5.3	5.3	5.3	5.3	5.3
14.500	5.4	5.4	5.4	5.4	5.5
15.000	5.5	5.5	5.5	5.5	5.5
15.500	5.6	5.6	5.6	5.6	5.6
16.000	5.6	5.7	5.7	5.7	5.7
16.500	5.7	5.7	5.7	5.8	5.8
17.000	5.8	5.8	5.8	5.8	5.8



Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 25 years  
 Storm Event: TypeII 24hr (6.4 in)

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.500	5.8	5.9	5.9	5.9	5.9
18.000	5.9	5.9	5.9	5.9	5.9
18.500	6.0	6.0	6.0	6.0	6.0
19.000	6.0	6.0	6.0	6.0	6.0
19.500	6.1	6.1	6.1	6.1	6.1
20.000	6.1	6.1	6.1	6.1	6.1
20.500	6.1	6.2	6.2	6.2	6.2
21.000	6.2	6.2	6.2	6.2	6.2
21.500	6.2	6.2	6.2	6.2	6.3
22.000	6.3	6.3	6.3	6.3	6.3
22.500	6.3	6.3	6.3	6.3	6.3
23.000	6.3	6.3	6.4	6.4	6.4
23.500	6.4	6.4	6.4	6.4	6.4
24.000	6.4	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 100 years  
 Storm Event: TypeII 24hr (8.0 in)

---

Time-Depth Curve: TypeII 24hr (8.0 in)

---

Label	TypeII 24hr (8.0 in)
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	100 years

---

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.1	0.1	0.1
1.000	0.1	0.1	0.1	0.1	0.1
1.500	0.1	0.1	0.1	0.2	0.2
2.000	0.2	0.2	0.2	0.2	0.2
2.500	0.2	0.2	0.2	0.3	0.3
3.000	0.3	0.3	0.3	0.3	0.3
3.500	0.3	0.3	0.4	0.4	0.4
4.000	0.4	0.4	0.4	0.4	0.4
4.500	0.4	0.5	0.5	0.5	0.5
5.000	0.5	0.5	0.5	0.5	0.6
5.500	0.6	0.6	0.6	0.6	0.6
6.000	0.6	0.7	0.7	0.7	0.7
6.500	0.7	0.7	0.7	0.8	0.8
7.000	0.8	0.8	0.8	0.8	0.9
7.500	0.9	0.9	0.9	0.9	0.9
8.000	1.0	1.0	1.0	1.0	1.0
8.500	1.1	1.1	1.1	1.1	1.2
9.000	1.2	1.2	1.2	1.3	1.3
9.500	1.3	1.3	1.4	1.4	1.4
10.000	1.4	1.5	1.5	1.6	1.6
10.500	1.6	1.7	1.7	1.8	1.8
11.000	1.9	1.9	2.0	2.1	2.2
11.500	2.3	2.5	2.8	3.4	4.5
12.000	5.3	5.5	5.6	5.7	5.8
12.500	5.9	5.9	6.0	6.1	6.1
13.000	6.2	6.2	6.3	6.3	6.4
13.500	6.4	6.4	6.5	6.5	6.5
14.000	6.6	6.6	6.6	6.6	6.7
14.500	6.7	6.7	6.8	6.8	6.8
15.000	6.8	6.9	6.9	6.9	6.9
15.500	6.9	7.0	7.0	7.0	7.0
16.000	7.0	7.1	7.1	7.1	7.1
16.500	7.1	7.1	7.2	7.2	7.2
17.000	7.2	7.2	7.2	7.3	7.3

Subsection: Time-Depth Curve  
 Label: Town of Chapel Hill Design Storms

Return Event: 100 years  
 Storm Event: TypeII 24hr (8.0 in)

**CUMULATIVE RAINFALL (in)**  
**Output Time Increment = 0.100 hours**  
**Time on left represents time for first value in each row.**

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.500	7.3	7.3	7.3	7.3	7.4
18.000	7.4	7.4	7.4	7.4	7.4
18.500	7.4	7.5	7.5	7.5	7.5
19.000	7.5	7.5	7.5	7.5	7.6
19.500	7.6	7.6	7.6	7.6	7.6
20.000	7.6	7.6	7.6	7.6	7.7
20.500	7.7	7.7	7.7	7.7	7.7
21.000	7.7	7.7	7.7	7.7	7.8
21.500	7.8	7.8	7.8	7.8	7.8
22.000	7.8	7.8	7.8	7.8	7.9
22.500	7.9	7.9	7.9	7.9	7.9
23.000	7.9	7.9	7.9	7.9	7.9
23.500	8.0	8.0	8.0	8.0	8.0
24.000	8.0	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Runoff CN-Area  
 Label: Post Dev Area - Storm Filter

Return Event: 1 years  
 Storm Event: TypeII 24hr (3.0 in)

**Runoff Curve Number Data**

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	18,109	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	4,131	0.0	0.0	80.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	22,240	(N/A)	(N/A)	94.657

Subsection: Runoff CN-Area  
 Label: Post Dev Bypass

Return Event: 1 years  
 Storm Event: TypeII 24hr (3.0 in)

**Runoff Curve Number Data**

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	95,227	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	62,066	0.0	0.0	80.000
Woods - good - Soil D	77.000	42,513	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	199,806	(N/A)	(N/A)	87.940



Subsection: Runoff CN-Area  
 Label: Pre Dev Area

Return Event: 1 years  
 Storm Event: TypeII 24hr (3.0 in)

**Runoff Curve Number Data**

Soil/Surface Description	CN	Area (ft <sup>2</sup> )	C (%)	UC (%)	Adjusted CN
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads - Soil D	98.000	97,381	0.0	0.0	98.000
Open space (Lawns,parks etc.) - Good condition; grass cover > 75% - Soil D	80.000	66,026	0.0	0.0	80.000
Woods - good - Soil D	77.000	58,639	0.0	0.0	77.000
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	222,046	(N/A)	(N/A)	87.102

## Index

### M

Master Network Summary...2, 3

### P

Post Dev Area - Storm Filter (Runoff CN-Area, 1 years)...12

Post Dev Bypass (Runoff CN-Area, 1 years)...13

Pre Dev Area (Runoff CN-Area, 1 years)...14

### T

Town of Chapel Hill Design Storms (Time-Depth Curve, 1 years)...4, 5

Town of Chapel Hill Design Storms (Time-Depth Curve, 100 years)...10, 11

Town of Chapel Hill Design Storms (Time-Depth Curve, 2 years)...6, 7

Town of Chapel Hill Design Storms (Time-Depth Curve, 25 years)...8, 9

- Appendix D – Environmental
  - RCD, Floodplain, Jordan Buffer Determination



**PUBLIC WORKS DEPARTMENT  
STORMWATER MANAGEMENT DIVISION**

405 Martin Luther King, Jr. Blvd.  
Chapel Hill, NC 27514-5705  
Telephone (919) 969-7246  
Fax (919) 969-7276  
www.townofchapelhill.org

11/23/2016

Dave Ballentine  
221 Providence Road  
Chapel Hill, NC, 27514

RE: Stream Determination for Parcel # 9799-14-1643

Dear Mr. Ballentine:

As requested, the Town Public Works Department has performed a stream determination on the properties identified on the attached forms. This determination indicates whether different types of streams (perennial, intermittent, and/or ephemeral) or perennial waterbodies are present on the property in question or on nearby properties. These streams and their classifications are shown on the accompanying map. Stream segments regulated by the Jordan Lake Stream Buffer ordinance are highlighted. **Locations of all features on the map are approximate and must be field surveyed for precise location.**

This stream determination information is used to determine the location and extent of the Resource Conservation District and the Jordan Lake Watershed Riparian Buffer. Specific land use regulations and restrictions apply within the boundaries of these protected areas. If you are considering any kind of work on your property, including clearing vegetation, paving, grading, or building, please consult with the Town Planning Department to determine the possible extent of the Resource Conservation District and Jordan Lake Watershed Riparian Buffer on your property and corresponding regulations.

This classification will remain in effect for five years from the date of the site visit before a request for reclassification will be considered, unless the stream channel characteristics are significantly altered as a result of watershed changes.

In accordance with the Town's procedures, you may appeal this administrative decision to the Town Manager. If you wish to do so, you must file your written appeal accompanied by any materials you believe support your appeal, within **30** days of receipt of this letter.

If you have questions regarding stream determinations, please contact me at (919) 969-5083. If you have questions regarding the Town's Resource Conservation Districts or the Jordan Watershed Riparian Buffer regulations, please contact the Planning Department at (919) 968-2728, or view information online at <http://www.townofchapelhill.org/town-hall/departments-services/public-works/stormwater-management/regulations-ordinances>.

Regards,

Dave Milkereit  
Stormwater Specialist



**PLANNING DEPARTMENT**

405 Martin Luther King, Jr. Blvd.  
Chapel Hill, NC 27514-5705  
Telephone (919) 968-2728  
Fax (919) 969-2014  
www.townofchapelhill.org

## STREAM DETERMINATION RECORDS REVIEW

Property Information	
Parcel ID Number (PIN)	Address / Location Description
9799-14-1643	1602 E. Franklin St

After reviewing Town GIS information, USGS 1:24,000 Topographic maps, and County Soil Survey maps, I have determined no new stream determination will be required for the property(ies) listed above for the following reason(s):

- No unclassified streams or waterbodies, streams or waterbodies identified as requiring a new classification or determination, or unidentified flowlines (possible streams) are shown within 150 feet of the property in question on the Town's GIS, the USGS 1:24,000 Topographic map, or the County Soil Survey map for the area.
- A Resource Conservation District boundary was set on a recorded final plat for the property in question, and there are no streams or waterbodies shown on the USGS 1:24,000 Topographic map or County Soil Survey within 150 feet of the property.
- A stream determination has been done for this property, a property uphill or upstream, or a nearby property as of November 23, 2011 or later, and that stream determination applies to this property. A copy of the documentation for the relevant site visit(s) is available upon request.

Relevant PIN(s): 9890-12-2793, 9799-14-8584, 9799-14-0340, 9799-14-2352

**A map showing water features, their Town flow classifications, presence of Jordan Riparian Buffers, and their approximate locations is attached. Origins or breakpoints that have been flagged in the field are marked on the map.**

Other conditions exist which may affect the location of the Resource Conservation District or Jordan Stream Buffer:





- FEMA floodzone is mapped in the area. Precise location of the Base Flood Elevation and associated Resource Conservation District must be determined by a field survey commissioned by the owner or a representative.
- Segments of perennial or intermittent stream are piped in the area. These segments do not have an associated Jordan Stream Buffer.
- Possible Jurisdictional Wetlands have been identified in the area. A formal review by a professional certified in Jurisdictional Wetland Delineation is recommended.




\_\_\_\_\_  
Town Staff signature

11/23/2016  
date



# Stream Determination Area Map

-  Unclassified Stream
-  Ephemeral Stream
-  Intermittent Stream
-  Perennial Stream

-  Ephemeral Breakpoint
-  Intermittent Breakpoint
-  Perennial Breakpoint

**Address:** 1602 E Franklin St

**Parcel ID:** 9799-14-1643



-  Culverts
-  2-foot Contours
-  10-foot Contours
-  Parcels
-  Approximate Jordan Buffer
-  Site visited

0 125 250 500 Feet

1 inch = 250 feet

Stream locations are approximate and must be verified by survey.  
Buffers are measured from top of bank.





# USGS 24K Topographic / County Soil Survey Maps

 Site Parcel Boundary

**Address:** 1602 E Franklin St



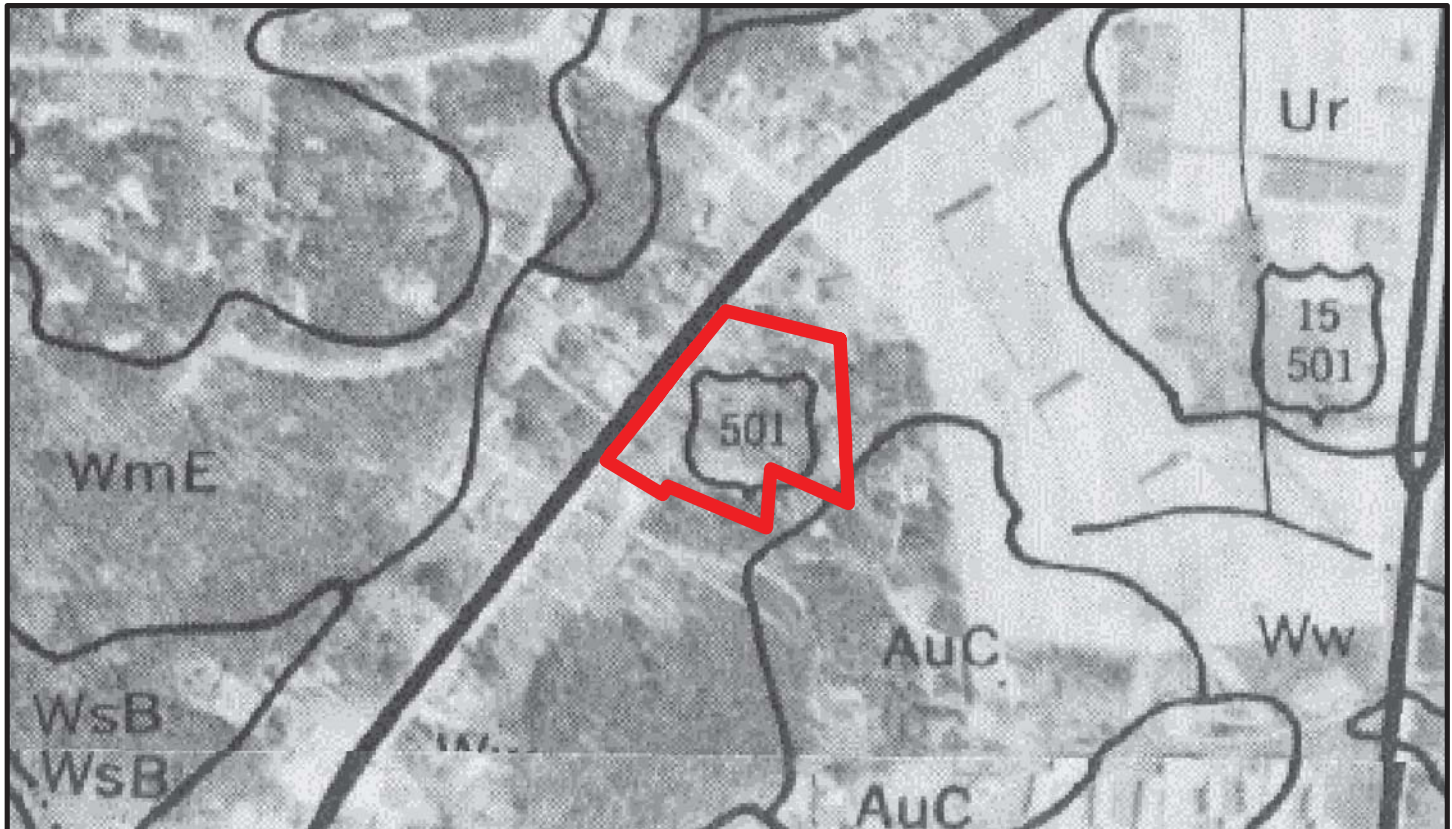
0 150 300 450 600 Feet

**Parcel ID:** 9799-14-1643



1 inch = 500 feet

*Created by Town of Chapel Hill Public Works Department - Stormwater Management Division- 11/22/2016*







**VIEW FROM FRANKLIN STREET**

**REVISIONS**

NO.	DATE	REVISIONS

**OWNER INFORMATION**

OWNER INFORMATION	
OWNER: SIGNATURE HEALTHCARE	
PROJECT ADDRESS: 3700 WEST MAIN STREET	
CITY: CHAPEL HILL, NC	
STATE: NORTH CAROLINA	
ZIP: 27514	
PHONE: (919) 996-7961	
FAX: (919) 996-7961	

**PROJECT INFORMATION**

PROJECT NAME	
PROJECT ADDRESS	
PROJECT CITY	
PROJECT STATE	
PROJECT ZIP	
PROJECT PHONE	
PROJECT FAX	

**NOTES**

- 1. ALL NEW TRUCK CARGO AND ACCOMPANIED PARKING AREAS SHALL BE CONSTRUCTED TO THE FULL CAPACITY OF THE AVAILABLE LAND. THE EXISTING ROADWAY SHALL BE MAINTAINED AND THE EXISTING SIDEWALKS SHALL BE REPAIRED AND IMPROVED. THE EXISTING PAVEMENT SHALL BE REPAIRED AND IMPROVED. THE EXISTING SIDEWALKS SHALL BE REPAIRED AND IMPROVED.
- 2. EXISTING VEGETATION WITHIN REQUIRED LANDSCAPE BUFFERS WILL BE PRESERVED AND REPLANTED AS NEEDED TO FULFILL REQUIRED LANDSCAPE BUFFERS. EXISTING VEGETATION TO BE REMOVED SHALL BE REPLANTED WITH EQUIVALENT SPECIES. EXISTING VEGETATION TO BE REMOVED SHALL BE REPLANTED WITH EQUIVALENT SPECIES.
- 3. ALL NEW TRUCK CARGO AND ACCOMPANIED PARKING AREAS SHALL BE CONSTRUCTED TO THE FULL CAPACITY OF THE AVAILABLE LAND. THE EXISTING ROADWAY SHALL BE MAINTAINED AND THE EXISTING SIDEWALKS SHALL BE REPAIRED AND IMPROVED. THE EXISTING PAVEMENT SHALL BE REPAIRED AND IMPROVED. THE EXISTING SIDEWALKS SHALL BE REPAIRED AND IMPROVED.
- 4. ALL NEW TRUCK CARGO AND ACCOMPANIED PARKING AREAS SHALL BE CONSTRUCTED TO THE FULL CAPACITY OF THE AVAILABLE LAND. THE EXISTING ROADWAY SHALL BE MAINTAINED AND THE EXISTING SIDEWALKS SHALL BE REPAIRED AND IMPROVED. THE EXISTING PAVEMENT SHALL BE REPAIRED AND IMPROVED. THE EXISTING SIDEWALKS SHALL BE REPAIRED AND IMPROVED.

**SITE DATA**

EXISTING	PROPOSED
NET LAND AREA: 222,046 SF (51.0 AC)	NET LAND AREA: 222,046 SF (51.0 AC)
EXISTING ZONING: R-3	EXISTING ZONING: R-3
EXISTING USE: GROUP CARE FACILITY	EXISTING USE: GROUP CARE FACILITY
FLOOR AREA SUMMATION: 34,221 SF (0.81 AC)	FLOOR AREA SUMMATION: 34,221 SF (0.81 AC)
EXISTING FLOOR AREA: 40,048 SF	EXISTING FLOOR AREA: 40,048 SF
PROPOSED FLOOR AREA TO BE ADDED: 3,800 SF	PROPOSED FLOOR AREA TO BE ADDED: 3,800 SF
ALLOWABLE FLOOR AREA (D.A. Y.F.A.M.): 74,008 SF	ALLOWABLE FLOOR AREA (D.A. Y.F.A.M.): 74,008 SF
VEHICLE FLOOR AREA: 79	VEHICLE FLOOR AREA: 79
VEHICLE FLOOR AREA: 104	VEHICLE FLOOR AREA: 104
VEHICLE FLOOR AREA: 17	VEHICLE FLOOR AREA: 17
VEHICLE FLOOR AREA: 54	VEHICLE FLOOR AREA: 54
VEHICLE FLOOR AREA: 83	VEHICLE FLOOR AREA: 83
VEHICLE FLOOR AREA: 82	VEHICLE FLOOR AREA: 82
VEHICLE FLOOR AREA: 0	VEHICLE FLOOR AREA: 0
VEHICLE FLOOR AREA: 2	VEHICLE FLOOR AREA: 2
VEHICLE FLOOR AREA: 12	VEHICLE FLOOR AREA: 12
VEHICLE FLOOR AREA: 14	VEHICLE FLOOR AREA: 14

**PLAN KEY NOTES**

- 1. CONCRETE SIDEWALK (TYP.)
- 2. W/OTED STOP SIGN
- 3. 30" CURB & GUTTER (TYP.)
- 4. INVERTED "U" BIKE RACK (CLASS 2 BIKE PARKING)
- 5. STANDING JANTHOP (VAN ACCESSIBLE)
- 6. HANDICAP PARKING SIGN
- 7. PARKING SPACE STRIPING (TYP.)
- 8. CONCRETE WHEELSTOP (TYP.)
- 9. REUSABLE/RECYCLING ENCLOSURE
- 10. (2) 12' X 30' STORAGE BEDS
- 11. DESIGN BUILD RETAINING WALL
- 12. MONUMENT SIGN
- 13. W/OTED DOWN CURB (TYP.)
- 14. ELECTRIC VEHICLE CHARGING STATION
- 15. 2' WIDE MILL STRIP
- 16. REBAR BED PACKAGE FOR CHAPEL HILL SIGN (RELOCATE TO OUTSIDE OF 10' X 70' SITE TRIANGLE)
- 17. DOUBLE ELECTRIC CAR CHARGING PERMITAL
- 18. ELECTRIC CAR CHARGING VEHICLE SIGN
- 19. CLASS 1 BIKE PARKING ENCLOSURE (2 SPACES)

**ORANGE COUNTY SOLID WASTE NOTES**

- 1. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED BY THE COUNTY'S REGULATED RECYCLABLE MATERIALS (RRM) AND TO BE RECYCLED OR DEMOLISHED. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER SHALL BE ASSESSED BY THE COUNTY'S REGULATED RECYCLABLE MATERIALS (RRM) AND TO BE RECYCLED OR DEMOLISHED.
- 2. PURSUANT TO THE COUNTY'S RRM, CLEAN WOOD WASTE, SCRAP METAL, AND RECYCLABLE MATERIALS PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED. UNRECYCLED PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
- 3. PURSUANT TO THE COUNTY'S RRM, ALL HAULERS OF WASTE CONSTRUCTION AND DEMOLITION MATERIALS SHALL BE REGISTERED WITH THE COUNTY OF ORANGE.
- 4. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE, THE OWNER SHALL OBTAIN A DEMOLITION OR CONSTRUCTION ORDER FROM THE COUNTY OF ORANGE. ALL DEMOLITION OR CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS (RRM) AND TO BE RECYCLED OR DEMOLISHED.
- 5. THE PRESENCE OF ANY ABANDONED CONTAINERS (CANS), AND/OR OTHER WASTE MATERIALS ON THE SITE SHALL BE REPORTED TO THE COUNTY OF ORANGE.

**PAVING LEGEND**

SYMBOL/ABBREVIATION	DESCRIPTION
(Symbol)	EXISTING ASPHALT PAVEMENT
(Symbol)	EXISTING SIDEWALK
(Symbol)	PROPOSED ASPHALT PAVEMENT
(Symbol)	PROPOSED SIDEWALK
(Symbol)	PROPOSED BIKEWAY
(Symbol)	PROPOSED BIKEWAY STRIP
(Symbol)	PROPOSED BIKEWAY STRIP
(Symbol)	PROPOSED BIKEWAY STRIP
(Symbol)	PROPOSED BIKEWAY STRIP

**DRAWING LEGEND**

SYMBOL/ABBREVIATION	DESCRIPTION
(Symbol)	EXISTING TREE
(Symbol)	PROPOSED TREE
(Symbol)	EXISTING PROPERTY LINE
(Symbol)	PROPOSED PROPERTY LINE
(Symbol)	EXISTING SETBACK LINE
(Symbol)	PROPOSED SETBACK LINE
(Symbol)	EXISTING EASEMENT LINE
(Symbol)	PROPOSED EASEMENT LINE
(Symbol)	EXISTING RIGHT OF WAY LINE
(Symbol)	PROPOSED RIGHT OF WAY LINE

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**MEASUREMENTS**

MEASUREMENTS	EXISTING	PROPOSED
EXISTING	97,381 SF (2,238 AC)	97,381 SF (2,238 AC)
PROPOSED	13,833 SF (0,696 AC)	13,833 SF (0,696 AC)
POST DEVELOPED TOTAL	111,214 SF (2,534 AC)	111,214 SF (2,534 AC)
NET IMPROVEMENT INCREASE	16,152 SF (0,371 AC)	16,152 SF (0,371 AC)

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14

**VEHICLE FLOOR AREA CLASSIFICATION**

CLASSIFICATION	AREA	PERMITS
VEHICLE FLOOR AREA CLASSIFICATION	0	0
VEHICLE FLOOR AREA CLASSIFICATION	2	12
VEHICLE FLOOR AREA CLASSIFICATION	12	14
VEHICLE FLOOR AREA CLASSIFICATION	5 (INCL. 1 VAN ACCESSIBLE)	5
VEHICLE FLOOR AREA CLASSIFICATION	14	14



ISSUED	DATE
ZONING COMPLIANCE PERMIT DRAWINGS <td></td>	
SIGNATURE HEALTHCARE FACILITY EXPANSION CHAPEL HILL, NORTH CAROLINA <td></td>	

**NOTES**  
 1. PHOTOMETRIC PLAN AND DETAILS ON THIS SHEET PROVIDED BY DUKE ENERGY.

**Custom Lighting Shoebox LED**

The Energy Efficient Shoebox LED is a compact, low-profile lighting fixture designed for use in parking lots, walkways, and other outdoor areas. It features a high-efficiency LED light source and a clear, protective lens. The fixture is available in multiple mounting heights and is designed to provide uniform, glare-free illumination.

LED	Mounting Height
150 Watts	25' - 30'
200 Watts	30' - 35'
250 Watts	35' - 40'

**Custom Lighting Shoebox LED**

The Energy Efficient Shoebox LED is a compact, low-profile lighting fixture designed for use in parking lots, walkways, and other outdoor areas. It features a high-efficiency LED light source and a clear, protective lens. The fixture is available in multiple mounting heights and is designed to provide uniform, glare-free illumination.

LED	Mounting Height
150 Watts	25' - 30'
200 Watts	30' - 35'
250 Watts	35' - 40'

**Custom Lighting Shoebox LED**

The Energy Efficient Shoebox LED is a compact, low-profile lighting fixture designed for use in parking lots, walkways, and other outdoor areas. It features a high-efficiency LED light source and a clear, protective lens. The fixture is available in multiple mounting heights and is designed to provide uniform, glare-free illumination.

LED	Mounting Height
150 Watts	25' - 30'
200 Watts	30' - 35'
250 Watts	35' - 40'

**Custom Lighting Shoebox LED**

The Energy Efficient Shoebox LED is a compact, low-profile lighting fixture designed for use in parking lots, walkways, and other outdoor areas. It features a high-efficiency LED light source and a clear, protective lens. The fixture is available in multiple mounting heights and is designed to provide uniform, glare-free illumination.

LED	Mounting Height
150 Watts	25' - 30'
200 Watts	30' - 35'
250 Watts	35' - 40'

**Custom Lighting Shoebox LED**

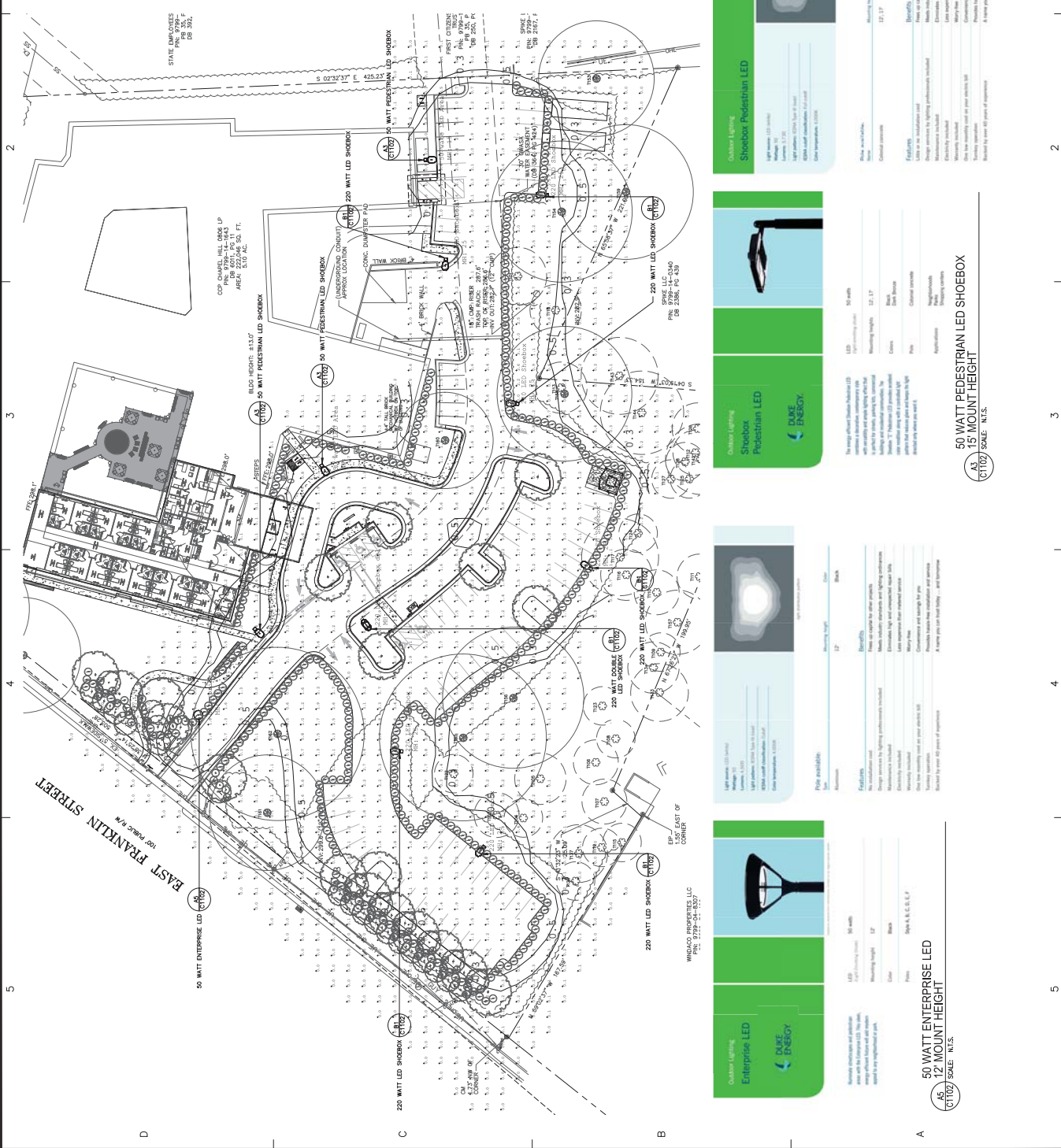
The Energy Efficient Shoebox LED is a compact, low-profile lighting fixture designed for use in parking lots, walkways, and other outdoor areas. It features a high-efficiency LED light source and a clear, protective lens. The fixture is available in multiple mounting heights and is designed to provide uniform, glare-free illumination.

LED	Mounting Height
150 Watts	25' - 30'
200 Watts	30' - 35'
250 Watts	35' - 40'

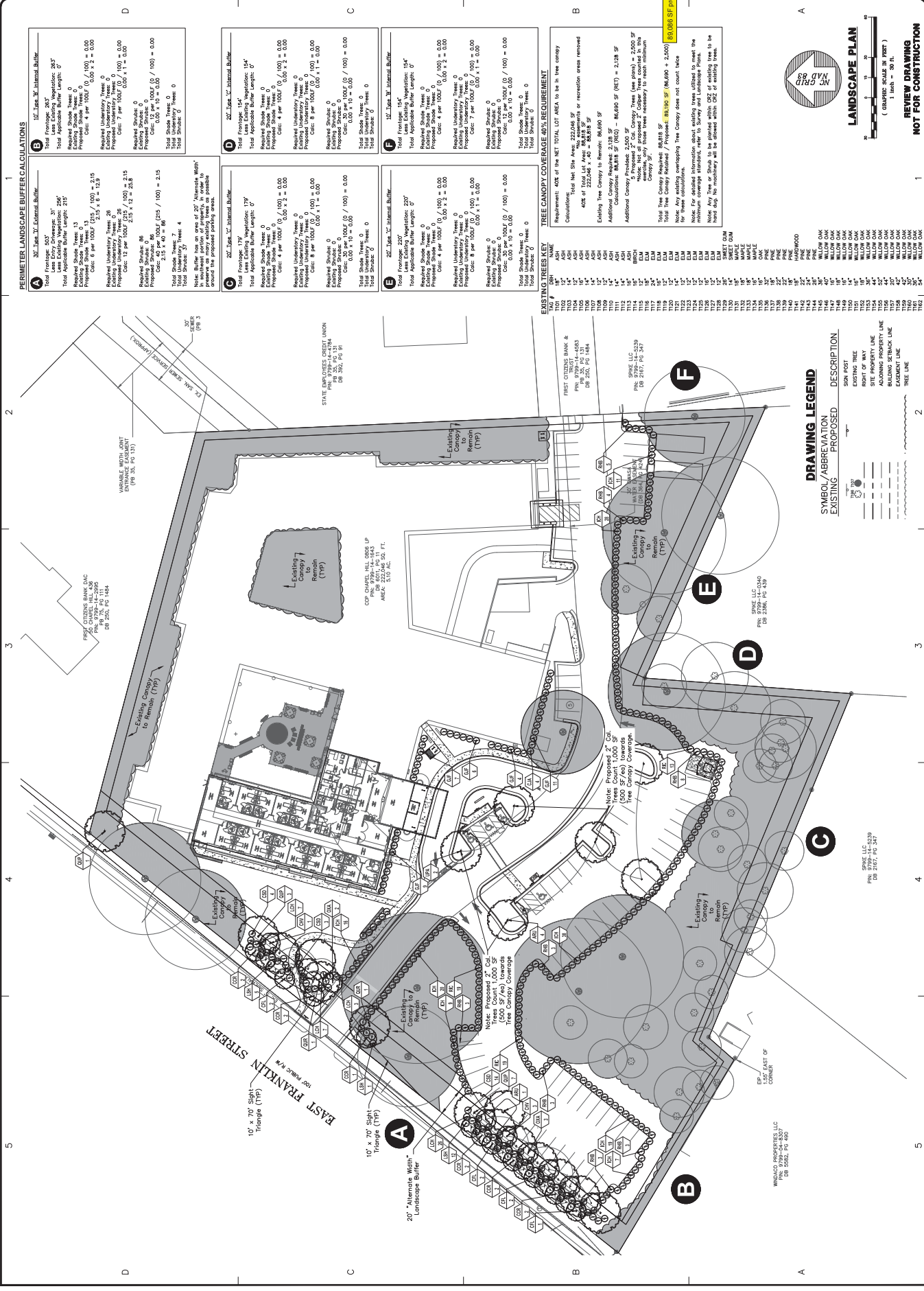
**Custom Lighting Shoebox LED**

The Energy Efficient Shoebox LED is a compact, low-profile lighting fixture designed for use in parking lots, walkways, and other outdoor areas. It features a high-efficiency LED light source and a clear, protective lens. The fixture is available in multiple mounting heights and is designed to provide uniform, glare-free illumination.

LED	Mounting Height
150 Watts	25' - 30'
200 Watts	30' - 35'
250 Watts	35' - 40'



NO.	DATE	REVISIONS



**PERIMETER LANDSCAPE BUFFER CALCULATIONS**

**A. 30' Tree, 30' Interval Buffer:**  
 Total Frontage: 307'  
 Total Area: 9210 SF  
 Total Existing Vegetation: 256'  
 Total Applicable Buffer Length: 215'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (215 / 100) = 2.15$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $7 \text{ per } 100LF (215 / 100) = 1.505$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**B. 20' Tree, 20' Interval Buffer:**  
 Total Frontage: 194'  
 Total Area: 3880 SF  
 Total Existing Vegetation: 154'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**C. 10' Tree, 10' Interval Buffer:**  
 Total Frontage: 154'  
 Total Area: 3080 SF  
 Total Existing Vegetation: 154'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**D. 5' Tree, 5' Interval Buffer:**  
 Total Frontage: 154'  
 Total Area: 3080 SF  
 Total Existing Vegetation: 154'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**E. 20' Tree, 20' Interval Buffer:**  
 Total Frontage: 220'  
 Total Area: 4400 SF  
 Total Existing Vegetation: 220'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**F. 10' Tree, 10' Interval Buffer:**  
 Total Frontage: 307'  
 Total Area: 6140 SF  
 Total Existing Vegetation: 307'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**EXISTING TREES KEY**

NO.	DATE	REVISIONS

**TREE CANOPY COVERAGE (M<sup>2</sup>) REQUIREMENT**  
 Requirement: 40% of the NET TOTAL LOT AREA to be in tree canopy  
 Calculations:  
 Total Lot Site Area: 220,000 SF  
 40% of 220,000 = 88,000 SF  
 Existing Tree Canopy to Remain: 88,000 SF  
 Additional Canopy Required: 2,128 SF  
 Additional Canopy Provided: 2,128 SF  
 Note: Not all proposed 2" canopy trees are included in this canopy SF. Please refer to the site plan for tree locations.  
 Total Tree Canopy Provided: 90,128 SF (88,000 + 2,128)  
 Note: Any existing canopy trees not included in this canopy SF are included in the existing canopy SF.  
 Note: For detailed information on tree canopy calculations, please refer to the site plan and the attached tree schedule.  
 Note: Any Tree or Shrub to be planted within 50' of existing trees to be hard-isp. No machinery will be allowed within 50' of existing trees.

**A. 30' Tree, 30' Interval Buffer:**  
 Total Frontage: 307'  
 Total Area: 9210 SF  
 Total Existing Vegetation: 256'  
 Total Applicable Buffer Length: 215'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (215 / 100) = 2.15$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $7 \text{ per } 100LF (215 / 100) = 1.505$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**B. 20' Tree, 20' Interval Buffer:**  
 Total Frontage: 194'  
 Total Area: 3880 SF  
 Total Existing Vegetation: 154'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**C. 10' Tree, 10' Interval Buffer:**  
 Total Frontage: 154'  
 Total Area: 3080 SF  
 Total Existing Vegetation: 154'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**D. 5' Tree, 5' Interval Buffer:**  
 Total Frontage: 154'  
 Total Area: 3080 SF  
 Total Existing Vegetation: 154'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**E. 20' Tree, 20' Interval Buffer:**  
 Total Frontage: 220'  
 Total Area: 4400 SF  
 Total Existing Vegetation: 220'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**F. 10' Tree, 10' Interval Buffer:**  
 Total Frontage: 307'  
 Total Area: 6140 SF  
 Total Existing Vegetation: 307'  
 Total Applicable Buffer Length: 0'  
 Required Shade Trees: 0  
 Existing Shade Trees: 0  
 Proposed Shade Trees: 0  
 Calc:  $4 \text{ per } 100LF (0 / 100) = 0.00$   
 Required Understory Trees: 0  
 Existing Understory Trees: 0  
 Proposed Understory Trees: 0  
 Calc:  $8 \text{ per } 100LF (0 / 100) = 0.00$   
 Total Shade Trees: 0  
 Total Understory Trees: 0

**DRAWING LEGEND**

SYMBOL / ABBREVIATION	EXISTING	PROPOSED	DESCRIPTION
SHRUB			SHRUB
TREE			TREE
			RIGHT OF WAY
			SITE PROPERTY LINE
			ADJOINING PROPERTY LINE
			BUILDING SETBACK LINE
			EXISTING TREE CANOPY
			PROPOSED TREE CANOPY
			TREE LINE

**NOT FOR CONSTRUCTION**



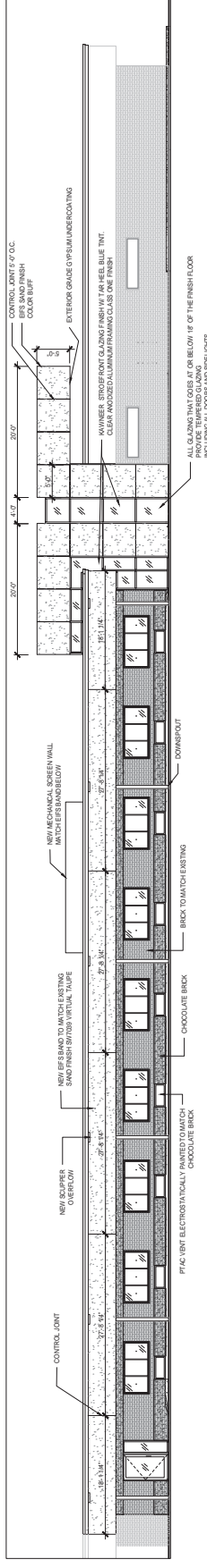
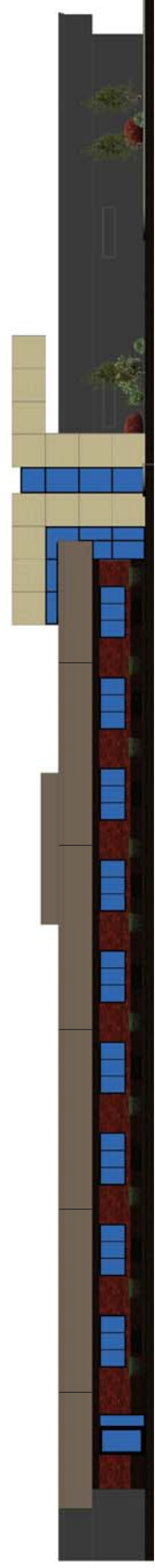


14 BED, 600 SQ FT SHORT TERM REHAB ADDITION TO EXISTING NURSING FACILITY FOR SIGATURE HEALTHCARE OF CHAPEL HILL 1602 E. FRANKLIN STREET CHAPEL HILL, NC 27514

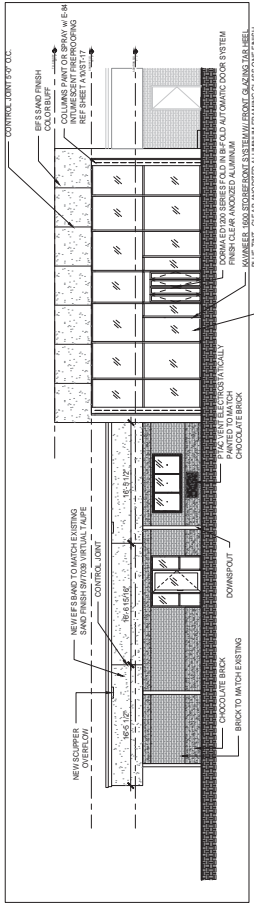
ADDITION & CULTURE RENOVATION ELEVATIONS

Drawn By: CH  
Checked By: TW  
Scale: 1/8" = 1'-0"  
Date:

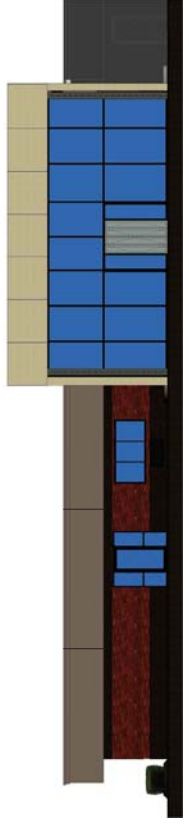
Drawing No. A-9



EXTERIOR ELEVATION 1  
1/8" = 1'-0" CHAPEL HILL, NORTH CAROLINA A-3



EXTERIOR ELEVATION 1  
1/8" = 1'-0" CHAPEL HILL, NORTH CAROLINA A-3





FRANKLIN STREET WEST ELEVATION w & w/o EFIS JOINTS  
 NTS

1  
 R-1



FRANKLIN STREET VIEW w & w/o EFIS JOINTS  
 NTS

2  
 R-1



21-03-108



14 BED, 9,600 SQ FT SHORT TERM REHAB  
 ADDITION TO EXIST. SNLTD NRSNG  
 FACILITY FOR  
 SIGNATURE HEALTHCARE  
 OF CHAPEL HILL  
 1602 E. FRANKLIN STREET CHAPEL HILL, NC 27514

ADDITION &  
 CULTURE CHANGE RENOVATION

RENDERINGS

Drawn By: CH  
 Check By: TW  
 Scale: N.T.S.  
 Date:

Drawing No.  
**R-1**

**STRUCTURE DETAILS**

STYLE: SOUTHERN CLASSIC GARAGE  
SIDING: PAINTED (LP SMARTSIDE)  
SIDEWALL HEIGHT: 7' 5.75"  
ROOF OVERHANG: STANDARD  
SIZE: 12X36

TRIM: STANDARD TRIM  
BASE: RUNNERS

**COLORS**

SIDING COLOR: NAVAJO WHITE  
TRIM COLOR: EARLY AMERICAN  
ROOF COLOR: DRIFTWOOD  
ROOF MATERIAL: ARCHITECTURAL  
SHINGLES

**DOORS & RAMPS**

76" H DOUBLE SOUTHERN CLASSIC DOOR  
5' X 6' RAMP  
HINGES: DELUXE HINGES  
76" H SINGLE SOUTHERN CLASSIC DOOR

**VENTS**

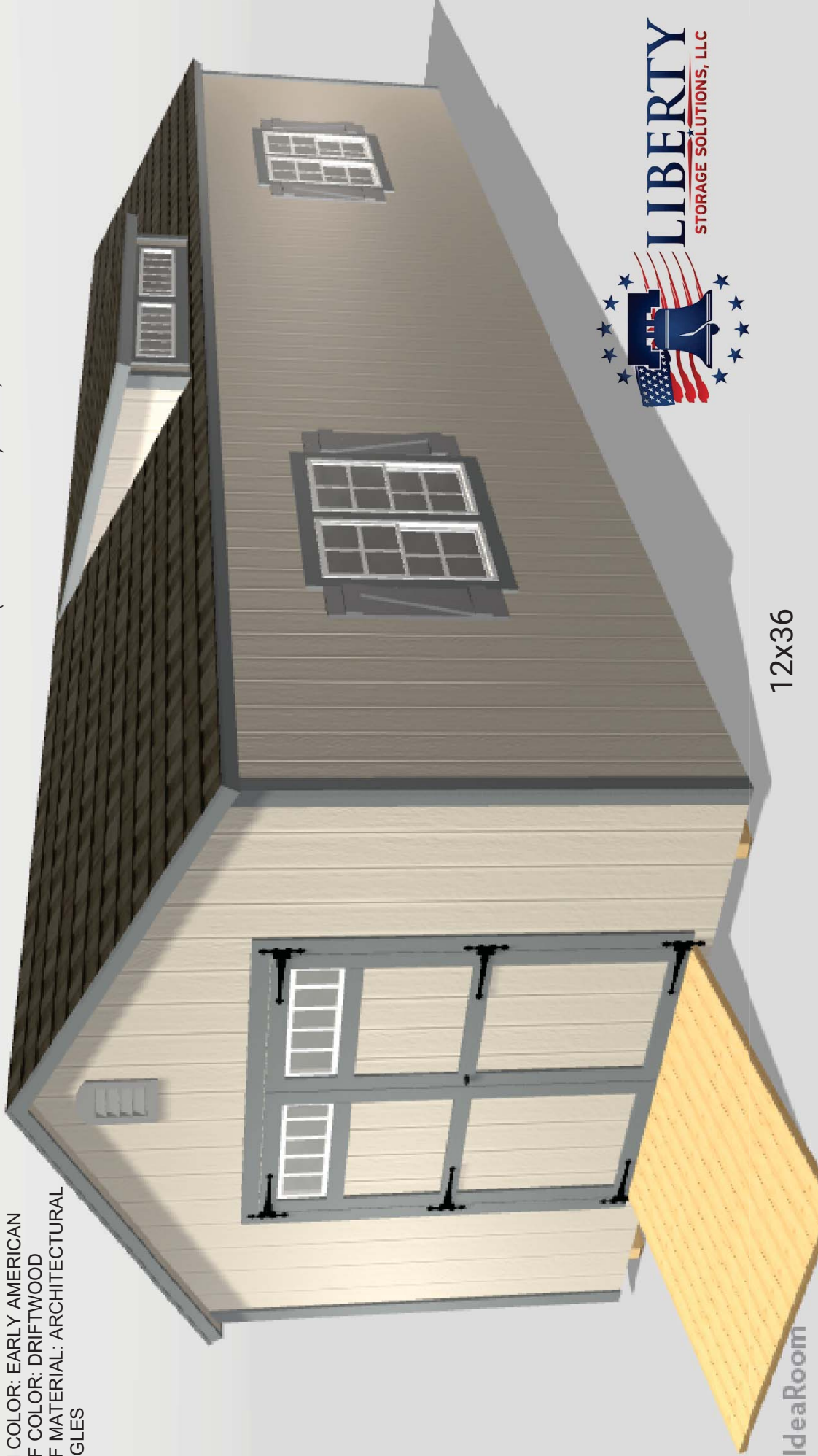
(2) CLASSIC VENTS  
COLOR: GAP GRAY

**WINDOWS & ACCESSORIES**

(4) 24"X36" WINDOWS  
WINDOW COLOR: WHITE  
SHUTTERS: 36" THREE BOARD PAINTED Z-SHUTTERS  
SHUTTERS COLOR: GAP GRAY  
DORMER: TRANSOM DORMER

**FLOORING & INTERIOR**

FLOORING: 3/4" ADVANTECH FLOORING  
FLOOR JOIST: 2X6 PRESSURE TREATED FLOOR JOISTS  
(STD ON 14' WIDE) FOR 8, 10 & 12 W



12x36







4 AM

20180601000101980 S/INS  
Bk:RB6473 Pg:256  
06/01/2018 02:29:31 PM 1/8

FILED Mark Chilton  
Register of Deeds, Orange Co., NC  
Recording Fee: \$26.00  
NC Real Estate TX: \$0.00

MH

Prepared by: Kay Pearlstein, Chapel Hill Planning Department

Retorts:  
Town of Chapel Hill  
Planning Dept.  
405 Martin Luther King Jr. Blvd  
Chapel Hill, NC 27514



TOWN OF CHAPEL HILL  
405 MARTIN LUTHER KING JR BLVD  
CHAPEL HILL, NC 27514  
(919) 968-2728

ORANGE COUNTY

NORTH CAROLINA

SPECIAL USE PERMIT MODIFICATION

KNOW ALL MEN BY THESE PRESENTS, that the undersigned applicant, Ballentine Associates for Signature Health Care of Chapel Hill, having applied to the Town of Chapel Hill for a Special Use Permit Modification of the existing Special Use Permit approved by the Chapel Hill Town Council on November 17, 1978 (recorded in Deed Book 307 Page 553 at the Orange County Register of Deeds office) said Special Use Permit Modification approval was granted by the Town of Chapel Hill on October 25, 2017; if developed according to the Site Plan dated May 17, 2017, and the terms of said approval being as follows:

NAME OF PROJECT: Signature Health Care

DESCRIPTION OF PREMISE

LOCATION: 1602 East Franklin Street

ORANGE COUNTY PARCEL IDENTIFIER NUMBER: 9799-14-1643 *JRC*

DESCRIPTION OF DEVELOPMENT

GROSS LAND AREA: 244,251 square feet

MAXIMUM FLOOR AREA: 49,646 square feet

NUMBER OF BEDROOMS: 108 beds

IMPERVIOUS SURFACE: 113,336 square feet

SPECIAL TERMS AND CONDITIONS

Approves the application for Signature Health Care Development according to the Site Plan dated May 17, 2017 (on file in the Chapel Hill Planning Department), with the following modification of regulations:

- Modification of Section 5.9.7 of the Land Use Management Ordinance to increase Off-Street Parking space requirements by 28 spaces to allow a maximum of 82 vehicular parking spaces.

This finding is based on the determination that not all of the 104 parking spaces allowed by the original 1978 Special Use Permit were constructed (25 spaces left unconstructed), and the proposed building addition for expanded rehabilitation services will require additional employee and visitor parking. The community will be better served with the expansion of medical services at this location. Three additional spaces are proposed with the expansion of facilities. The Land Use Management Ordinance allows a maximum of one vehicle parking space per two beds for a Group Care Home or a maximum of 54 spaces.



- Modification of Section 5.9.7 of the Land Use Management Ordinance to decrease the bicycle parking space requirement to allow a minimum of 11 bicycle spaces.

This finding is based on the determination that the facility offers recovery-care and rehabilitation services. The reduction in spaces would provide bicycle parking for approximately 25 percent of the 43 employees. Two Class I spaces would be required and nine spaces as Class II. An interior shower is available to cyclists at the facility. The LUMO allows a minimum of four bicycle parking spaces or one space per four beds.

Stipulations Specific to the Signature Health Care of Chapel Hill Expansion

1. Construction Deadline: That construction begin by October 25, 2019 (two years from the date of approval) to be completed by October 25, 2021 (four years from the date of approval).
2. Land Use Intensity: This Special Use Permit Modification authorizes the following:

<b>Use: Group Care Facility</b>	
Gross Land Area	244,251 square feet
Total Floor Area Allowed	49,646 square feet
Maximum Vehicular Parking Spaces	82 spaces
Minimum Bicycle Parking Spaces	11 Spaces: 20% Class I and 80% Class II
Total Impervious Surface Area Allowed	113,336 square feet
Total number beds	108 beds
Land Disturbance	85,000 square feet

Access

3. Accessibility Requirements: Prior to issuance of a Certificate of Occupancy, the developer shall provide the minimum required handicapped infrastructure according to Americans with Disabilities Act and associated codes and standards.
4. Performance Bond: Prior to beginning construction, the developer shall submit a performance bond to the Town to cover 125 percent of the cost of the infrastructure improvements in the public right-of-way.
5. Driveway Sidewalk: A five-foot wide concrete sidewalk shall be constructed along the east side of the driveway and along the southern property line connecting the new sidewalk with the existing sidewalk. If space allows, the sidewalk shall be constructed around the five parking spaces adjacent to the building to prevent walking behind vehicles.
6. Driveway Permit: Prior to beginning work on the North Carolina Department of Transportation (NCDOT) right-of-way, the developer shall obtain an approved driveway permit and/or encroachment agreement(s). As a condition of the permit, the permittee shall be responsible for the design and construction of the stipulated improvements in accordance with NCDOT requirements. An approved permit will be issued upon receipt of approved roadway and signal construction plans, inspection fees, and any necessary performance and indemnity bonds.
7. Three Party Encroachment Agreement: Prior to work within the East Franklin Street right-of-way, including the sidewalk connection to the existing public sidewalk and the proposed landscaping within the East Franklin Street right-of-way, a three-party encroachment agreement will need to be submitted for approval to NCDOT. The Town of Chapel Hill will be the third party.
8. Future Pedestrian Connection: The property owner shall consider a pedestrian connection between Couch Road and through the Signature Health Care property once adjacent redevelopment begins on Couch Road.

Architecture

9. Storage Trailers: Two existing 40-foot by 8-foot trailers on the western edge of the existing parking lot shall be removed from the site prior to issuance of a Certificate of Occupancy.
10. Storage Sheds: Two storage 12-foot by 36-foot sheds shall be installed behind the six-space parking bay at the southern end of the site with sidewalks to access the sheds and subject to Community Design Commission approval.





Solid Waste and Recycling

11. Dumpster Capacity: That the developer monitor existing solid waste facilities for adequate capacity post construction and if additional facilities are needed, that new concrete dumpster pads and refuse/recycling enclosure shall be outside the critical root zone of rare and specimen trees.

Environment

12. Energy Management Plan: Prior to issuance of a Zoning Compliance Permit, the developer shall provide an Energy Management Plan for Town approval. The plan shall incorporate a "20 percent more energy efficient" feature to outperform the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) energy efficiency standard in place at the time of approval.

In addition, we recommend that the Developer consider the use of the following:

- Graywater use from stormwater retention system;
- Existing pond for additional stormwater detention and/or increase capacity of new underground storm filter detention system to handle some of the existing stormwater runoff; and
- Solar Power Voltaics for the addition so that it might meet the AIA 2030 Challenge carbon reduction target.

**STANDARD STIPULATIONS**

Transportation

13. Repairs in Public Right-of-Way: Prior to issuance of a Certificate of Occupancy, the developer shall repair all damage for work in the public right-of-way related to the construction of this project, which may include pavement milling and overlay. The design must be reviewed and approved by the Town Manager prior to issuance of a Zoning Compliance Permit.
14. Street Closure Plan: Prior to the issuance of a Zoning Compliance Permit, the developer shall provide a street closure plan, subject to Town Manager approval, for any work requiring street, sidewalk, or lane closures.
15. Work Zone Traffic Control Plan: Prior to issuance of a Zoning Compliance Permit, the developer must provide a Work Zone Traffic Control Plan and a Construction Management Plan for approval by the Town Manager. The Work Zone Traffic Control Plan shall comply with the Manual on Uniform Traffic Control Devices. The Construction Management Plan shall provide staging, construction worker parking, construction vehicle routes, and hours of construction.
16. Bicycle Parking: Prior to the issuance of a Zoning Compliance Permit, the developer shall provide dimensioned details for the bicycle parking spaces that comply with Town parking standards. The bicycle parking design must comply with the spring 2010 Association of Pedestrian and Bicycle Professionals Guidelines, and the Class I and Class II bicycle parking standards required by the Town Design Manual.
17. Parking Lot Standards: Prior to issuance of a Certificate of Occupancy, the developer shall construct the parking lot and drive aisles to Town standards for pavement design and dimensions.
18. Vehicular Charging Stations: Prior to issuance of a Certificate of Occupancy the Developer shall dedicate two electric car charging spaces and lay the conduit for future electric car station expansion during the parking lot reconfiguration.
19. Sight Distance Triangles: The developer must provide sight distance triangles that meet AASHTO standards on the landscape plan prior to issuance of a Zoning Compliance Permit. Landscaping must be removed within the sight distance triangle for clear and unobstructed line of sight for vehicles.

Transportation Management Plan

20. Transportation Management Plan: Prior to issuance of a Zoning Compliance Permit, we recommend the developer submits an updated Transportation Management Plan subject to Town Manager approval, including conducting an initial survey of employees' interest for purchasing electric vehicles.

Landscape and Architecture

21. Invasive Exotic Vegetation: Prior to the issuance of a Zoning Compliance Permit, the developer shall identify on the planting plan, known invasive exotic species of vegetation, as defined by the Southeast Exotic Pest Plant Council (SE-EPPC)<sup>1</sup>, and provide notes indicating removal of any identified exotic species from the landscape buffer areas, prior to planting.
22. Landscape Protection: Prior to issuance of a Zoning Compliance Permit, a detailed Landscape Protection Plan shall be approved. The plan shall include which trees will be removed and which will be preserved, critical root zones of all rare and specimen trees, and clearly indicate names and species.

<sup>1</sup><http://www.se-eppc.org/weeds.cfm>



23. Tree Protection Fencing Prior to Construction: Prior to issuance of a Zoning Compliance Permit, the developer shall provide a note on the Final Plans indicating that tree protection fencing will be installed prior to land-disturbing activity on the site. Tree protection fencing shall be provided around construction limits, construction parking and materials staging/storage areas. Town standard landscaping protection notes, shall be included on the plans, subject to Town Manager approval.
24. Landscape Planting Plan: Prior to issuance of a Zoning Compliance Permit, the developer shall provide a detailed Landscape Planting Plan with a detailed planting list, subject to Town Manager approval. The Plan shall include canopy trees that are proposed to shade any surface parking areas.
25. Tree Canopy: That the final plans shall exhibit 40 percent canopy coverage through a combination of retained and replanted trees.
26. Demolition Plan: Prior to beginning building demolition, the developer must submit a Demolition Plan showing how materials will be recycled.
27. Steep Slopes: Prior to issuance of a Zoning Compliance Permit, the Developer shall include a map indicating how development and construction will comply with the steep slopes regulations in the Land Use Management Ordinance, subject to Town Manager review and approval.
28. Lighting Plan Approval: Prior to issuance of a Zoning Compliance Permit, the Community Design Commission shall approve a lighting plan for this site and shall take additional care during review to ensure that the proposed lighting plan will minimize 1) upward light pollution and 2) off-site spillage of light.
29. Community Design Commission Approval: The Developer shall obtain Community Design Commission approval of building elevations prior to issuance of a Zoning Compliance Permit.
30. Alternative Buffer: The Developer shall obtain Community Design Commission approval of Alternative Buffers prior to issuance of a Zoning Compliance Permit.

#### Stormwater Management

31. Stormwater Management Plan: This project must comply with the Section 5.4 Stormwater Management of the Land Use Management Ordinance.
32. Erosion Control Inspections: In addition to the requirement during construction for inspection after every rainfall, the developer shall inspect the erosion and sediment control devices and offsite roadways daily, make any necessary repairs or adjustments to the devices, remove deposition of wet or dry silt on adjacent roadways and maintain inspection logs documenting the daily inspections and any necessary repairs.
33. Phasing Plan: Prior to issuance of a Zoning Compliance Permit, the developer shall obtain approval of a Phasing Plan that provides details of which improvements are to be constructed during each phase. The phasing plan shall detail public improvements, and stormwater management structures will be completed in each phase prior to requesting a Certificate of Occupancy. Construction for any phase may not begin until all public improvements in previous phases are complete, with a note to this effect on the final plans and plats.
34. Erosion Control Bond: If one acre or more is uncovered by land-disturbing activities for this project, then a performance guarantee in accordance with *Section 5-97.1 Bonds* of the Town Code of Ordinances shall be required prior to final authorization to begin land-disturbing activities.
35. Silt Control: The developer shall take appropriate measures to prevent and remove the deposit of wet or dry silt on adjacent paved roadways.
36. Curb Inlets: The developer shall provide pre-cast curb inlet hoods and covers stating, "Dump No Waste! Drains to Jordan Lake", in accordance with the specifications of the Town Standard Detail SD-5A, for all new curb inlets for private, Town and State rights-of-way.
37. As-Built Plans: Prior to the issuance of a Certificate of Occupancy, the developer shall provide certified as-built plans for building footprints, parking lots, street improvements, storm drainage systems and stormwater management structures, and all other impervious surfaces, and a tally of the constructed impervious area. The as-built plans should be in DXF binary format using State plane coordinates and NAVD 88.
38. On-Site/Adjacent Stormwater Features: Prior to issuance of a Zoning Compliance Permit the final plans shall locate and identify existing site conditions including all on-site and adjacent stormwater drainage features on the plans. The final plans must provide proper inlet protection for the stormwater drainage inlets on or adjacent to the site to ensure the stormwater drainage system will not be obstructed with construction debris.





39. Repair/Replacement of Damaged Stormwater Infrastructure: Existing stormwater infrastructure that is damaged as a result of the project demolition or construction must be repaired or replaced, as specified by the Stormwater Management Engineer, prior to requesting a Certificate of Occupancy.

Water, Sewer, and Other Utilities

40. Utility/Lighting Plan Approval: The final utility/lighting plan shall be approved by Orange Water and Sewer Authority, Duke Energy, other local utility service providers, and the Town Manager before issuance of a Zoning Compliance Permit. The property owner shall be responsible for assuring that these utilities can continue to serve the development. In addition, detailed construction drawings shall be submitted to OWASA for review/approval prior to issuance of a Zoning Compliance Permit.
41. Lighting Plan: Prior to issuance of a Zoning Compliance Permit, the developer shall submit for Town Manager review and approval site plans and other required documents to satisfy the lighting requirements of Section 5.11 of the Land Use Management Ordinance including submission of a lighting plan; providing for adequate lighting on public sidewalks, including driveway crossings and beneath awnings; demonstrating compliance with Town standards; and sealed by a Professional Engineer.
42. Relocation of Overhead Utilities Underground: Prior to issuance of a Certificate of Occupancy, the developer shall provide for the underground installation of all public utilities as specified by Section 5.12.2 in the Land Use Management Ordinance.
43. Water/Sewer Line Construction: All public water and sewer plans shall be approved by OWASA and constructed according to their standards. Where sewer lines are located beneath drive aisles and parking areas, construction methods approved by OWASA shall be employed to ensure that sewer lines will not be damaged by heavy service vehicles. Final plans shall be approved by OWASA and the Town Manager prior to issuance of a Zoning Compliance Permit.
44. Recordation of Documents: Prior to issuance of a Zoning Compliance Permit, easement plats and documentation as required by OWASA and the Town Manager shall be recorded if necessary.

Fire Safety

45. Firefighting Access during Construction: As required by NC Fire Code (Section 1410.1 Required Access), vehicle access for firefighting shall be provided to all construction or demolition sites including vehicle access to within 100 feet of temporary or permanent fire department connections and hydrants. Vehicle access shall be provided by either temporary or permanent roads capable of supporting vehicle loading under all weather conditions.
46. Fire Flow Report: That the Final Plan application shall include a Fire Flow Report sealed by an Engineer registered in the State of North Carolina. An OWASA flow test must be provided with the report. Fire flow shall meet the 20 psi or exceed the requirements set forth in the Town Design Manual. The Fire Flow Report shall be reviewed and approved by the Town Manager prior to issuance of a Zoning Compliance Permit.
47. Automatic Sprinkler System: The developer shall install automatic sprinkler systems in accordance with Town Code and NC Fire Code.
48. Hydrants Active: The developer shall provide active fire hydrant coverage, acceptable to the Fire Department, for any areas where combustible construction materials will be stored or installed, prior to having such materials delivered to the site. All required fire hydrants must be installed, active, and accessible for the Fire Department use prior to the arrival of combustible materials on site. That fire protection systems shall be installed according to Town Ordinance, the NC Fire Code, and NFPA 13.
49. Fire Hydrant and FDC Locations: The Final Plans shall indicate the locations of existing and proposed fire hydrants and Fire Department Connections (FDC). Fire Department Connections shall be located on the street side of the building within 100 feet of a hydrant. Hydrant spacing shall comply with the Town Design Manual. Design shall be reviewed and approved by the Town Manager prior to issuance of a Zoning Compliance Permit.
50. Fire Hydrant Accessibility: All structures must be located within 500 feet of a fire hydrant. The developer must maintain a 50-foot maximum distance between fire hydrants and Fire Department Connections, in a clearly visible and accessible location on the street side of buildings.

Solid Waste Management and Recycling

51. Solid Waste Management Plan: Prior to issuance of a Zoning Compliance Permit, a detailed Solid Waste Management Plan, including a recycling plan and a plan for managing and minimizing construction debris, shall be approved by the Town Manager. The plan shall include dimensioned, scaled details of any proposed refuse/recycling collection areas, associated screening, and protective bollards, if applicable. Each bulk waste container shall be labeled as to type of material to be collected.





52. Construction Waste: Clean wood waste, scrap metal and corrugated cardboard, all present in construction waste, must be recycled. All haulers of construction waste must be properly licensed. The developer shall provide the name of the permitted waste disposal facility to which any land clearing or demolition waste will be delivered.
53. Recycling Service: The developer shall contact Orange County Solid Waste Management to establish commercial recycling and cardboard collection services.

State and Federal Approvals

54. State or Federal Approvals: Any required State or federal permits or encroachment agreements (e.g., 401 water quality certification, 404 permit) shall be approved and copies of the approved permits and agreements be submitted to the Town of Chapel Hill prior to the issuance of a Zoning Compliance Permit.
55. North Carolina Department of Transportation Approvals: Prior to issuance of a Zoning Compliance Permit, plans for any improvements to State-maintained roads or in associated rights-of-way shall be approved by NCDOT.

Miscellaneous

56. Temporary Construction Access Agreements: Prior to issuance of a Zoning Compliance Permit, the developer shall provide construction agreements with adjacent property owners where necessary, subject to Town Manager approval. If the abutting property is to be used as part of construction access, the developer shall provide documentation of permission from the owner of said property.
57. Construction Management Plan: A Construction Management Plan shall be approved by the Town Manager prior to issuance of a Zoning Compliance Permit. The construction management plan shall: 1) indicate how construction vehicle traffic will be managed, 2) identify parking areas for on-site construction workers including plans to prohibit parking in residential neighborhoods, 3) indicate construction staging and material storage areas, 4) identify construction trailers and other associated temporary construction management structures, and 5) indicate how the project construction will comply with the Town's Noise Ordinance.
58. Traffic and Pedestrian Control Plan: That the developer shall provide a Work Zone Traffic Control Plan for movement of motorized and non-motorized vehicles on any public street that will be disrupted during construction. The plan must include a pedestrian management plan indicating how pedestrian movements will be safely maintained. The plan must be reviewed and approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. At least five working days prior to any proposed lane or street closure, the developer must apply to the Town Manager for a lane or street closure permit.
59. Construction Sign Required: Prior to the commencement of any land disturbing activities, the developer shall post a construction sign at the development site that lists the property owner's representative and telephone number, the contractor's representative and telephone number, and a telephone number for regulatory information at the time of issuance of a Building Permit. The construction sign may have a maximum of 32 square feet of display area and maximum height of 8 feet. (§5.14.3(g) of Land Use Management Ordinance). The sign shall be non-illuminated, and shall consist of light letters on a dark background. That prior to the issuance of a Zoning Compliance Permit, a detail of the sign shall be reviewed and approved by the Town Manager.
60. Open Burning: The open burning of trees, limbs, stumps, and construction debris associated with this development is prohibited.
61. Detailed Plan Review and Approval: Prior to issuance of a Zoning Compliance Permit, final detailed site plans, grading plans, utility/lighting plans, stormwater management plans (with hydrologic calculations), landscape plans, and landscape maintenance plans shall be approved. Such plans shall conform to plans approved by the Council and demonstrate compliance with all applicable regulations and standards of the Land Use Management Ordinance and Design Manual.
62. Town Manager Review and Approval: Plans, plats, and associated detailed requirements as set forth in the stipulations of this resolution and incorporated into the Special Use Permit shall be reviewed and approved by the Town Manager, or his designee, as well as outside agencies, such as NCDOT, OWASA, and Duke Energy, where indicated.
63. As-Built Plans: Prior to issuance of a Certificate of Occupancy, the developer shall provide certified as-built plans for building footprints, parking lots, street improvements, storm drainage systems and stormwater management structures, and all other impervious surfaces. The as-built plans should be in DXF binary format using State plane coordinates and NAVD 88. The developer shall also contact the Town's Engineering and Design Services Division for address assignment of each unit.
64. Vested Right: This Special Use Modification Permit constitutes a site specific development plan establishing a vested right as provided by North Carolina General Statutes Section 160A-385.1 and the Chapel Hill Land Use Management Ordinance.
65. Continued Validity: Continued validity and effectiveness of this approval shall be expressly conditioned on the continued compliance with the plans and conditions listed above.



66. Non-Severability: If any of the above conditions is held to be invalid, approval in its entirety shall be void.

67. Relationship to Existing Special Use Permit: Except as modified herein, the provisions of the original Special Use Permit, recorded in book 307, page 553, shall remain in effect.

BE IT FURTHER RESOLVED that the Council hereby approves the application for a Special Use Permit Modification for Signature Health Care of Chapel Hill Expansion at 1602 East Franklin Street.

\*\*\*\*\*



IN WITNESS WHEREOF, the Town of Chapel Hill has caused this instrument to be executed in its name as evidence of the issuance of said permit, and the undersigned being all of the property owners of the property above described, have executed this instrument in evidence of their acceptance of said Special Use Permit as covenant running with the land.

ATTEST

[Signature]  
Town Clerk

Town of Chapel Hill  
BY Benjamin G. Hitchings  
Ben Hitchings, Director  
Planning and Development Services  
Benjamin G.



ACCEPTED BY OWNER:

CCP CHAPEL HILL 0806 LP,  
a Delaware limited partnership

By: CCP Holdings GPI LLC,  
a Delaware limited liability company  
its general partner

By: [Signature]  
Name: Michael L. Costa  
Executive Vice President, Finance  
Its: \_\_\_\_\_

Attest: [Signature]  
Jan Eckhardt

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

COUNTY OF ORANGE

STATE OF CALIFORNIA

On 5/29/18, 2018, Michael L. Costa personally appeared before me, Notary Public, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

my hand and official seal.

[Signature]  
Signature



(Seal)

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS  
ORANGE COUNTY

NORTH CAROLINA

I, Christina M. Strauch, a Notary Public in and for said County and State do hereby certify that Benjamin G.

Ben Hitchings, Director, Planning and Development Services, of the Town of Chapel Hill, and SABRINA M. OLIVER Deputy Town Clerk,

duly sworn says each for herself that she knows the corporate seal of the Town of Chapel Hill and that the seal affixed to the foregoing instrument is the corporate seal of the Town of Chapel Hill, Benjamin G. Ben Hitchings, Director, Planning and Development Services of said Town of Chapel Hill,

and SABRINA M. OLIVER, Deputy Town Clerk for the Town of Chapel Hill, subscribed their names thereto, that the corporate seal of the Town of Chapel Hill was affixed thereto, all by virtue of a resolution of the Chapel Hill Town Council, and that said instrument is the act and deed of the Town of Chapel Hill.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal this the 26th day of March, 20 18.

Christine M. Strauch  
Notary Public  
Christina M. Strauch

My commission expires: 4/14/18

