SOUTH GREEN
501 SOUTH GREENSBORO STREET
PROJECT SYNOPSIS

PRINCIPLES:
The project design is based on three principles:
1. finding a solution that corrects the persistent flooding of the subject property, with the subtext of contributing to solving the trailer park flooding across South Greensboro Street,
2. removing a derelict eyesore and creating an attractive energy efficient commercial property on one of the town's major entranceways, with the subtext of creating jobs, expanding the commercial tax base and paying for the flood correction and
3. building a property that will encourage bicycle use and pedestrian travel with the aim of expanding the walkable community south along South Greensboro Street to the residential neighborhoods south of the bypass. While encouraging non-motorized access, the plan must also recognize that, given the proximity of the bypass and the lack of a sidewalk up South Greensboro Street, the current character of the site is mostly vehicular. Therefore the plan must assure that adequate parking exists and vehicular access is achieved as safely as possible, while simultaneously encouraging non-vehicular access and ensuring that the existing road network is also made safer.

MAJOR CHANGES SINCE LAST APPLICATION: Our last application contained new stormwater calculations received from our first civil engineer. These calculations were vastly different from previous calculations included in our earlier applications from the same engineer. The variance between data sets was large enough to cause me to question both sets of data. Given the importance of accurate estimates of stormwater flow on this property, I decided to obtain a second opinion. Recalculated CFS and resultant pipe capacity calculations by Ballantine & Associates opened up design solutions that were not previously available and we were able to eliminate the open flume. The 8x5 box culvert included in this application will carry a 100 year storm. We also recalculated balanced cut and fill, resulting higher finish floor and parking lot elevations. With more accurate recalculated detention volumes, using pervious pavers to access the required detention in a washed stone sub layer became possible and thus is included in this application. Refer to revised attachment 12, new storm water calculations.

FLOODING PROBLEM. ANALYSIS AND SOLUTION:

This analysis was done with the assistance and advisement of Fritz Brunssen, civil engineer.

It is not possible to solve the persistent flooding of the lower portion of the property without understanding its causes. The property began to flood consistently after completion of the Roberson Place subdivision and the storage facility to the south.

The increase in storm water flow caused by the Roberson Place subdivision is not detained within Roberson Place, entering our property two ways.

1. The storm water on the Roberson Place road network is not sufficiently captured by the last set of catch basins on Purple Leaf Place and a substantial portion of it enters the subject property in an uncontrolled manner.
2. The water that does enter the Roberson Place storm water system is released into a ravine to the east, eventually entering a 24” pipe that crosses our property. This ravine (and thus the 24” pipe that drains it) was already the primary drainage channel for 120 acres of urban Carrboro. The existing 24” pipe is not capable of carrying the increased storm water flow caused by Roberson Place. This 24” pipe ends at a DOT junction box on the south west corner of the property, where it enters a 42” DOT pipe crossing under South Greensboro St. DOT has recognized as long ago as 1985 that this 42” pipe is inadequate. Please see two attached letters from NCDOT.

The water that does not enter the Roberson Place system and flows instead down Purple Leaf Place could enter the 24” pipe via a catch basin on our property, but at that point the 24” pipe is already full and overflowing with the water already placed in it by the ravine, the Roberson Place storm water system and backflow from the storage facility to our south.

Gathering on the impervious surface of the storage facility to the south, storm water from the storage facility enters a 30” pipe which connects up to the DOT junction mentioned above. In a substantial rain event, that junction box and its 42” pipe are already full. Since the storm water from the storage facility is from a much higher elevation than our property, it has a higher “head”, the pressure of which pushes even more storm water back up the 24” pipe where it pours out of the open catch basin on our property. In a heavy rain event, a solid fountain of water rises a foot in the air above the catch basin in the center of our property.

At some point in the past, our property was used as a quarry and a great deal of soil was removed and used as fill somewhere else. Since the finished elevation of the property is so much lower than South Greensboro St, as stormwater fountains out of the catch basin and flows uncontrolled down Purple Leaf Place, it ponds deeply, creating an unapproved detention basin that decreases the incidence of flooding downstream (i.e. the trailer park).
Our solutions to flooding are based upon the principle that, while we must detain the increased stormwater generated on our property as a result of our development, we have the right to pass on stormwater that enters our property from upstream. Therefore, as we solve the flooding of this property and pass the water on, flooding at the trailer park could actually increase if it is not kept in a larger set of storm water pipes that carry it coherently past the trailer park. These downstream improvements by NCDOT in conjunction with this application are necessary to end persistent flooding in this area of Carrboro.
Our solutions to flooding also depended upon the ruling that, since the ravine stream across our property is already piped, we can continue to pipe it.

IN THIS APPLICATION, as shown on the attached plans, we propose replacing the existing 24" pipe with an 8'x5' box culvert which would cross our property, at which point NCDOT will carry it forward (see below). This culvert will handle a 100 year storm event. For perspective, the recent flooding in June of 2013 was estimated to be a 5 year storm.

The second element in our flood control plan is raising the level of the property. We plan on taking soil from the hill on our eastern portion and filling the low points on the west. In places, as much as 9' of fill will be placed and compacted, eliminating the basin where stormwater currently collects.

Separately, we are detaining and cleaning the storm water increase caused by our development.

Once the water is gathered and passed by culvert, NCDOT will carry it on. NCDOT will place a new storm water pipe under South Greensboro St. This pipe will continue the network begun by our culvert, carrying the storm water from 120 acres of Carrboro along South Greensboro St to a point past the trailer park. NCDOT estimates their new pipe will carry a 50 year storm. We will be making a contribution to the cost of this NCDOT work. This NCDOT work is essential to successful flood correction.

ZONING: While the rent basis from uses such as restaurants and retail are essential to the project in order to pay for the infrastructure corrections and improvements, Woodhill NC would like to keep the possibility of restoring a portion of the property to its historical use of light industrial, while surrounding it with retail and restaurant uses. Restaurant uses are not currently permitted in M-1. Therefore we have requested rezoning to M-3-CU.

Here is a full list of our proposed uses.

2.110 SALES -- high vol - all indoor
2.120 SALES -- low vol -- all indoor
2.130 SALES -- wholesale
2.210 SALES -- high vol -- w/ outdoor display
2.220 SALES -- low vol -- w/ outdoor display
2.230 SALES -- wholesale -- w/ outdoor display
3.110 OFFICE/SVC -- attract customers
3.120 OFFICE/SVC -- little/no customer traffic
3.130 OFFICE/SVC -- doc/dentist >10,000 sqft
3.150 OFFICE/SVC -- copy/print
3.210 OFFICE/SVC w/outdoor -- attract customers
3.220 OFFICE/SVC w/outdoor -- attract no/few cust
3.250 FREESTANDING ATM
4.100 MANUFACTURING
5.120 TRADE SCHOOL
5.130 ART GALLERY
5.200 CHURCH/SYNAGOGUE/TEMPLE
5.300 LIBRARY/MUSEUM/GALLERY/ART CENTER
5.400 SOCIAL/FRATERNAL CLUB, LODGE, UNION HALL
6.110 RECREATION -- BOWLING/SKATING/TENNIS/ETC
6.121 MOVIE THEATER <300 seats
6.140 COMMUNITY CENTER
8.100 RESTAURANT
8.200 RESTAURANT -- outdoor service
8.500 RESTAURANT -- carry out service
8.600 RESTAURANT with delivery
8.700 FOOD TRUCK
12.100 VET
13.100 POLICE STATION
15.100 POST OFFICE
16.200 DRYCLEANER/LAUNDROMAT w/o drive-thru window
19.200 HORTICULTURAL SALES w/ outdoor display

WETTED SURFACE HISTORICAL DATA:

In an effort to put the area flooding in perspective, we obtained historical data from NOAA on 24-hour rainfall totals for the last 15.25 years (July 15, 1998 through March 22, 2014). In the last 15.25 years, there have been 9 days where precipitation totals measure greater than that of the 2-year storm (greater than 3.5 inches). In other words, in the last 15 years there have been 9 days where the current property would flood South Greensboro St and the trailer park. Assuming our improvements had been in place, the days of flooding would have been 1.

NOTE: The trailer park also receives flood waters from the Old Pittsboro Road area. Our improvements will not rechannel those waters, but it will reduce storm water flow into the drainage ditch behind the trailer park. NCDOT has estimated that, post improvements, flooding in the trailer park will occur in a 10 year storm. Now the trailer park floods in a 2 year storm.

Please access the original NOAA data file at:
http://www1.ncdc.noaa.gov/pub/orders/cdo/308865.csv

Data for storms greater than 2 years between July 15, 1998 and March 22, 2014 sorted by size.

Date	**PRCP(tenth of mm)**	**PRCP(inches)**	**Category**
19990906	1951	7.681087	100 year storm
20000724	1300	5.1181	10 year storm
20130701	1240	4.88188	5 year storm
20080828	1219	4.799203	5 year storm
19990916	1140	4.488.8	>2 year storm
20060726	1074	4.228338	>2 year storm
20021012	1021	4.019677	>2 year storm
20080906	965	3.799205	>2 year storm
20120919	965	3.799205	>2 year storm

Rainfall Storm Definitions provided by NOAA

1-year storm 24-hour rainfall amount:	3.0 inches
2-year storm 24-hour rainfall amount:	3.5 inches
5-year storm 24-hour rainfall amount:	4.4 inches
10-year storm 24-hour rainfall amount:	5.1 inches
25-year storm 24-hour rainfall amount:	6.0 inches
50-year storm 24-hour rainfall amount:	6.7 inches
100-year storm 24-hour rainfall amount:	7.4 inches

VEHICULAR, BICYCLE AND PEDESTRIAN ACCESS. TRANSPORTATION IMPACT ANALYSIS.

Rand Road currently is a public ROW that enters on the southwest corner of the property and connects up to Purple Leaf Place. Since the site has been abandoned for many years and the town has placed bollards at its north end, traffic on Rand Road has been minimal. While we drew a number of site plans that kept Rand Road entering our property on the southwest corner, the prospect of a dramatic increase in traffic at the intersection of South Greensboro street and Rand Road was problematic given the closeness of the intersection of Old Pittsboro Road just to the north.

It made better sense to realign Rand Road with Old Pittsboro Road to create one coherent intersection rather than two in close proximity. To minimize danger to the trees on the northwest corner of that intersection, we planned as much widening as possible to take place on the east side.

We hired Davenport Transportation Engineers to conduct a Traffic Impact Analysis (attached). Their preliminary analysis raised the probability that NCDOT would decide that the new intersection of Old Pittsboro, South Greensboro and Rand Road would not initially warrant a stop light. This was deeply troubling. For cars leaving our site on Rand Road, we believed a stop light was essential to safely turn left (i.e. south). A right hand only exit would force all traffic into downtown Carrboro. We believed a stop light was essential to creating a safe intersection.

Another potential problem for this new alignment was the sharp angle at which Old Pittsboro Road intersects South Greensboro St. Davenport felt that NCDOT might require a reconfiguration of the end of Old Pittsboro Road to make it closer to a right angle when intersecting South Greensboro St.

The solution to both these difficulties is the creation of a roundabout, current drawings of which are included in this application. The roundabout has been biased toward the south east as much as possible to minimize its impact on properties and trees on the west side on South Greensboro St. The roundabout allows safe exit from the property in both directions and mitigates the sharp angle of Old Pittsboro Rd.

The roundabout concept has been approved by NCDOT. The construction drawings have been reviewed by NCDOT. The last set of minor changes were requested. Final stage roundabout drawings are included in this application.

T.I.A. HIGHLIGHTS:

a. Signal Analysis on page 3 of the executive summary, stating that a stop light is not warranted at the new intersection.

b. Table A of page 5 of the executive summary shows level of service ratings for the intersection of Old Pittsboro Road now and in 2016 in build and no build scenarios:

current: B.

no build 2016 : C

roundabout 2016: A (am) / B (pm)

In other words, the proposed roundabout improvements handle the existing traffic flow and the predicted increase caused both by the development and general increase and still raise the level of service to the highest possible rating.

c. Our neighbors in Roberson Place have expressed concern about connectivity to Purple Leaf Place, which the Board of Aldermen has restricted by bollard. Woodhill NC has no opinion about the nature of the connection to Roberson Place, except to note the obvious desirability of emergency ingress and egress. Keeping the connection as bollard restricted is fine with us. In an effort to quantify possible drive through volume, we asked Davenport to analyze the traffic impact of an open connection.

In the busiest hour of the two hour AM peak period, Davenport estimates that 38 cars would exit Roberson Place through Rand Road. Twenty-three of these trips would be cars from within Roberson Place itself. The remaining 15 trips would be cut through.

In the busiest hour of the two hour PM peak period, Davenport estimates 47 trips would traverse Rand Road on their way to or from Roberson Place, 16 of which would be to/from within Roberson Place itself. The remaining 31would be cut through.

In other words, for residents along the southern portion of Purple Leaf Place, who currently experience very little traffic, the majority of traffic generated in the AM and a slightly less than half of all traffic generated daily by an open connection would be caused by their neighbors in the subdivision, not by cut throughs.

It follows therefore that residents on the north end of Roberson Place may perhaps see a traffic decrease in the event of an open connection.

STREET DETAILS: As noted above, Rand Road crosses the subject property, connecting to Purple Leaf Place in the Roberson Place subdivision. Rand Road is currently paved but without curb and gutter, sidewalks or stormwater control. As discussed above, our application moves the ROW and the street within it to create a safer intersection with South Greensboro St. and allow for orderly development of the property, placing curb and gutter, sidewalks, planter strips and stormwater control along it. In conversations with town staff subsequent to our first application, they classified the East West portion of relocated Rand Road as a collector street. This was based upon our TIA analysis that said that +800 trips a day would occur on that portion of the road. The LUO defines a collector street as: “A street whose principal function is to carry traffic between minor, local, and subcollector streets and arterial streets but that may also provide direct access to abutting properties.: 15-210-b-5.

We would note that the East West portion of Rand Road does not carry traffic between a network of minor, local, and subcollector streets, and arterials and in that respect does not conform to the definition of a collector. Only projected traffic counts coming from the immediate businesses put it in this category, rather like the entrance to any commercial center.

Carrboro’s street planning guide is designed to promote the orderly construction of suburban residential street network .The LUO section for collector streets calls for an 11’ travel lane, a 4’ bike path, a 3’ planting strip (also referred to as devil strip) and a 5’ sidewalk. In South Green, we are building a unified more complete bike path that runs all the way through our property in another location, rendering bike paths along the street redundant. Since the bike path is elsewhere, the ROW can decrease in overall width.

DOT is also requiring a 3' raised median between the travel lanes, which is not anticipated in the LUO collector street section, which raises the ROW width.
Those two changes (raised median and remotely located bike lanes) give Rand Road a different section than the one contained in the LUO. The section contained in this application for the collector portion of Rand Road on each side of the DOT required 3' raised median is as follows: 11' travel lane, curb and gutter, 2' planting strip and a 5' sidewalk.
In accord with section 15-216(j) we request the board of alderman allow the construction of a 3' raised median and the construction of a planting strip at a width of 2' (instead of 3') in a ROW of 50 feet, because the combo promotes public safety while keeping overall section widths close to town norms. This request is repeated under the section FOUR REQUESTS FOR EXEMPTIONS TO OR ALTERNATE STANDARDS TO SPECIFIC STANDARDS OF THE LUO.

PEDESTRIAN: The roundabout also increases pedestrian safety by adding an area of refuge after each lane crossing. This application provides for a complete sidewalk network in the project, connected to Roberson Place and up our frontage on South Greensboro St. It also creates a sidewalk network to the bus stop on the west side of South Greensboro. It does provide a cross walk and area of refuge around the north of the roundabout in anticipation of a sidewalk down the west side of South Greensboro. We hope the town's plans for a sidewalk up the west side of South Greensboro Street come to fruition soon, bringing this area more clearly and directly into the walkable community.

On the other side of town, North Greensboro St benefits from sidewalks on both sides of the street, making the North Greensboro street neighborhoods part of the downtown walkable community. South Greensboro currently has no such amenity, isolating it and the neighborhoods south of the bypass. We recognize pedestrians will be able to walk to town through the sidewalks on our property and up Roberson Place. We intend to promote that connectivity with signage directing pedestrians to the current sidewalk access through Roberson Place.

BICYCLES: In an effort to call attention to the bike network this Carrboro main entrance, our site plan extends the bike path, currently ending in Roberson Place, all the way to South Greensboro St, where we propose signage to direct riders to it. Two separate covered bike racks are provided. See site plan. The Comprehensive Bicycle Transportation Plan calls for bike traffic to travel on Old Pittsboro Road. That plan also calls the intersection of Old Pittsboro Road and South Greensboro Street unsafe and calls for it to be improved, which we are doing. We expect the bike path extension and it's signage to increase awareness of the bike path and its usage, thereby, in combination with the roundabout, increasing non-vehicular access to South Green.

BUS SERVICE: South Green is on the Carrboro Loop of the J Route of Chapel Hill Transit, providing easy and quick bus access to and from downtown Carrboro. The Chapel Hill loop of theCM Route offering access to downtown Chapel Hill, the university and the hospital is a short distance south on South Greensboro St, at the bypass and South Greensboro. There is no bus service north on South Greensboro St. to downtown, instead the J route loop brings riders south

along South Greensboro, west along the bypass and into downtown by Jones Ferry Road. Davenport has told us NCDOT will not allow a bus stop for a north bound bus in our frontage south of the roundabout because it will be too close to the roundabout. Our frontage north of the roundabout is too steep to create a bus stop.

NEW LOTS AND BUILDINGS:

LOTS AND BUILDINGS SITE PLAN A: Our Site Plan A proposes four new energy efficient buildings on three lots. To the north of Rand Road, a 19,232 square foot multiuse retail and restaurant building on two floors (first floor15, 431 sq ft. second floor 3,802 sq ft.) on Lot 1 with 53 parking places and 20 covered bike spaces. There are patios on each end of the building 1. The west end patio is 904 sq ft and the east end patio is 800 sq ft. Lot one is 1.313 acres. To the east of Rand Road, a 17,162 square foot single tenant building on two floors (first floor 14,772 sq ft. Second floor 2,309 sq ft.) on Lot 2 with 81 parking places and 10 covered bike spaces. Lot 2 is 2.970 acres. To the south of Rand Road, site plan A shows two buildings on Lot 3, a 3,500 sq foot general retail building (building 4) and a 4,770 sq ft restaurant and retail building (building 3) with 42 parking spaces and 8 bike racks. Building 3 has a 350 sq ft patio. Lot 3 is 1.013 acres.

ALTERNATES:

SITE PLAN B: Our submission contains an alternate for a single building on the Southwest portion of the property instead of two buildings. This alternate is included to give us flexibility in satisfying the requirements of prospective tenants who might come forward. Our alternate site plan (site plan B) proposes a single 9,226 sq ft building on Lot 3 with 41 parking places and 6 bike racks. In this alternate, Lot 1 and Lot 2 are identical to Site Plan A.

FOOTPRINTS: For the purpose of comparing building footprints (i.e. not counting possible mezzanines and second floor space) between existing and proposed:, the new buildings in site plan A total 38,475 square feet. The existing buildings are 34,528 sq feet.

SECOND FLOORS: Currently in site plan A, second floors are planned in the following places: in Building 1, second floor office space of approximately 2,810 sq ft on the east end of the building and mezzanines in the middle and west end totaling 992 sq ft. Building 1 also has enough vertical height to allow the construction of mezzanine spaces in each tenant space. In Building 2, there is a mezzanine option of 2,390 sq ft along the west side of the building. On building two, elevations showing the building with and without the second floor mezzanine have been submitted for approval.

PATIOS: Repeating information above, three patios are proposed, each associated with a possible restaurant. On the west end of building 1 a patio of 904 sq ft. On the east end of building 1, a patio of 800 sq ft. On the north side of building 3, a patio of 350 sq ft.

Please see submitted floor plans and elevations.

PARKING MATRIXES SOUTH GREEN 8-12-14

INTRO:
Prior to receiving approval from the Town of Carrboro, we are unable to sign letters of intent with any of the prospective tenants for South Green. Creating parking predictions for a project that does not currently have any tenants requires a series of educated assumptions. This introductory paragraph is intended to summarize those assumptions.

1. RESTAURANTS: We anticipate that South Green may contain as many as 3 different locally owned restaurants. One of those might be a smaller facility (2000 sq ft) that offers delivery service and is open for lunch and dinner. We anticipate the other two will be full service restaurants, each about 3500 sq ft, one perhaps a more family orientated full service, the other a slightly more upscale restaurant. Having designed 30+ restaurants in my career, the industry reality is that full service restaurants, particularly upscale restaurants, are usually not open for lunch. When they are open for lunch, the customer volume is 1/3 to ¼ of the night time volume. We thus have created parking matrixes for both day and night scenarios. For the night scenario, we have used the LUO parking requirement of 1 space per 100 square feet for full service restaurants. For the day scenario, we have used a parking requirement of 1 space per 200 square feet, which more accurately reflects the daytime load. For daytime in a full service restaurant, a ratio of 1 space per 300 square feet could also be used. We have also made the educated assumption that only one of the two predicted full service restaurants is open for lunch, the other offering dinner service only.

2. RETAIL: We have been in discussion with a locally owned garden store tenant for building number 2, which under the LUO would be a low volume retail use requiring 1 space per 400 square feet with an office mezzanine at 1 space per 400 sq ft. This potential tenant is not open in the evening. The rest of our potential retail space has been calculated as high volume retails, requiring 1 space der 200 square feet. Since most retailers (particularly small local shops) are not open at night, in our matrixes we have assumed that only a portion of our high volume retail tenants will be open in the evening.

3. DAY AND NIGHT USE: Since the primary parking needs of the potential restaurants is in the evening and the primary parking needs of the potential retail space is in the daytime, a portion of the restaurant spaces can be used in the day by retail stores and retail spaces can be used in the evening by restaurant customers.

4. SITE PLANS A AND B: For the southwest portion of the site, we have submitted two site plans. Since the square footage of the alternates is very close, the parking matrixes are very similar. Never the less, the parking matrixes submitted with this application cover both alternates. Option A has two buildings in the south west lot, numbered 3 and 4. Option B has one building in the south west lot, numbered 5.

5. CROSS PARKING: We be recording cross parking agreements between the 3 lots of South Green.

6. PRESUMPTIVE STANDARDS: The LUO contains parking requirements for each category of use. These standards make no provision for different parking needs of restaurants between day and night trade and no provision for staggered hours of operation between restaurants and retail.

We have created a matrix based upon the presumptive standards:

PRESUMPTIVE MATRIX - ALL RETAIL OPEN. ALL RESTAURANT OPEN @ 1/100

(assuming 9000 feet of restaurant)				SITE PLAN A	SITE PLAN B	
	Sq Ft	RATIO		Parking Places	Parking Places	
building 1 -- 2 restaurants	7000	1/	100	70	70	
building 1 patio				9	9	
building 1 high volume retail	8340	1/	200	42	42	
building 1 mezzaine low volume office	992	1/	400	2	2	
building 1 low volume office	2810	1/	400	7	7	
atm				3	3	
building 2 high volume	14772	1/	200	74	74	
building 2 office	2390	1/	400	6	6	
building 3 high vol retail	2772	1/	200	14		
building 3 restaurant	2000	1/	100	20		
building 3 patio				5		
building 4 high volume retail	3500	1/	200	18		
	2000	1/	100		20	building 5 restaurant
	7226	1/	200		36	building 5 retail
Bike Rack credit per 15-191 d 1				-1	-1	
Motorcycle pad credit per 15-291 d 2				-8	-8	
Parking required as per presumptive standard:				261	260	

The presumptive total is 261. It is a very badly inflated number. This presumptive standard forces us to build spaces based upon a number of assumptions we know to be false.

A. All full service restaurants are open for lunch.

B. The daytime restaurant need is 1 space per 100 sq ft.

C. All retail shops are open at night.

If we built parking lots to this standard, we would have an enormous number of parking spaces empty all year long (even more than Willow Creek).

Instead we have created a variety of realistic parking matrixes analyzing what the actual parking requirement will be.

6. REALISTIC PARKING SCENARIOS: In order to cover a wider range of possible tenant combinations, we have included 5 different parking matrixes (called scenarios), two for daytime use and three for evening use.

DAY SCENARIOS: We have included two day parking scenarios. In each we have assumed that one 3500 sq ft full service restaurant will be closed for lunch and one will be open. The open restaurant daytime parking needs are calculated at 1 space per 200 sq ft.

In the first scenario, we have assumed building 2 will be leased to a low volume tenant who would use a second floor office area. This low volume tenant would prefer create a plant display area on the eastmost parking section, eliminating 18 spaces. Day scenario 1 reflects 18 fewer spaces.

In the second scenario, building two is occupied by a high volume retail tenant and the 18 spaces are restored.

DAY SCENARIO ONE (LOW VOLUME IN BUILDING 2):

					SITE PLAN A	SITE PLAN B	
	Sq Ft	RATIO			Parking Places	Parking Places	
building 1 restaurant (3500 open, 3500 closed)	3500	1/	200		18	18	
building 1 patio					9	9	
building 1 high volume retail	8340	1/	200		42	42	
building 1 mezzaine low volume office	992	1/	400		2	2	
building 1 low volume office	2810	1/	400		7	7	
atm					3	3	
building 2 LOW volume	14772	1/	400		37	37	
building 2 office	2390	1/	400		6	6	
building 3 high vol retail	2772	1/	200		14		
building 3 restaurant	2000	1/	200	+3	13		
building 3 patio					5		
building 4 high volume retail	3500	1/	200		18		
	2000	1/	200	+3		13	building 5 restaurant
	7226	1/	200			36	building 5 retail
Bike Rack credit per 15-191 d 1					-1	-1	
Motorcycle pad credit per 15-291 d 2					-8	-8	
Parking required prior to flexible parking adjustments:					165	164	
Parking Provided:					157	156	
low volume garden store would eliminate 18 spaces in rear lot for plant display area							
	Parking provided is				95%	95%	of required

DAY SCENARIO TWO (HIGH VOLUME IN BUILDING 2):

					SITE PLAN A	SITE PLAN B	
	Sq Ft	RATIO			Parking Places	Parking Places	
building 1 restaurant (3500 open, 3500 closed)	3500	1/	200		18	18	
building 1 patio					9	9	
building 1 high volume retail	8340	1/	200		42	42	
building 1 mezzaine low volume office	992	1/	400		2	2	
building 1 low volume office	2810	1/	400		7	7	
atm					3	3	
building 2 HIGH volume	14772	1/	200		74	74	
building 2 office - NOT BUILT		1/	400		0	0	
building 3 high vol retail	2772	1/	200		14		
building 3 restaurant	2000	1/	200	+3	13		
building 3 patio					5		
building 4 high volume retail	3500	1/	200		18		
	2000	1/	200	+3		13	building 5 restaurant
	7226	1/	200			36	building 5 retail
Bike Rack credit per 15-191 d 1					-1	-1	
Motorcycle pad credit per 15-291 d 2					-8	-8	
Parking required prior to flexible parking adjustments:					196	195	
Parking Provided:					172	171	
	Parking provided is				88%	88%	of required

As you can see, daytime parking provided (summarized below) is between 88% and 95% of the parking required, depending on the eventual tenant combination. At the end of this parking analysis, we will make a request for flexibility in administration in accord with LUO 15-292, denoting numerous reasons that less parking will be sufficient.

NIGHT SCENARIOS: We have generated three parking matrixes that represent the most probable night time parking needs (prior to flexible adjustments). In all these scenarios, both the full service restaurants with their patios are open and their parking needs are calculated at 1 space per 100 sq ft, as per the LUO. A small amount of high volume retail is open in night scenario 1 and a greater amount of high volume retail is open in night scenario 2. The other difference between scenario 1 and scenario 2 is that the third potential restaurant is calculated a delivery restaurant in scenario 1 (at one per 200 plus 3). In scenario 2, the third restaurant is calculated as full service requiring 1 space per 100.

Night Scenario One							
					SITE PLAN A	SITE PLAN B	
	Sq Ft	RATIO			Parking Places	Parking Places	
building 1 -- 2 restaurants OPEN AT 1/100	7000	1/	100		70	70	
building 1 patios BOTH OPEN					18	18	
building 1 high vol retail (6430 CLOSED) 2000 SQ FT OPEN	2000	1/	200		10	10	
building 1 mezzaine low volume office (CLOSED)	0	1/	400		0	0	
building 1 low volume office (CLOSED)	0	1/	400		0	0	
atm					3	3	
building 2 (CLOSED)	0	1/	200		0	0	
building 2 office - (CLOSED)	0	1/	400		0	0	
building 3 high vol retail (CLOSED)	0	1/	200		0		
building 3 restaurant OPEN AT 1/200+3	2000	1/	200	+3	13		
building 3 patio					5		
building 4 high volume retail (3500 CLOSED)	2000	1/	200		10		
	2000	1/	200	+3		13	building 5 restaurant OPEN AT 1/200
	2000	1/	200			10	building 5 retail (5226 SQ FT CLOSED) 2000 SQ FT OPEN
Bike Rack credit per 15-191 d 1					-1	-1	
Motorcycle pad credit per 15-291 d 2					-8	-8	
Parking required prior to flexible parking adjustments:					120	115	
Parking Provided:					172	171	
	Parking provided is				143%	149%	of required

Night Scenario Two : Building 3 or Building 5 Restaurant at 1/100 and more retail open						
				SITE PLAN A	SITE PLAN B	
	Sq Ft	RATIO		Parking Places	Parking Places	
building 1 -- 2 restaurants OPEN AT 1/100	7000	1/	100	70	70	
building 1 patios BOTH OPEN				18	18	
building 1 high vol retail (6430 CLOSED) 2000 SQ FT OPEN	2000	1/	200	10	10	
building 1 mezzaine low volume office (CLOSED)	0	1/	400	0	0	
building 1 low volume office (CLOSED)	0	1/	400	0	0	
atm				3	3	
building 2 (CLOSED)	0	1/	200	0	0	
building 2 office - (CLOSED)	0	1/	400	0	0	
building 3 high vol retail open	2772	1/	200	14		
building 3 restaurant OPEN AT **1/100**	2000	1/	100	20		
building 3 patio				5		
building 4 high volume retail open	3500	1/	200	18		
	2000	1/	100		20	building 5 restaurant OPEN AT **1/100**
	5226	1/	200		26	building 5 retail (5226 SQ FT open) 2000 SQ FT closed
Bike Rack credit per 15-191 d 1				-1	-1	
Motorcycle pad credit per 15-291 d 2				-8	-8	
Parking required prior to flexible parking adjustments:				149	138	
Parking Provided:				172	171	
	Parking provided is			115%	124%	of required

As you can see, the parking provided (analyzed below) in these two scenarios is in excess of need.

NIGHT SCENARIO 3: In this scenario, Building 2 (14,772 sq ft) is presumed to be open and a high volume retail tenant, requiring 1 space per 200 sq ft.

Night Scenario Three: Buildings Two and four Open as High Volume						
(assuming 9000 feet of restaurant)				SITE PLAN A	SITE PLAN B	
	Sq Ft	RATIO		Parking Places	Parking Places	
building 1 -- 2 restaurants OPEN AT 1/100	7000	1/	100	70	70	
building 1 patios BOTH OPEN				18	18	
building 1 high vol retail (6430 CLOSED) 2000 SQ FT OPEN	2000	1/	200	10	10	
building 1 mezzaine low volume office (CLOSED)	0	1/	400	0	0	
building 1 low volume office (CLOSED)	0	1/	400	0	0	
atm				3	3	
building 2 **OPEN AS HIGH VOLUME RETAIL**	14772	1/	200	74	74	
building 2 office - (NOT BUILT)	0	1/	400	0	0	
building 3 high vol retail (CLOSED)	0	1/	200	0		
building 3 restaurant OPEN AT 1/200+3	2000	1/	200 +3	13		
building 3 patio				5		
building 4 high volume retail (3500 OPEN)	3500	1/	200	18		
	2000	1/	200		13	building 5 restaurant OPEN AT 1/200+3
	0	1/	200			building 5 retail (CLOSED)
Bike Rack credit per 15-191 d 1				-1	-1	
Motorcycle pad credit per 15-291 d 2				-7	-7	
Parking required prior to flexible parking adjustments:				203	180	
Parking Provided:				172	171	
	Parking provided is			85%	95%	of required

The point in scenario 3 is to stress the nighttime needs by adding a large high volume retail tenant open at night in Building Two and all of Building Four open at night as well. As you can see, in Plan A 85 % of the parking required by the LUO prior to flexible administration is still provided. In Plan B, with the retail of Building Five closed, 95% of the need is met.

Parking Provided	SITE PLAN A	SITE PLAN B
	Parking Places	Parking Places
Standard Parking Places:	143	140
Compact Parking Places:	29	31
Total Parking Places (Standard + Compact):	172	171
Motorcycle Parking Places (lowers required parking by 8 spaces):	8	8
Handicapped Parking Required:	6	6
Handicapped Parking Provided:	6	6
Van Accessible HC Parking Required:	3	3
Van Accessible HC Parking Provided:	3	3
Bicycle Parking Required:	14	14
Bicycle Parking Provided (lowers required parking by 1 space):	38	36

REQUEST FOR FLEXIBLE ADMINSTRATION UNDER 15-292: The following factors mitigate the parking required for South Green, reducing the number of parking spaces actually needed below those produced by the matrixes and scenarios.

BIKE: The Comprehensive Bicycle Transportation Plan calls for bike traffic to travel on Old Pittsboro Road. That plan also calls the intersection of Old Pittsboro Road and South

Greensboro St unsafe and calls for it to be improved, which we are doing. South Green is also extending the Roberson bike path to South Greensboro St. The Bike Plan also calls for signage to be added for the bike path, which South Green is doing. We expect that extension and it's signage to increase awareness of the bike path and its usage, thereby, in combination with the roundabout, increasing non-vehicular access to South Green.

BUS: South Green is on the Carrboro Loop of the J Route of Chapel Hill Transit, providing easy and quick bus access to and from downtown Carrboro. The Chapel Hill loop of the J Route offering access to downtown Chapel Hill, the university and the hospital is a short distance south on South Greensboro St. The CM route of Chapel Hill Transit passes close by at the corner of Merritt Mill and South Greensboro. All of these bus routes increase non-vehicular access to the restaurants and shops of South Green.

PEDESTRIAN: There are 985 addresses within 1500 feet of South Green, the vast majority of which are residential.

In addition to those dwellings, NCDOT is completing work on a sidewalk network on Smith Level Road south of the bypass that will connect to South Green, thereby allowing increased pedestrian communication with previously isolated residential single family and multifamily developments south of the bypass extending south along Smith Level Road to and including Culbreth Road and its neighborhoods.

There is an existing sidewalk connection to downtown Carrboro through Roberson Place. We are aware that a sidewalk from downtown Carrboro is in the Carrboro CIP and we hope it will be constructed soon.

The construction of a roundabout at the intersection of Old Pittsboro Road, Rand Road and South Greensboro St will calm traffic and increase the safety of pedestrians accessing South Green or simply walking by on South Greensboro.

Within South Green, there is an extensive pedestrian network.

All of these connections, pedestrian, bus routes and bike ways, will make non-vehicular access to South Green easy and convenient.

We therefore ask the BOA, in accord with Section 15-292, to allow a reduction of parking built from the estimated maximum load contained in our 5 scenarios of 203 spaces to the 172 (171) spaces shown on our site plans. This request is repeated in the section labeled FOUR REQUESTS.

IMPERVIOUS SURFACE TOTALS, STORM WATER DETENTION AND FILTERING:

This application includes responses to all stormwater calculations requested by the Town and Sungate. Enclosed with this application are new calculations from Ballantine &Associates of storm water flow, detention requirements, filter requirements and the Jordan Lake Accounting Tool. Please refer to the detailed storm water report.

LANDSCAPING:
Our landscape plans for both plan A and B are attached to this application. The following landscape plan elements are important and worth calling to your attention:

LARGER TREES: Plans call for 4"caliper trees shading the parking lots and 6" caliper along the streets, instead of the required 2" caliper. These trees should add about a caliper inch per annum, reaching full growth at 18" instead of the required 12". At the rate of 1 caliper inch per annum, full growth along the streets should be reached in a dozen years. Parking lot shading is in excess of ordinance requirement. In this application, we have increased our street tree size to 6" caliper at initial planting. To clarify the enormous impact these larger trees will create at planting, pictures of 2" , 4" and 6" caliper trees with a human and a story pole are included with this application.

PARKING LOT BUFFER PLANTING: Intent of the parking buffer planting is to provide a visual disruption between the entry drive and the parking areas. It is designed to provide a visual break without the look of the common sheared, heavily maintained hedge that is typical of parking screens with limited space. The planting selections and placements are chosen to create a variety of textures, colors and forms that will be aesthetically pleasing and create a sense of entry into a unique property.

Irregular patches of native Grasses will provide summer blooms, fall interest and softness to the surrounding hardscape. The native switchgrass will be a tall intermittent vertical element that will screen as well as stay in bounds of the tight planting area. The evergreen shrubs have been selected to bloom throughout the spring and summer and become the "bones" of the entry drive. Overall, the entry drive and plantings will be an informal and a more natural look to tie the property to its surroundings.

SCREENS: As per LUO, a type C broken screen is placed between the site and South Greensboro Street. As per the LUO, a Type A Opaque Screen is installed between the site and the residential property to our north, the residential property on our north east corner and the Lincoln Center to our east.

Color pictures of the plants we selected are attached to this application.

PARKING LOT LIGHTING:
All parking lot lights are to be LED. A parking lot lighting plan showing all foot candle levels is submitted for both Site Plan A and B.
We have attached a photo that illustrates the dramatic differences between these LED parking lot light and conventional luminaires.

These LED Fixtures are DARK SKY COMPLIANT with NO LIGHT TRESPASS and FULL CUT OFF AT 90 DEGREES. With more stable photometrics, we are able to aim them with an exactitude that HID or HPS cannot match. Along with the foot candle analysis, aiming, shielding data and specification sheets are included for both options. Additionally Fixtures near our residential neighbors to the north are FULLY SHIELDED. A cut sheet for the LED light fixture is attached. As per plan, some poles have two fixtures.

We have also submitted an alternate street lighting plan intended to light the public streets to town standards using our LED lighting at 15 feet, instead of the town standard High Pressure Sodium at 25 to 30 feet. A request for approval of this alternate is contained below in our section entitled Four Requests for Exemptions or Alternate Standards.

COMMUNICATIONS WITH ROBERSON PLACE:
Our storm water management necessitates coordination with our upstream neighbors at Roberson Place. We were given the contact information for Ann Aylward, manager of the Roberson Place Homeowners Association, at our Neighborhood Information Meeting which we held at the Town of Carrboro on September 26th, 2012. We reached out to her, and when she returned to the US from her travels, Runyon met with her at Open Eye Café on October 10, 2012, to describe our project and storm water improvements we wanted make in Roberson Place. After this meeting the members of the Roberson Place HOA formed a subcommittee and met with Runyon at his design studio on November 12th 2012, to go over these requests for improvements in greater detail. After that, we made another presentation to the HOA at their annual meeting. After that meeting, Woodhill NC delivered a formal written request to the HOA on November 15th, 2012.

The Roberson Place HOA responded in writing to these requests on January 30th, 2013. Some permissions to make improvements were granted, other improvements the HOA decided to undertake on their own. Our request to purchase the option to buy ravine lands in order to privately build the series of detention basins in the ravine (a project in the same area that the Town of Carrboro requested public funds to complete; see: Carrboro and Chapel Hill BMP Sites, Orange County, North Carolina. Concept Plan prepared for the NCDENR by Ward Consulting Engineers, January 8, 2007) was denied. The Roberson Place HOA believed it would take a lot work to organize the HOA to allow us the purchase of the option, and they did not want to do this legwork, because they had no confidence that we would be able to get the necessary approvals from town and state authorities to actually undertake this project. It is interesting to note that the state did not fund this project solely due to lack of funds, not because of any feasibility concerns. Our requests and the Roberson Place HOA responses are attached to this synopsis. This attachment has been updated to include email header as provenance since the communication we received from the Roberson Place HOA was not on letterhead.

SIGNAGE:

We have included calculations of our square foot sign allowance for each building as per LUO and have included these calculations in an attachment.
The signs shown in the architectural drawings are accurate as to potential size and placement, and do conform to our signage allowance as per the LUO, and are intended to give an idea of size of future signs.
We plan to have signs saying "South Green" or "South Green Shopping & Dining" on the south and west sides of the tower on building one as shown on our renderings.
We plan to have a freestanding sign on the south west corner of lot one that will list our tenants. In addition, we may have a small directional sign that directs visitors to the tenant at the back of the development. We will have a sign for the ATM. And we will have signs for individual tenants.
The tenant signs will not be unified in terms of size, color and font. We find a unified scheme of tenant signs to be homogenous, bland, and characteristic of a strip mall. We believe it will be more in keeping with the artistic character of Carrboro to have signage that is eclectic. That said, we have no interest in allowing our tenants to install garish signs. We will not have, for instance, panel box signs in the development.

Calculations of signage areas in accord with the LUO are attached. The signage on the building elevations have been sized to reflect the enclosed calculations.

JUSTIFICATION FOR THE REMOVAL OF TREES:
As per LUO Section 15-316(a) we are requesting permission to remove 24 trees with diameter of 18” or greater because the retention of these trees will unreasonably burden our development. The removal of the 24 trees is incidental to the removal of the foot of the hillside at the back of the property. These trees are on an area we must level in order to satisfy essential elements of the project.

The removal of the 24 trees will allow us to move dirt from our hillside to low places on the site, raising the grade as much as 9 feet in some places. The resultant level area allows us the necessary space to fit the buildings, parking lots, bike path, and the improvements to Rand Road. Fortunately, the forestation in this area is relatively young. We estimate that the area was clear cut about fifty years ago. Here is the breakdown of trees that we will lose if we undertake our project.

Fourteen pines and one double pine: pine trees are not rare; they are native trees; these trees have reached half their estimated life span; they are not considered hardwoods; they are aesthetically pleasing in that they are evergreens.

Four oak trees: oak trees are not rare; they are native trees; these trees have reached one quarter of their estimated lifespan; they are considered hardwoods; they are deciduous trees but are not particular stand-outs for fall color.

Two poplar trees: poplar trees are not rare; they are native trees; these trees have reached one half of their estimated lifespan; poplar is a hardwood; while not considered an ornamental tree, poplars do flower, and are known for their yellow autumn color.

One sycamore tree: sycamore trees are not rare; they are native trees; this tree has reached one half of its estimated lifespan; sycamore is a hardwood; sycamore is a large shade tree with nice white peeling bark, but sycamores are prone to disease issues, and drought issues which cause them to drop leaves.

One sweet gum and one double sweet gum: sweet gum trees are not rare; these trees have reached one quarter of their estimated lifespan; they are considered hardwoods; sweet gum are known for bright fall color and spiky gumballs.

We will be adding well over 100 deciduous/evergreen trees.

We kindly request permission to remove the 24 trees listed on our tree table and shown on our demolition plan.

COMPLIANCE WITH ARCHITECTURAL STANDARDS FOR DOWNTOWN DEVELOPMENT, VISION 2020, DOWNTOWN CIRCULATION STUDY, DOWNTOWN CARRBORO NEW VISION

a. Architectural Standards for Downtown Development: Architects response contained in attachments. UPDATED

b. Vision 2020 document: The following elements of Carrboro Vision 2020 are fulfilled by South Green:

- 2.11 We are a model infill development. We are improving a public road, adding sidewalks, and creating buildings that are compatible with the mill-like aesthetic of Carrboro.

- 2.23 We are removing invasive kudzu and working within the guidelines of Appendix E-17 of the LUO.

- 2.42 South Green has a design aesthetic is consistent with the character of Carrboro. The

buildings are evocative of old mill buildings like the many found in Carrboro. These are four sided buildings as opposed to a strip with a façade.

- 2.43 Our tree shading exceeds the requirements of the LUO.

- 3.1 Our development has appropriate buffers, does not compromise the integrity of existing neighborhoods, and will, in conjunction with NCDOT, have a positive environmental impact of remedying existing flooding.

- 3.312 South Green is connected to pedestrian areas. We are increasing Carrboro's walkability.

- 3.361 We have talked to local business owners in every category.

- 4.0 South Green will improve auto, bicycle and pedestrian traffic. We are improving pedestrian traffic by creating a walking destination, adding sidewalks and crosswalks. We are improving bicycle traffic by extending the Carrboro bike path. We are improving auto and bicycle traffic by creating a roundabout that will ease congestion caused by cars turning left onto Old Pittsboro Road, and will at the same time have a traffic calming effect.

- 5.41 We have hired an energy management engineer and have met with Environmental Planner Randy Dodd and are pursuing the best green building techniques practicable.

c. Downtown Circulation Study:
(A.4) we are fixing storm water drainage systems. (A.14) we are adding a modern roundabout – increasing vehicular and pedestrian safety. (C 12.) Our roundabout will calm traffic on Greensboro Street. (E.) our bike path improves bike-ability.

d. Downtown Carrboro, New Vision document: While our proposed development is not technically in the downtown area we recognize that we are in a central location that is both a gateway to Carrboro and accessible to downtown by foot, bicycle and auto.

· Buildings: Our design aesthetic is evocative of the mill-like character of Carrboro.
· Walkability: South Green will enhance the walkability of Carrboro by providing a new destination, along with new, well-lit sidewalks that are buffered by planting strips.
· Crossings: Both the retail development and the roundabout will offer well lit crossings with highly visible markings.
· Lighting: Our LED street lighting offers safety, minimized light spill and energy efficiency.

· Roundabouts: we are creating a roundabout on South Greensboro Street that will ease congestion and calm traffic.

· Bikes: South Green will have two covered bike racks, and will extend the Carrboro bike path from South Greensboro Street to the Roberson Greenway.

· Gateway: The improved look and usefulness of the gateway to Carrboro from Smith Level Road will not only calm traffic and ease congestion, but will also announce arrival to the Town of Carrboro.

FOUR REQUESTS FOR EXEMPTIONS TO OR ALTERNATE STANDARDS TO SPECIFIC STANDARDS OF THE LUO

1. STREET LIGHTING: WOODHILL NC is lighting the entire exterior of the project with LED building and parking lot lights on 15 foot poles, increasing initial purchase costs by a factor of four from the typical cobra head High Pressure Sodium. Cut sheets for the LED parking lot lights are attached to this application. Foot candle analysis is also submitted with this application.

Studies have stated that the widespread adoption of LED lights could remove the need for 20 nuclear power plants nationwide. While LED parking lot and street lights are the wave of the future, Led Street lights are not yet permitted on streets in Carrboro. Since the area around the intersection is already LED, this is the perfect place to try them out.

Since Rand Road is a public ROW passing through the property, town staff has informed us that town standard street lighting will be required. The town street lighting standard contained in Appendix A-26 (Public Works Street Lighting Policy) and attached hereto allows only the very cobra headed High Pressure Sodium that we are striving to avoid. Moreover this standard requires (as town staff have informed us) that cobra headed HPS lighting the intersection must be on a 25 to 30 foot pole, where as our network is on 15 foot tall poles (as required by the LUO). Appendix A-26 states “Alternative lighting fixtures and poles are not acceptable”.

In this instance town policy would force Woodhill NC to install a vastly inferior and energy wasting street light that would overtop and conflict in color, intensity and height with our carefully crafted LED lighting plan. The contrast in quality of light will be vastly different and visually unpleasant. Please see photo above.

What we propose instead is that two of our 15 foot tall LED luminaires be wired to remain on all night long. A foot candle analysis demonstrating that the of the intersection lighting thus achieved is within standards has been submitted with this application.

The last paragraph of A-26 states that “this policy may be amended at anytime with the support of the Director of Public Works, the Town Manager and the board of Aldermen. Woodhill NC asks that the Board of Aldermen allow the alternate intersection LED street lighting plan submitted with this application.

2. STREET SECTION:

Carrboro’s street planning guide is designed to promote the orderly construction of suburban residential street network .The LUO section for collector streets calls for an 11’ travel lane, a 4’

bike path, a 3' planting strip (also referred to as devil strip) and a 5' sidewalk. In South Green, we are building a unified bike path that runs all the way through our property in another location rendering bike paths along the street redundant. Since the bike path is elsewhere, the ROW can decrease in overall width.
NCDOT is also requiring a 3' raised median between the travel lanes, which is not anticipated in the LUO collector street section.
Those two changes (raised median and remotely located bike lanes) give Rand Road a different section than the one contained in the LUO. The section contained in this application for the collector portion of Rand Road on each side of the DOT required 3' raised median is as follows: 11' travel lane, curb and gutter, 2' planting strip and a 5' sidewalk.

In accord with section 15-216(j) Woodhill NC requests the board of alderman allow the construction of a 3' raised median and the construction of a planting strip at a width of 2' (instead of 3') in a ROW of 50 feet, because the combo promotes public safety while keeping overall section widths close to town norms.

3. STREET TREES: Section 15-315 requires one 2" caliper street tree every 30 feet, both sides. Town staff has informed us that this provision is intended primarily for residential streets (where the trees could occur in residential lawns) and indeed we find it would conflict with our landscape plan. As they mature, trees in the frequency required by this provision would over shadow and rob necessary light from the plantings in our parking lot buffer planter (explained in our landscape section above). Instead our plan proposes a smaller number of much larger 6" caliper trees, each within the required 200 sq ft of landscaping area per tree. Pictures of the relative tree size difference are attached to this application. As the pictures show, a smaller number of 6" caliper trees have a lot more impact than 2" caliper trees and, in combination with the parking buffer plantings and LED street lights, create an attractive and balanced streetscape. We still exceed the shading requirements in the ordinance.

In accord with section 15-309 Woodhill NC requests a deviation in the street tree requirement as per the flexibility provisions of section 15-309.

4. REQUEST FOR FLEXIBLE ADMINSTRATION UNDER 15-292: The following factors mitigate the parking required for South Green, reducing the number of parking spaces actually needed below those produced by the matrixes and scenarios.

BICYCLES: The Comprehensive Bicycle Transportation Plan call for bike traffic to travel on Old Pittsboro Road. That plan also call the intersection of Old Pittsboro Road and South Greensboro St unsafe and calls for it to be improved, which we are doing. South Green is also extending the Roberson bike path to South Greensboro St. The Bike Plan also calls for signage to be added for the bike path, which South Green is doing. We expect that extension and it's signage to increase awareness of the bike path and its usage, thereby, in combination with the roundabout, increasing non-vehicular access to South Green.

BUS: South Green is on the Carrboro Loop of the J Route of Chapel Hill Transit, providing easy and quick bus access to and from downtown Carrboro. The Chapel Hill loop of the J Route offering access to downtown Chapel Hill, the university and the hospital is a short distance south on South Greensboro St. The CM route of Chapel Hill Transit passes close by at

the corner of Merritt Mill and South Greensboro. All of these bus routes increase non-vehicular access to the restaurants and shops of South Green.

PEDESTRIAN: There are 985 addresses within 1500 feet of South Green, the vast majority of which are residential.

In addition to those dwellings, NCDOT is completing work on a sidewalk network on Smith Level Road south of the bypass that will connect to South Green, thereby allowing increased pedestrian communication with previously isolated residential single family and multifamily developments south of the bypass extending south along Smith Level Road to and including Culbreth Road and its neighborhoods.

There is an existing sidewalk connection to downtown Carrboro through Roberson Place. We are aware that a sidewalk from downtown Carrboro is in the Carrboro CIP and we hope it will be constructed soon.

The construction of a roundabout at the intersection of Old Pittsboro Road, Rand Road and South Greensboro St will calm traffic and increase the safety of pedestrians accessing South Green or simply walking by on South Greensboro.

Within South Green, there is an extensive pedestrian network.

All of these connections, pedestrian, bus routes and bike ways, will make non-vehicular access to South Green easy and convenient, justifying a reduction in the number of parking places built.

We therefore ask the BOA, in accord with Section 15-292, to allow a reduction of parking built from the estimated maximum load contained in our 5 scenarios of 203 spaces to the 172 (171) spaces shown on our site plans, a 16% reduction.

ATTACHMENTS:
Please Note: All attachments are unchanged since previous submission, and are available by request.

1. Architect's Response to Downtown Development Standards
2. Communications with Roberson Place homeowners association, and permissions granted and denied.
3. ~~Structural calculations from Neville Engineering~~ OMITTED
4. Two letters from NCDOT
5. Cut sheets for LED parking lot lights
6. Color photos of landscape plants and trees and tree heights
7. Letters from utilities
8. Notification map 1000 feet
9. Neighborhood meeting form, attendance sheet and summary
10. T.I.A. executive summary
11. Signage calculation
12. New detailed stormwater calculations from Ballentine and Associates. ONLY 2 SETS OF PLANS INCLUDE THIS LARGE DOCUMENT PER TOC REQUEST
13. Complete T.I.A.
14. ~~Parking lot shading calculations~~ INCLUDED ON TREE SHADING PLAN.
~~15. Letter from Geotechnologies, Inc re Permeable Pavement Suitability~~ OMITTED.
16. Solid Waste Management Plan
17. Nationwide Maintenance Permit from Army Corps of Engineers.
18. Appearance Committee Meeting Minutes – September 4, 2014