NEW URBANISM IN THE TRIANGLE: HOW CAN IT BE PUT INTO PRACTICE?

AN ASSESSMENT OF TWO NEIGHBORHOODS

By

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The New Urbanism movement has had an impact throughout the country, including in the Triangle region of North Carolina. As a reaction to “sprawl”-style development, New Urbanism advocates several key principles which outline what makes a successful, livable place. This paper analyzes two neighborhoods in the Triangle, Trinity Heights and Southern Village, as examples of New Urbanism style development. In addition to a surface evaluation of their integration of New Urbanism principles, this analysis seeks to identify how the developers of these two neighborhoods were able to accomplish these New Urbanism styles of development within the confines of the local jurisdictions’ zoning and subdivision regulations, and other rigid development standards.

I. Quantifying New Urbanism

What Makes a Neighborhood?

The neighborhood I grew up in doesn’t have a name. It isn’t a “subdivision” or a “development,” but just a neighborhood. The houses – all different styles, ages, and sizes – sit close together, with short front lawns facing the streets. The shady backyards divulge well-traveled paths from backdoor to backdoor. The roads are narrow and mostly quiet, and neighbors talk to each other from their front lawns. A main avenue stretches from the neighborhood to downtown, a short walk downhill. Some of the neighbors walk down to the avenue to catch the bus on their commute to work. During the week, there’s a crossing-guard sitting at one intersection in the neighborhood, there to watch over the children walking to the elementary school three blocks away. The teenagers ride their bikes downtown to the upper schools, bumping along buckled sidewalks. Large trees, responsible for the buckled sidewalks, shade the streets and lawns all summer, and create enough leaves to make huge leaf piles lining the curbs in the fall.
There are countless neighborhoods throughout the country that, for many reasons, do not embrace any of those characteristics. Instead, these neighborhoods feature wide, unconnected streets, many ending in cul-de-sacs. The houses, usually with similar architecture and facades, are all set back the same distance from the street. There are often no sidewalks, but plenty of wide driveways leading up to multi-car garages that front the street-side of the houses. The trees, if any, were most likely planted by the developer who laid out the neighborhood, and are all the same variety and size. Rigid regulations requiring minimum street widths, setbacks, and other development standards, coupled with developers’ interests in streamlining and maximizing profit, result in a recurring pattern of these nondescript residential developments. The “development,” as these neighborhoods are usually termed, often has just one entrance onto a larger feeder road, where sometimes many other developments are also connected, as well as the area’s shopping and employment centers. At these entrances, large signs and landscaping distinguish one from another, and display the development’s name.

These subdivisions and developments have been termed “sprawl suburbs” by academics and newspaper reporters. They have been blamed for a multitude of societal problems including environmental degradation, center city decline, and rising childhood obesity rates.¹ There are many explanations as to why they exist, starting with federal housing programs after World War II, the rise of automobile dependence, and even the invention of the air conditioner.² However, there has also come to be recognition in recent years that people do not all want to live in these “sprawl suburbs.” Although they

have arisen out of increasing attempts to accommodate new tastes and new levels of
efficiency and safety, these developments have seemingly sacrificed many neighborhood
features that people enjoy. There has been recognition of this shift from living in
“neighborhoods” to living in a “development” and subsequently, a reaction.

**Introducing New Urbanism**

The spearhead of this reaction to the “sprawl suburbs” has been the New
Urbanism movement. In 1993, the Charter of the New Urbanism was drafted by several
thinkers who called themselves the Congress for the New Urbanism. In the brief, two-
page Charter, the Congress identifies their stance on the current state of development, and
lays out twenty-seven principles “to guide public policy, development practice, urban
planning, and design.”³ Separated into three levels of application – the region, the
neighborhood, and the block – these principles identify the key characteristics of what
makes a successful place, from the entire metropolis down to the fine scale of one
building.

The ideology of the movement is to restructure public policy and practices in
order to promote the development of places that are: *diverse*, both in the way they are
used and in the type of people who inhabit them; *accessible* in a variety of modes,
focused more on the pedestrian, and less on the automobile; *defined* by physical
boundaries and public spaces and institutions; and *integrated* into the existing landscape,
local history, climate, and societal fabric.

For the level of the neighborhood, ideological principles of New Urbanism
emphasize creating a sense of place, responsibility, and pride for the neighborhood’s

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residents. They advocate that this is done by forming identifiable areas through design and use. In terms of design, the principles champion compact, pedestrian-friendly, interconnected street networks. The design of houses and buildings should be managed with illustrated urban design codes in order to preserve local character, create harmony between neighborhoods, and guide change. Uses should be mixed together, and easily accessible to one another. Housing should be available in a range of sizes, styles, and prices. Civic, institutional, and commercial activity like restaurants, grocery stores, shopping areas, churches, offices, schools, and parks, should be embedded within the residential areas to create identifiable centers and to promote more pedestrian access.

The elements of a New Urbanism neighborhood sound very similar to the first neighborhood described above. Although that neighborhood wasn’t described as “diverse, accessible, well-defined, and integrated,” it does embody these four components when closely assessed. However, there is a difference between applying these ideals to an existing neighborhood and applying them to a new neighborhood. Picking out the elements which make an established area a successful and enjoyable place to live, work, and play, is significantly simpler than applying these ideals to a concept plan. However, in an acknowledgement of the desirability of these styles of development, there are developers in the Triangle who have attempted the difficult task of building New Urbanism style neighborhoods from the ground up.

**Putting New Urbanism into Practice**

It is not difficult to ascertain that the ideals of New Urbanism themselves can be tricky to integrate into a new neighborhood design. Putting conceptual principles like
“diversity” and “definition” into blueprints is a challenge in itself. However, there is another, usually more significant hurdle preventing developers from building places like the ones advocated by the Congress for the New Urbanism. Many local jurisdictions have strict regulations which, although in the best interest of their citizenry, do not easily allow for the features of a New Urbanism style development. Zoning and subdivision ordinance regulations are usually the culprits which prevent flexibility. Furthermore, these codes and ordinances can sometimes defer to even more exacting application through required approval from engineering or public works departments. The result is usually a tricky set of rules, restrictions, and guidelines which establish just one acceptable path for a developer to follow.

Regulations set in place to keep people safe, to protect the local government from lawsuits, or as one component of larger federal legislation, can easily be enough to cause a developer to abandon any New Urbanism concept plans. And the result, therefore, is the more easily implemented, although often less desirable alternative – “sprawl suburbs.”

Local Exceptions to Sprawl Suburbs

Despite the regulatory roadblocks to building a New Urbanism style development, some planners and developers have still attempted to tackle the challenge. Two local examples are the Southern Village development in Chapel Hill, and the Trinity Heights development in Durham.

The Southern Village development is what many would term, “Traditional Neighborhood Design” or a “Neo-Traditional Development.” The website maintained by
the builder espouses New Urbanism ideals in his description of Southern Village as “a new old neighborhood” where families can walk up to the market or the movie theater, children can cut through the woods on their way to school, and neighbors know each other’s names.⁴ The development is relatively large, and somewhat independent from the rest of Chapel Hill. Built on a greenfield site, it includes a center district for commercial, civic, and institutional uses, surrounded by different types of residential neighborhoods.

Also a project influenced by the ideology of New Urbanism, Trinity Heights embodies the philosophy on a different scale, as a much smaller infill project. Adjacent to Duke University’s East Campus, the neighborhood was originally a gaping hole in the historic “streetcar suburbs” of northwest central Durham. Focused on blending harmoniously with the existing area, it now includes several single-family houses and a small townhouse development, as well as two pocket parks.

These two neighborhoods serve as examples from which an analysis can be made about the hurdles to implementing New Urbanism. But first of all, it is important to assess the two developments in terms of how they were able to incorporate the principles of New Urbanism. Do they accommodate the principles of diversity, accessibility, definition, and integration? Do they address the principles of a neighborhood as defined by the Charter for the New Urbanism? Once this is established, the more important question of “How?” is asked. The analysis will evaluate how the two New Urbanism style developments were able to be accomplished considering the regulatory restrictions on them.

II. How do Local Examples of New Urbanism Measure Up

*New Urbanism Features of Southern Village*

Driving into the main entrance of Southern Village, you find yourself on Market Street, about a mile and a half from downtown Chapel Hill. The street travels around in a long oval, fronted by some coordinated building facades. There are a handful of stores including a small community-owned grocery, a florist shop, an Italian restaurant, and a four-screen movie theater. A stone church marks one corner of the entrance, facing several two-story office buildings. An apartment building sits at the far end of the town center, and window boxes on the second-story windows of the other storefronts indicate that apartments sit up there as well. In the middle of the oval there is a parking lot and a large, landscaped green.

From here, the green, you have a view of most of the rest of the community. Streets radiate off of Market Street, forming a connected web of residential areas. In addition to the apartments off the town center, there are also condominiums and row townhouses. About two blocks from the town center, the streets are lined with single-family houses. Some are set close together, almost like townhouses, with small gardens separating them from one another. Shared alleys set behind these houses and the townhouses allow for backyard garages and no driveways. Traveling further, the mix of housing types increases, with some of the homes become significantly large. All the streets are lined on both sides with sidewalks and small, newly planted street trees. Practically every house, although somewhat similar to one another, is different, yet almost all of them boast a front porch.
The site itself is approximately 300 acres, offering about 1,400 dwelling units, 80,000 square feet of commercial retail space, and 145,000 square feet of office space. There is a public elementary school on the site, about two blocks from the town center, and a public middle school borders one edge. School children walk or ride their bikes. While the town center is on one end of the site, next to the entrance off of the main thoroughfare, a community/recreation center sits in the geographical center of the site. There are soccer fields, tennis and basketball courts, a sand volleyball court, and a community pool, as well as a small club house. A greenway travels through the center of the development, next to the community center. It offers bike paths connecting back up to the main thoroughfare and provides a buffer around a creek on the property. There are also three man-made ponds on the site to help alleviate stormwater flows. A park-and-ride lot has been built off the town center, near the main thoroughfare, and transit stops are included throughout the entire site.

When evaluating Southern Village in terms of the principles of New Urbanism, it is generally a very successful implementation, although not without some caveats.

**Diversity**

The residential housing types throughout South Village were originally meant to provide for a wide variety of affordability, and thus, a wide variety of residents. However, the popularity of the neighborhood has promoted a rapid increase in housing values and rental rates. Therefore, the majority of the neighborhood is currently occupied by residents with a relatively high level of wealth.
In terms of diversity of uses, the neighborhood is still primarily a residential neighborhood, but its small town center and community center provide for some alternative uses. For example, the local grocery is probably not large enough to satisfy all the needs of the residents, but it can be a convenient option for making a quick stop to pick up necessities, or a forgotten item. In addition, there are some office uses, the church and the school, a handful of commercial uses, and many opportunities for entertainment and recreation with the restaurants, movie theater, community center, and numerous parks.

**Accessibility**

The focus on creating a walkable, interconnected street network is evident in Southern Village. Designing for pedestrians was a clear goal, as portrayed by the multitude of walking paths and sidewalks throughout the community, as well as the narrow street widths and the lack of driveways.

The park-and-ride lot and the integrated transit system provide for alternative transportation options, and are well-used. The bike path running through the community also provides an alternative mode of transportation, and it is a convenient option for many students riding up to the middle school outside the community.

**Definition**

Southern Village does not lack definition. This is due, in part, to its location, the efforts of the homeowners in the area, and a successful design. Being somewhat separate from the rest of Chapel Hill, in a location on the outskirts of the developable area for the Town, Southern Village has been able to turn inward
for a sense of community. This is also coupled with strong community design elements, specifically the town center and the associated green, as well as a multitude of community-run programs and events.

However, probably one of the most significant reasons for the sense of community in the development is the location of the elementary school. The school plays a major role in connecting a huge majority of the residents, as many are families with children of grade school age. It promotes greater interaction between neighbors, and establishes a sense of common pride for the residents of Southern Village.

**Integration**

As a project that was built on a mostly blank slate, on a greenfield, it is difficult to claim that Southern Village is integrated into the region in which it was built. The architecture reflects a “southern” influence, but it is modeled more after turn-of-the-century urban areas, not vernacular architecture of the farmland it was built upon. Even so, it has been integrated well into the rest of Chapel Hill. The close proximity to the main thoroughfare of 15-501, the schools, the transit system, all tie the development into the greater community.

Also, as with many dense, New Urbanism style developments, the site is focused on intensive human use, and is insensitive to the local ecology. The stream buffer and stormwater ponds pay heed to environmental concerns, but are little compensation for the large amount of impervious surface and loss of vegetation throughout the site.
The combination of good design elements and a wide variety of uses within Southern Village have created a neighborhood that generally embraces the principles of the New Urbanism movement. Although the development misses the mark on some points, as a project that was built from the ground up, the developers of Southern Village were successful in building a New Urbanism neighborhood; and perhaps more importantly, the developers were very successful in creating a neighborhood that people enjoy to live in and be a part of.

**New Urbanism Features of Trinity Heights**

For many years, the north side of Duke University’s East Campus faced a large vacant lot. Today, looking across the street, the view is of a cohesive historic neighborhood. Large trees line the streets, sidewalks frame small front lawns, and the neighborhood homes look as if they are original to Durham’s streetcar suburbs.

Two small configurations of brick, Georgian-style townhouses face the edge of the University, with an open archway centering the large block and beckoning down into an internal alley. Deeper within the tree-shaded streets that frame the development, the townhouses give way to single-family homes, designed in the craftsman architectural style. It is difficult to determine which were existing and which were part of the infill project, as they are all in the same slightly varied bungalow style. The homes sit close to the street, and close to each other. No driveways separate the lots, as the alley running through the center of the block provides rear automobile access. In addition, many of the rear garages also boast upper story garage apartments.
On one street, the block is broken up by a small pocket park nestled into the fabric of the neighborhood. The park is embraced by a low stone wall, modeled after the stonework found on Duke’s campus. Another park is located on a corner lot positioned on the opposite edge of the block from the University side. The grassy corner park displays a “Trinity Heights” sign and features a prominent oak tree.

Trinity Heights sits on approximately five and half acres, over one full and one half city block. There are a mix of fifteen townhouses and twenty-five single-family residences within the development. One of the key components of this development is that all sales are subject to restrictive covenants only allowing faculty and staff of Duke University to purchase and reside within the dwellings. This is a program established by Duke to promote employee home-ownership within the Durham community.

The project’s most noticeable accomplishment is how seamlessly it, as a new development, was able to infill the area so successfully. In this situation, New Urbanism and a historic neighborhood are woven together in a side-by-side comparison. So how does Trinity Heights hold up according to the New Urbanism principles?

**Diversity**

As a small development project, focused only on two city blocks, Trinity Heights does not provide too many options for a mix of uses, and is primarily residential, with the small parks providing some recreational outlets. However, because it was located in an existing mixed-use area, the residents of the development are within walking distance to a variety of institutions, including the University, and nearby churches, as well as a main shopping and commercial area in Durham, Ninth Street.
Furthermore, the types of dwellings constructed on the subdivision also provide for a variety of living situations, and therefore, a variety of types of people. While young couples or retirees may be attracted to the townhouses, and families to the single-family houses, the garage apartments provide rental opportunities for students or other singles. However, all of the owners and primary residents of these properties are restricted to be affiliated with Duke University. In some ways this prevents diversity. Nonetheless, it is arguable that bringing in these faculty and staff members actually increases the diversity of the type of residents in the area.

**Accessibility**

Because Trinity Heights was incorporated into an existing streetscape, it functions very successfully, both for pedestrians and automobiles. The perimeter of the project is focused on the pedestrian, boasting the wide sidewalks protected by mature shade trees, and houses set close to the street with large front porches. Paths cut through the two parks, both of which are designed at the human scale to function as “outdoor rooms.” The massive tree in the middle of the corner park provides both a draw to the space as well as a sort of “roof” for pedestrians; the stone wall encircling the other pocket park defines the space and creates a sense of community ownership. In addition, pedestrian flows are connected to the network outside Trinity Heights, as the surrounding mixed-use areas are all within walking distance.

Yet, as is emphasized in the Charter of the New Urbanism, the development also accommodates automobiles. But rather than take away from
the pedestrian access, the alley cutting through the middle of the block adds a functional space for cars that is away from the pedestrian activity of the street.

Furthermore, transit options are available as well. Both the city and regional bus systems have stops nearby, in addition to the free on-campus bus system servicing the University, where the majority of the development’s residents are employed.

**Integration**

Greenfield New Urbanism projects often come up short in their lack of integration into the existing landscape. As an infill project, this is the component of New Urbanism in which Trinity Heights excels. The architecture, mix of housing types, narrow lot sizes, shorter set backs, tree cover, and even details like lighting and stonework, all run cohesively from Trinity Heights into the surrounding area. The architecture and the mature shade trees play a key role in this seamless transition, allowing the site to appear older and more established than it actually is. But the developer also took great care with the details – the stone wall surrounding the pocket park is modeled after the stone wall encompassing the adjacent East Campus. The stone itself was brought in from the same quarry as the Duke stone. The effort results in a perception that the neighborhood was built at the same time as the campus.

From a societal viewpoint, Trinity Heights also plays a role in integrating the University into the surrounding Durham community. What was once a vacant lot, a gap in the neighborhood’s fabric, and a hole in the interaction between Duke
University and Durham, is now a connection. Members of the University community are now also members of the Durham community.

**Definition**

Although there are some signs surrounding the Trinity Heights, as an infill project, it is difficult to ascertain exactly where it begins and ends. Yet this does not necessarily take away from how well the development establishes and defines itself. As an infill project, Trinity Heights plays a key role not just in defining itself, but in the defining the greater neighborhood. The project has invigorated the area, spurring new investment and rehabilitation in the surrounding streets. It has contributed to shifting the perception of the area as being dilapidated and somewhat dangerous, to a well-cared-for neighborhood.

In addition, small details previously mentioned also work to define Trinity Heights – the stone wall surrounding the pocket park; the archway in the block of townhouses; the pedestrian orientation. Other components contribute as well, including the traditional street lights and the “Blue Devil” weathervane atop the townhouse building. These design features allow the area to feel unified and well-defined.

The attention to detail and the emphasis on the pedestrian in Trinity Heights have resulted in an infill New Urbanism project that fits cohesively into the existing traditional neighborhood that surrounds it. Although many components of New Urbanism were satisfied simply by the location of the site, the true success of the project is due to the focus on key design elements.
Restricting New Urbanism

Both Southern Village and Trinity Heights are prime examples of local New Urbanism developments. Although built on different scales, in different types of locations, in different jurisdictions, they both achieved several principles of New Urbanism. In addition to the ideology on which they are based, the two share another common theme – originally, neither one was allowed as it has been built. Although generally supported by the jurisdictions in which they were built, Southern Village and Trinity Heights both took several years to trudge through the approval process. In order to build these development projects, those involved had to jump several hurdles and find many creative solutions to restrictive regulations. For example, even though Trinity Heights is modeled after the surrounding neighborhood, there were several development regulations that did not initially allow for features that already existed next door.

These regulations, however, are not any stricter in Durham and Chapel Hill than in other jurisdictions throughout the state and the country. Yet, this style of development is in high demand, from potential residents to elected officials alike. Therefore, the critical part of this analysis is determining how these two developments were able to succeed being built in the New Urbanism style, despite the regulatory limitations.

The Analysis of “How”

In order to determine how these developments persisted, each site is assessed individually, again. In addition to a brief explanation of the history of each project, the

analysis includes a general timeline of the processes by which each was approved, specifically noting which local policies enabled these developments to be built. From there, several key challenges are identified for each development, as well as a description of how the challenges were resolved. Finally, conclusions are drawn in order to evaluate general challenges of creating New Urbanism developments within restrictive regulations.

III. How Southern Village Achieved New Urbanism Ideals

History of the Site

Following completion of new Comprehensive Plan in 1989, the Chapel Hill Town Council initiated a small area planning process for 2700 acres within the extra-territorial planning jurisdiction, termed the Southern Area. For the next two years, a series of meetings were held to evaluate the site, elicit public input, and develop a plan – and in 1992, the Small Area Plan for the Southern Area was adopted. The Plan recognized that the area was somewhat threatened by the fast-paced growth in Chapel Hill, and proposed low density residential development for most of the land, concentrating future development with a village of higher density generally located where Southern Village has now been built. A general definition of what the Plan envisioned as a “village” was also included.

“The village is an alternative to traditional subdivision development. The village is designed to encourage people to walk, ride bicycles and use public transit. It is designed so that all residents have easy access to the village center which will
have neighborhood stores, a central transit stop, and possibly other facilities, such as a day care center.”

The site which the Plan targeted for a village was selected for its prime location, just two miles from the Town’s downtown, and one mile from the University of North Carolina-Chapel Hill campus and hospital. Those that drafted the Plan recognized this location’s ability to promote opportunities for incorporating New Urbanism principles, like transit and bike and pedestrian paths to downtown.

In addition to the village concept, the Plan cited other options for protecting the rural character of the area. It identified significant environmental features of the Southern Area, and drafted several preservation objectives including protecting water quality and the Resource Conservation District.

Furthermore, the Plan also included a section on strategies to accomplish this vision. It recommended two main regulatory steps: (1) a rezoning the land for the proposed use and density called for in the Plan, and (2) implementing Conditional Use Rezoning and Special Use Permits for the development of the village.

Entering into this planning process and targeting the land for rezoning as a “village” was a major step towards encouraging a New Urbanism style development in Chapel Hill’s Southern Area. The Town Council recognized the benefits of the style of development which allowed for a mix of uses and a higher density, and sought to encourage it.

**The Approval Process**

About one year later, in 1993, D.R. Bryan of Bryan Properties submitted a Master Land Use Plan proposal and rezoning application for the land identified in the Small Area

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Plan as the village site. Bryan Properties worked for almost a year before submitting the final Master Plan, working through many preliminary details with the Town staff. The design team created a scheme based on several design charettes and public opposition was minimal.\(^7\) The Master Plan deemed the site “Southern Village” and outlined a village structure similar to what the Small Area Plan had envisioned.

In order to actually move forward with the project, Bryan Properties and their development team applied for a rezoning in order to accommodate the concept plan. The land was requested to be rezoned as Neighborhood Commercial – Conditional Use (NC-C) for the village core, and High Density Residential (15 units/acre) – Conditional Use (R-5-C) for the surrounding land.\(^8\) As a conditional use district, all uses normally allowed as a permitted use or special use are permitted only by issuance of a Special Use Permit by the Town Council. According to the development ordinance at the time, the purpose for this is to provide the regulatory flexibility and performance criteria necessary to permit a creative approach to development.\(^9\)

The development team’s plan included several districts within the village, which he planned to build in phases: the Village Core Storefront, the Village Green Entranceway Transition, the Village Green, a few Neighborhood Districts, and the Village Core Apartment District. This scheme coincided with the rezoning of the land as a village with the NC-C center core and the R-5-C high density residential neighborhoods. The rezoning was approved.

In 1993, the Master Plan was also approved, but not without many specific stipulations. In addition to requirements about land uses and the inevitable Special Use

Permits that would be necessary, the Master Plan dealt with a variety of issues that the development team had introduced in order to achieve the designs of a New Urbanism style development. Special terms and conditions were drawn up to deal with density, accessory dwelling units, transportation management including street layout as well as greenways and transit, common areas like pocket parks, and other design issues. In addition, the development team had also commissioned a set of “Traditional Neighborhood Design Guidelines” which were tied into the Master Plan as an additional, voluntarily-imposed requirement dealing with the overall design of the project.

Furthermore, the Master Plan outlined several other required ordinance regulations that are typical to any master land use plan approval. These included stormwater management, several mandatory improvements to the street network both within the project and serving the project, recreational space, Resource Conservation District stipulations, landscaping and buffers, steep slopes and erosion control, solid waste management, provision of utilities, and fire safety. As Chapel Hill had never undertaken an approval of such a large and complex development before, each of these components involved negotiations between the developer and the town council via the planning department.

As dictated by the Conditional Use zoning, a process was established by which the developer would be held to the approved Master Plan, and individual Special Use Permits would need to be approved for each “district” within the entire site. As was the original intent, the development team phased construction throughout the site, so each Special Use Permit was approved step by step as the project progressed.

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The first Special Use Permit approved was for the Northeast Tract Neighborhood and Village Green districts. This tract is primarily residential, with both attached and detached single-family houses. Differing from a typical suburban neighborhood, the tract boasts features like the interconnected street network including alleys, a protected cemetery within a small green, a connection to the proposed greenway, and a mix of accessory dwelling units. Small pocket parks were placed throughout the district, and the neighborhood has several connections and a general orientation towards the proposed village center. A lake was also proposed in this tract, within the buffer for the 15-501 thoroughfare, as a means to deal with stormwater flows. (However, as the approval process commenced, it became clear that an alternative approach to mitigating stormwater would be necessary.)

Also during this phase, a Special Use Permit was approved for the Village Core Storefront and the Village Green Entranceway Transition Districts. These two areas currently make up the majority of the village core. According to the Master Plan, the entrance area was designed as a visually integrated part of 15-501, with detached, low office buildings flanking the entry onto Market Street. From this entryway, the rest of the Village Core opens up. The Village Core focuses on providing a mixture of residential, commercial, and civic uses all restricted in size, scale, and intensity to those of a village setting. The design allows the proposed surrounding residential neighborhoods to access the Village Core through a variety of modes, and is in close proximity to the main thoroughfare of 15-501 as well as the proposed park-and-ride lot. The permit also allows

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the creation of a town green, and stipulates that it, along with other common areas, will be maintained by an owners’ association.

Following the completion of this first phase, the park-and-ride lot\textsuperscript{13} and the apartment complex\textsuperscript{14} were granted the next Special Use Permits. In addition to meeting standard off-street parking requirements, the park-and-ride lot includes pedestrian connections to the village core, and generally helps promote transit use both for the residents of Southern Village and other commuters from the area. Concern over the increased traffic potential from the 250 proposed apartments in the complex was mitigated by phasing the park-and-ride lot to be build concurrently with the construction of the multi-family dwellings. Staged development of a greenway trail and a bike lane connecting up to the main thoroughfare was also required in the permit approval.

As the construction commenced on these portions of the project, several adjustments were made to the Master Plan\textsuperscript{15} and the Special Use Permits for the Village Core\textsuperscript{16} and the Northeast Tract.\textsuperscript{17} These modifications had to go before the Town Council and public hearing. Some of these alterations were inevitable regulatory steps that the development team needed to take in order to achieve their New Urbanism vision, especially within the Town Core. The current zoning as NC-C still did not provide enough of the flexibility needed to build a mix of retail and residential uses that would create the desired urban vitality for the Village Center. In addition, other Plan and

\begin{itemize}
  \item Special Use Permit: Southern Village Park and Ride Lot. Town of Chapel Hill. Approved November 8, 1993.
  \item Special Use Permit: Southern Village – Southeast Tract – Apartment District. Town of Chapel Hill. Approved November 8, 1993.
  \item Modification of Master Land Use Plan – Southern Village. Town of Chapel Hill. Approved October 22, 1996.
  \item Modification of Special User Permit – Southern Village – Village Core Storefront District and Village Green Entranceway District. Town of Chapel Hill. Approved October 22, 1996.
  \item Modification of Special Use Permit – Southern Village – Northeast Tract Neighborhood District and Village Green District. Town of Chapel Hill. Approved October 22, 1996.
\end{itemize}
Permit adjustments were needed in order to effectively comply with the Town Watershed Protection District regulations and stipulations for being a part of the Resource Conservation District. At this time, 1996 – three years into construction, there was much more public interest in Southern Village, with a particular public outcry regarding the intensity of the development. The development team worked with the planning department in order to propose several changes to more adeptly deal with the necessary environmental regulations. The original concept plan of one lake to manage stormwater was replaced with a new concept that incorporated three man-made ponds throughout the site. Also, density issues regarding impervious surface and protection of resources were addressed with a density transfer option, and land use intensity requirements. After several contentious town council meetings, the modifications to the Master Plan and the two Special Use Permits were agreed-upon and approved.

In the final phase of construction, initiated in late 1996, a Special Use Permit was granted for the West Tract. Like the first phase, this tract was primarily residential, with a variety of attached and detached single-family houses and townhouses. Important aspects of this permit included the emphasis on dealing with Resource Conservation District and Watershed Protection District guidelines, the connections to roads and developments outside of the bounds of Southern Village, and again the implementation of New Urbanism principles with road and pedestrian connectivity, small lot sizes, pocket parks, and the “Traditional Neighborhood Design Guidelines.” As a response to the public reaction to the high level of density in this area, the developer created a plan for the West Tract that tapered densities at the edges of the development, so that the edges

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would be more like conventional subdivision lots, while the lots closer to the village center would be denser. This was an adjustment from the original vision of the Master Plan which included higher density pockets of multi-family residences scattered throughout the site. During approval of this permit, there was also an emphasis on the completion of the greenway to serve these new dwelling units. The Town required that the greenway be built concurrently with the development. Also approved at this time were Special Use Permits for the recreation site\textsuperscript{19} and the condominium development.\textsuperscript{20} The permit authorized the recreation site to maintain both public and private facilities with the pool and tennis facility being limited to members while the fields would be available to all residents of Chapel Hill.

The final Special Use Permit granted in the Southern Village project was for the Southern Village Elementary School.\textsuperscript{21} Citing of the school involved approval from both the Town Council for the Special Use Permit, as well as from the School Board. They also had to work with the County (which funds the construction of the school) and follow State guidelines. Significant features include the focus on pedestrian access in a variety of modes, the building’s two-story structure, and the collaborative partnership that was brokered between the development team and the Town in order to provide sufficient field space.

The permit to build the school, the final major Special Use Permit, was approved in 1997. The Special Use Permitting process took over four years to approve what originally was proposed on the Master Land Use Plan. Several other small final plan

\textsuperscript{19} Special Use Permit – Southern Village Recreation Site. Town of Chapel Hill. Approved Nov 4, 1996.
\textsuperscript{20} Special Use Permit – Southern Village Condominiums. Town of Chapel Hill. Approved Nov 4, 1996.
approvals have gone before the planning department and the town council, especially for new buildings being built within the Village Core. However, for the most part, the site has reached build-out.

**Challenges and Their Solutions**

Southern Village is a complex and large development project. As an attempt to implement principles of New Urbanism, it ran into some stringent regulatory roadblocks: it was a part of a Resource Conservation District and a Watershed Protection District; it included a wide variety of uses, making streamlining difficult; its success was contingent on external forces like the housing market, retail investment, and the School Board; and as a completely new approach to development in Chapel Hill, it was scrutinized by the public. However, the developer and the planning department worked diligently to balance interests and find common solutions. Several of the key challenges and their solutions are identified here.

*Challenge 1: Special Use Permits and Phased Development*

In building Southern Village, one of the overriding challenges facing both the developer and the planning department was the multitude of steps in the approval process, combined with the phasing of the project. This resulted in a process that was difficult to keep track of and manage. As the previous section explicitly describes, the Town utilized an initial Master Land Use Plan approval, and then a multitude of Special Use Permits in order to legally approve the project. This approach, using Special Use Permits, was necessary in order to provide sufficient flexibility to the developer. However, it also created a framework of approvals that was tedious, and sometimes
contentious with the public. Each of these Special Use Permits required extensive detail regarding the proposed development scheme. And all of these details could subsequently be re-assessed whenever a new permit went before the Town Council. Furthermore, when this system was combined with the phased construction plan that the developer followed, the process became even more complex and difficult. Months or even years would pass between phases, and then the Town Council would have to revisit a new series of Special Use Permit applications before the next phase could begin. Several contentious issues had to be discussed and decided each time, such as traffic and stormwater management. The process was redundant and intricate. Yet despite this complexity, there is no easy alternative to this process. The Town needs the control of being able to regulate at the detailed level of a Special Use Permit, and the developer needs the flexibility the permit allows in order to come up with creative development options that promote New Urbanism.

One makeshift solution arose as the project evolved. Often, there were instances when specific decisions could not be agreed-upon during Special Use Permit approval. In these cases, the permit would be drafted with language that would defer approval to a later step in the process. For instance, the width of alleys was a contentious issue in several Special Use Permits for residential areas. Rather than only outlining specific standards for the developer to follow, the permit states:

“Widths of the right-of-way for public alleys shall be: (a) with no curb and gutter: 30 feet; (b) with curb and gutter: 24 feet. The Town Manager may approve narrower widths on a case by case basis.”

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This last line allowing for narrower widths pending approval from the Town Manager is an example of how compromises were often able to be brokered on these Special Use Permits. Nonetheless, it was a flawed process that was difficult for both the planning department and the developer to manage, and which hampered putting New Urbanism principles into practice.

The Town is again working through the approval of what is deemed another “village” in a different part of Chapel Hill. In addition to other factors, this approval process has been significantly easier for the Town and for the developer simply because of the lessons learned from Southern Village. In addition, the approval framework at this other site is much less complex. In this situation, a developer was granted Master Land Use Plan approval to begin construction on a center village core surrounded by a dense mix of housing types and other uses. The developer subsequently built all of the necessary infrastructure in order to support this Master Plan vision. However, unlike the Southern Village project, there was no phasing of construction at this site. Once the original developer finished building the infrastructure, he then sold individual building parcels and areas to other developers (at a steeply elevated price), who then must individually apply for Special Use Permits for their particular lots. The process allows for a vision to be implemented in a less complex manner in which Special Use Permits are designated on a smaller scale, not for an entire district (as was the case in Southern Village). The contingency of this approach is that the original developer at this other site had sufficient capital in order to build all the needed infrastructure at once. In Southern Village, construction needed to be phased in order for the developer to finance future progress.
Challenge 2: Incorporating Environmental Regulations

In addition to meeting specific zoning regulations, the Southern Village development was required to meet requirements for two additional district classifications: the Resource Conservation District and the Town Watershed Protection District. These two districts are both related to protection and preservation of the health of the surrounding environment. Generally, when a New Urbanism style development is constructed on a greenfield, the ecology of the site is heavily impacted. As indicated during this analysis’ initial assessment of Southern Village as a New Urbanism development, the principles of “integration” are difficult to attain when the site is constructed from the ground up, in a naturally pristine site. The situation is no different for Southern Village, and complying with these additional district requirements was a challenge for the developer and the planning department.

Because the site is located within five miles of Jordan Lake, a drinking water source for Chapel Hill and surrounding areas, it is within Chapel Hill’s Resource Conservation District. This means it is subject to strict regulations to protect water quality, enforced through restrictions on impervious surface. Within Southern Village, there were limits which only allowed 20% of the land to be covered by impervious surface. As the construction of the project was phased, calculating this percentage became a major challenge. Trying to calculate the impervious surface percentage was a moving target. In addition, not only did the New Urbanism designs seeking Special Use Permit approval have to meet all of the Town standards, they also had to meet these impervious surface standards. Furthermore, the Resource Conservation district also
required several other standards involving erosion, flood protection, and stormwater management.

As previously mentioned, the original Master Land Use Plan for Southern Village incorporated a large lake in the Northeast tract in order to mitigate the development’s stormwater flows. However, there was concern that one lake might not be effective enough to manage the entire, high-density site. And because the lake was planned for a valley in which an intermittent stream runs, there was additional concern that changing the valley into a permanent lake may severely impact the functioning of the existing drainage network. When these concerns were explored and standards from the Resource Conservation District were applied, it became necessary for the development team to work with the planning department to redesign the stormwater management on the entire site. The resultant scheme incorporated three medium-sized ponds which were strategically built throughout the site.

Buffer vegetation became another difficult issue in Southern Village. The buffer around the stream that cuts through the middle of the development was a natural amenity that development team wanted to enhance with a greenway. The Town supported the idea and encouraged the development of a pedestrian and bike path in order to provide additional transportation options connecting to downtown. However, designating the greenway as a public path serving bicycles required it meet additional standards dictated by the Americans for Disabilities Act. This translated into a design that required a large amount of vegetation to be cleared for the path. However, this was in contradiction to the requirements of the Watershed Protection District, which enforces strict vegetation
standards for stream buffers. The development team was forced to completely redesign the buffer and the greenway in order to incorporate them both into the development.

These additional environmental regulations, although creating tricky problems, enforced the “integration” aspect of the New Urbanism into the design of the site. Without them, Southern Village could have potentially been much more detrimental to the ecology of the landscape.

*Challenge 3: Zoning*

Even with the Conditional Use zoning and all of the flexibility of the Special Use Permits, some problems still cropped up when the development team attempted to reconcile their New Urbanism concept of the Village Core with the applicable zoning. Rezoned as a Neighborhood Commercial-Conditional Use (NC-C), there were some overriding standards regarding parking and floor-area-ratios which couldn’t be adjusted in the Special Use Permit for the Village Core. If the development team had followed these zoning regulations, the Market Street area of Southern Village would not have incorporated several key New Urbanism features, such as second-story dwelling units, because the “NC” zoning discourages residential uses.

Recognizing that the zoning conflicted with the goals of a village core, the Town worked with the development team to draft a modified version of the zoning classification that used commercial land use intensities to determine appropriate floor-area-ratios for residential uses. This allowed for the dense residential uses like upper-story dwelling units, right on the green, within the Village Core. However, it essentially resulted in the series of Master Plan and Special Use Permit modifications described earlier.
Challenge 4: Coordinating with Other Town Departments

Throughout the entire development approval process there are many instances in which other Town departments are involved. This became a key challenge hampering the progress of Southern Village, specifically when it came to implementing New Urbanism principles of development. Chapel Hill’s planning department and the majority of the Town Council believed in the validity of New Urbanism and wanted to encourage the development team to proceed in building their concept in the “village” format they had envisioned in the Plan. However, these philosophies were not shared by other Town departments, such as the Public Works Department and the Engineering Department. And when it came time for these departments to make their own approvals, there were some major roadblocks and compromises.

One important exemplification of this lack of coordination is street and alley widths. New Urbanism principles advocate for a street design that protects and serves the pedestrian first, not the automobile. This is executed by building narrow streets with multiple, tight intersections, and utilizing alleys to provide access that reduces driveway cuts. In contrast, traffic engineers are concerned with managing automobile traffic as effectively as possible, and providing for worst-case access issues. This translates into an opposite approach: wide street widths and intersections. This is also the case for alleys. Although they are only meant to serve as access driveways for residents, engineering standards require that alleys maintain a minimum width as well as curb and gutter. This creates a passageway that resembles a street, defeating the purpose of the alley. In addition to these engineering requirements being in such discord with New Urbanism principles, they are standard practice, and difficult to refute.
After receiving approval for the first phase of development, this discrepancy about street and alley widths was revealed. Although the Special Use Permit had been approved, it deferred the issue to the Engineering Department. When it came time to build, all the streets within the first phase of development were mandated to be significantly wider than what the development team had originally envisioned. In the following phases, they made sure that the Special Use Permits specifically identified street widths, which the Town Council approved, bypassing involvement from the Engineering Department.

In order to deal with the issue of the alley widths, the development team elected to make the alleys private. This allowed them to be built at a minimum width of 12 feet rather than 20 feet. However, as a private alley, a new problem materialized. The Public Works Department, responsible for picking up solid waste throughout Chapel Hill, would not agree to service the alleys. This meant that homeowners would have to drag their trash to the front streets, although the service alley behind is a preferable location for pick-up. This issue was completely avoided because of a combination of factors. Initially, when Southern Village was built, it was not within the Town limits, but instead was in Chapel Hill’s extra-territorial jurisdiction. This meant that a private contractor was hired to pick up trash throughout the development. The private contractor had no problem with using the alleys. Once Southern Village was annexed, the Town was not legally allowed to fire the private contractor immediately, and instead pays the contractor to continue the service (for a limited number of years). The development team anticipated that by the time the solid waste collection becomes a Town-maintained service, Southern Village’s taxpaying residents and their political pressure would make a
more effective case to change the legislation than any the development team could have attempted.

Although these solutions were created, they demonstrate how difficult it is for a developer to implement New Urbanism principles. Even in this situation, in which the Town Council and the planning department are supporting them, the development team ran into some pivotal roadblocks that many other developers may not have fought.

*Challenge 5: Enforcement of Design Guidelines*

As previously discussed, design plays a key role in the development of successful New Urbanism style developments. In an attempt to address the design of Southern Village, the development team commissioned a set of “Traditional Neighborhood Development Design Guidelines” which were cited in the Master Land Use Plan, and thereby incorporated as an essential component of any construction in Southern Village. The guidelines outline, very specifically, the overall design of Southern Village, including building setbacks, the road network, parking, sidewalks, architecture and scale, public greens, etc. The guidelines are complete, effective if used properly, and the primary tactic the development team used to implement New Urbanism ideology. However, they are not enforceable. Because they have not been adopted by the Town of Chapel Hill, they are unable to be enforced in any manner. The main “bones” of the guidelines are already in place, as they were constructed by the development team during Southern Village’s initial inception (e.g. the street network, the sidewalks, the public spaces). However, as the development ages and changes, these commissioned guidelines can only serve as voluntary guidelines which residents can elect to follow, or not. The
planning department has already received a handful of inquiries regarding how to enforce the guidelines, without any recourse.

Although this is not a problem faced by the developer as he tried to construct a New Urbanism style development, it reveals a potential threat to the preservation of the New Urbanism principles in the future.

IV. How Trinity Heights Achieved New Urbanism Ideals

*History of the Site*

The small neighborhood of Trinity Heights has undergone a cycle of change: shifting from a farm to a vibrant residential neighborhood, then into a disinvested vacant area, and finally transformed into the stable infill development seen today. The area originally took its name from Trinity College, now East Campus of Duke University, with the title "Heights" referring to its location north, or above the College. After being originally settled as farmland and fields adjacent to the horse track (later, Duke’s East Campus), the first homes were built in Trinity Heights in the 1890s, following the development of the campus across Markham Avenue. The neighborhood was home to middle- and upper-class residents, mostly affiliated with the University. This is reflected in the architecture of existing structures from that time period. Later, in the 1920s, when the University expanded from Trinity College, several arts and crafts bungalow style houses were built in the neighborhood, and pockets of temporary multi-family apartments also sprung up. ²³

Since the inception of Trinity Heights, and as time went on, Duke University came to own a substantial number of parcels within the neighborhood. There is record of some of the dwellings being used to house visiting professors and graduate students. However, following the Great Depression, the area started to become disenfranchised. And when downtown Durham was faltering in the 1970s, the University demolished many houses in need of substantial rehabilitation. The resultant vacant lots gave the appearance of urban blight, and most likely discouraged the rehabilitation of existing homes and the revitalization of the neighborhood. The one and half block area directly adjacent to the University, later the site of the Trinity Heights infill project, remained vacant for many years.

In the late 1980s there was some tension between Duke University and the surrounding Durham community. Residents of the Trinity Heights neighborhood were concerned about Duke expanding its campus into the vacant lots, and eventually forcing displacement of the people living there.

Therefore, this highly visible block, as well as the rest of Trinity Heights, was targeted by the City in the drafting of the Northwest Central Durham Plan. The Plan recognized that the vacant land in the neighborhood was detrimental to the vitality of the area, and proposed some strategies in order to promote its redevelopment. But the focus was on redeveloping the area as a part of the surrounding residential neighborhood, not as a University expansion. It also distinguished the area as an important historical resource, and initiated its designation as a historic district. A primary strategy recommended by the Plan was to approve rezoning of Trinity Heights at a lower density. This

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recommended density would allow a mix of multi-family and single-family homes that was more consistent with the make-up of the existing surrounding development. In addition, the Plan clearly stated that some sort of unified development plan for the vacant block adjacent to campus would be ideal and preferred by the City.

However, the City also recognized that achieving this ideal vision of transforming the vacant block into a residential area was not in their hands. As the primary property-owner, the key player in this equation was the University. Therefore, the Plan addressed this straightforwardly. It concisely identified what steps could be taken by the University in order to rezone the land and get approval for a unified development plan.

By responding to the concerns of the Trinity Heights neighborhood residents, and identifying the University’s crucial role in the process, the Northwest Central Durham Plan was able to define a feasible and realistic strategy. This laid the groundwork for the eventual construction of Trinity Heights.

**The Approval Process**

With this clear directive from the City, Duke University began exploring options for redevelopment of the one-and-a-half blocks off East Campus. Under the leadership of a new University President and her new Duke-Durham Neighborhood Initiative, the University elected to build housing on this vacant land, but in a manner that would promote collaboration and interaction between the University and the community. The result was a homeownership program that utilized a covenant on the properties to restrict ownership to residents employed by the University. Although there was some concern that this approach would create a development that felt exclusive, there was also
recognition that having owner-occupied housing at this location would be a stabilizing factor, and a boon to the distressed neighborhood.  

Within the specific stipulations identified in the Plan were several New Urbanism principles. The City’s vision was for the site to be developed in the style of the existing street network and surrounding neighborhood – clearly a good fit for New Urbanism. In order to achieve these stipulations, the University recruited a development team that was committed to implementing New Urbanism style development. Then, in exchange for the covenant which restricted all future homeowners to be Duke employees, the University sold the property to the development team at very low cost. However, Duke remained an important part of the approval and development process. Working behind the scenes in many different capacities, the University used its resources and influence to help the process along.

Prior to drafting any schemes or submitting any proposals, Duke and the development team diligently provided opportunities for citizen participation, and gained public support during every step. In addition, significant time was spent in preliminary meetings with the Durham Planning Department staff and the Development Review Board to solicit guidance, and establish rapport. This collaborative approach allowed the developers to work with the surrounding property-owners and planning staff to craft a good design that was also feasible.

The first step in the process was a request to downzone the land to R-15, as outlined in the Plan. This rezoning was immediately approved, and the site was now subject to R-15 zoning regulations, as well as a historic district zoning overlay.

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Because of the size of the project, it needed to go through subdivision approval. The developers, upon guidance from the staff, elected to submit an application as a cluster subdivision. This was a tactic to allow more flexibility in design, and enabled them to employ several New Urbanism style principles. After several revisions, approval from the Historic District Commission, and eleven zoning code text amendments, the application was approved in 1999.

All parties refer to this approval process as difficult, but rewarding. From the inception of the project, there was a significant effort to work collaboratively. The Planning Department wanted to see the development occur, and consequently, worked hard to accommodate Duke and the development team. At the same time, Duke and the development team recognized that in order to have the development occur in the style that they desired, they would have to work with the Planning Department, the surrounding residents, and within the confines of the City ordinances. This approach led to mutual gains for all the stakeholders involved, and Trinity Heights is the exemplification of that.

**Challenges and Their Solutions**

Although the approval process was collaborative and a success overall, it was not without its challenges. The Planning Department and the development team had to work through several roadblocks, most of which were regulatory rather than differences in ideology. Final subdivision approval involved several text amendments to the zoning code, some special approvals by other City departments, and some creative solutions. The most significant challenges, and in most cases, their solutions, are identified here.
Challenge 1: Communicating with Surrounding Residents

As an infill development, this project impacted an existing neighborhood. And as a development that was initiated by the University, it was not initially trusted by the residents of the existing neighborhood. However, both Duke University and the development team took many steps to gain the support of the neighborhood residents. They initiated communication with the residents prior to any design scheme, and held several public comment meetings in order to respond to concerns and incorporate them into the site design.

Throughout the process, several issues became points of contention, but three significant ones were (1) the covenant restricting owners of the infill project homes to be Duke employees, (2) the location of the multi-family structures, and (3) the preservation of the large trees on the property. Although there was concern about the restrictive covenant the University placed on the homeowners, the overriding push to promote owner-occupied housing eventually won out. The University worked hard to communicate the benefits of having neighbors who live in their homes, as well as having a neighborhood receptive and attractive to their employees. The development team responded to the two other concerns, regarding the location of the townhouses and the preservation of the trees, by adjusting the design scheme. The development team shifted the location of the townhouses from a site adjacent to single-family houses to a site adjacent to the edge of East Campus. It also identified the two main trees to preserve and incorporated them into the two small pocket parks.

Promoting communication between the existing residents and the developers is a key aspect of integration, as espoused by New Urbanism. In addition, it allowed for an
opportunity to work together prior to any official submittal of application, thereby avoiding potentially contentious public hearings within the approval process.

**Challenge 2: Regular Subdivision Versus Cluster Subdivision**

When the development team first began talks with the Planning Department about initiating an application for subdivision approval, they were immediately met with their first regulatory roadblock. The design scheme they prepared included an internal alley which served several purposes. In addition to promoting New Urbanism ideals of pedestrian access, the alley allowed for a lot design that would more closely resemble the surrounding neighborhood, a goal of the City.

Yet, as a regular subdivision, many of the New Urbanism features that the developer wanted to implement, including the alley, would have gone by the wayside. The subdivision ordinance has lot size and setback requirements dictating a required minimum lot size that would have resulted in abandoning the entire alley concept.²⁶

However, staff members in the planning department alerted the developers to a special provision, a cluster subdivision, which allowed for reductions in lot size and dimensions by up to twenty percent as long as sufficient open space is provided.²⁶ The required open space set-aside could be met by park land, which was already a part of the concept plan (as another principle of New Urbanism). By using a cluster subdivision option, the lot sizes and setbacks could be reduced enough to allow for the internal alley. The development team thereby elected to submit the more complex application for cluster subdivision. This was made even more difficult by having to meet specific historic district designation requirements. The process involved a multitude of required

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calculations in order to determine an appropriate lot size. This was measured by comparing proposed lot sizes to the proposed open space set-aside, and then comparing this to calculations of the surrounding density contained by a specified 1000-foot radius within the historic district. These “calculations” were difficult to construct, and to justify. And whenever any changes were made (for other reasons, such as meeting sewer easement requirements, or engineering standards), they all had to be re-calculated, and re-checked by the Planning Department.

The cluster subdivision process allowed the developer to accomplish his New Urbanism vision of the internal alley and the narrow lot widths, but not easily.

*Challenge 3: Townhouse Design*

The two townhouse structures incorporated into the site design were supported by the planning department, the University, and the surrounding residents. In addition, they provide for diversity in housing types, as championed by New Urbanism, and reflect traditional land use patterns for the area. However, there were some zoning regulations which preventing building them in the manner proposed, requiring the development team and the Planning Department to work together to achieve the desired design.

First of all, the cluster subdivision restrictions and RM-8 zoning required setbacks of twenty feet,\textsuperscript{26,27} whereas the proposed design had much shorter setbacks. The proposed shorter setbacks were modeled after the existing building setbacks throughout the neighborhood, some of which were eleven or fourteen feet. Because reducing the setback was approved by the Historic Preservation Commission, and did not add any more units to the site, the Planning Department sought to relax this restriction.
In addition, the Durham Zoning Ordinance states, “In order to provide visual diversity, no more than six contiguous townhouse units shall be allowed with the same setback and the same façade treatment. Variation in setback must be at least two feet.”^27^ The two proposed townhouse buildings included more than six units, and were therefore subject to this stipulation. However, the design of the townhouses was based on traditional building techniques for the area, which included a straight, rather than tiered, front façade and setback. Again, once this design was approved by the Historic Preservation Commission, the Planning Department helped the development team work around the regulation.

The solution was through a text amendment. The planning department brought forth an amendment which would allow for greater flexibility in design for townhouses within historic districts, granting final approval to the Historic Preservation Commission. The Planning Commission approved the text amendment, thereby allowing the townhouses to be built as proposed.

**Challenge 4: Permitting Accessory Dwelling Units**

Incorporating second-story garage apartments was an important part of the development team’s vision. Like the townhouses, including garage apartments is a design choice that can create a wider variety of housing types within the development, a feature advocated by New Urbanism. While providing for more housing in the area, garage apartments can also promote the affordability of the single-family homes as well. Renting out a one-bedroom garage apartment is a direct way to defray mortgage payments.

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^27^ Durham City/County Zoning Ordinance. Section 4 “General Zone Districts” City and County of Durham, NC. Revised March 31, 2001.
The underlying RM-8 zone district on the site permits “accessory buildings”, but not “accessory dwellings.” Furthermore, there were several additional restrictions on the accessory buildings, including minimum setbacks, maximum heights, and maximum heated floor area.27

The first step was for a text amendment to the zoning ordinance permitting accessory dwelling units with the RM-8 zone. In addition, the Planning Department sought to deal with the other restrictions, and another text amendment was granted dealing with the setback, height, and floor area standards. It again took advantage of the fact that the proposed project was located in a Historic District, and applied for a text amendment which changed the ordinance to allow for more flexibility in the design of accessory buildings within Historic Districts, pending Historic Preservation Commission approval. The Planning Commission supported both text amendments.

Because the development team had worked so diligently up-front with the Planning Department, the several text amendments could be worked out in a fairly straightforward manner. Even so, it was another few hurdles added to the approval process, costing time, and subsequently, money.

Challenge 5: Negotiating Alley Width and Ownership

As previously mentioned, incorporating an alley into the site was a critical component in the proposed project’s design. It allowed for a layout of houses, garages, and buildings that was the most historically accurate, and desirable from a New Urbanism perspective. However, the development team ran into problems meeting the Engineering Department’s regulations.
A main concern was the portion of the alley that went underneath the arch of the townhouse building. The entrance to the alley being under the archway was a main focal point and key design component of the site, but it was not permitted on many levels. Sewer lines had to be rerouted and there were issues of setback and air-rights above a public right-of-way. However, the planning department worked on a creative solution in which the portion of the alley directly under the arch would be considered private and owned by the resident residing directly above it. This worked because a main concern was having limited utility access under the arch. By considering this small portion private, the utility vehicles technically do not have to service it, and are able to come from the other direction and turn around, never having to travel under the archway.

The other problem was the width of the alley. The Durham Reference Guide for Development\textsuperscript{28} states that an alley must be constructed fifteen feet wide. However, the development team determined that this width would not work for Trinity Heights. They proposed maintaining a twenty-foot right-of-way, with a ten-foot wide paved alley. All the alleys throughout Trinity Heights and the neighboring historic area of Trinity Park are ten feet wide. In addition, they argued that a fifteen-foot wide alley would promote excessive speeds and parallel parking.

After meeting with the head traffic engineer, and making the case for a narrower alley, the development team was granted a special exception. However, this regulation was not adjusted permanently. Furthermore, both this and the right-of-way issue were significant roadblocks during the approval process.

Challenge 6: Light Pollution Ordinance

Another major hurdle arose when the development team was confronted with compliance with the city-wide light pollution regulations. These regulations, which city lights are exempt from, place specific limits on the lumens permitted to shine on neighboring property.

The development team intended to use lamp-post style streetlights throughout the Trinity Heights project to increase the perception of it being an established, historic neighborhood. However, since these streetlights were not considered city streetlights, they were subject to the light pollution ordinance. After several meetings to grant a variance, there seemed no alternative but to give up the idea of the lamp-post style lights. However, the development team later came up with the solution of placing the lamp-posts on the property lines between two lots, claiming that half of the lumens were on one property and half were on the other. Finding this loophole enabled the lamp-post style streetlights to be used, but demonstrates how strict regulations prevent for a creative design idea, even one that most would consider an amenity.

Challenge 7: Trees in the Planting Strip

One of the main features of the Trinity Heights project was that it boasted a significant number of mature trees, both within the property, and along the streets. The fully-grown street trees are prime amenities that support New Urbanism principles, making the infill project work cohesively with the existing surrounding neighborhood. The large trees integrate the new site into the existing environment, and welcome pedestrian activity on the street. However, the zoning ordinance stipulates that a certain
number of trees must be preserved, and for all those that are cut, a certain percentage
must be replanted.29

This was not a problem until the development team learned of the strict
interpretation of this regulation by the City’s Urban Forester. According to her, the trees
within the planting strip could not be credited towards this requirement, and none of the
new trees could be planted within the planting strip. In essence, the planting strip and the
street trees were not eligible to be considered a part of the site. This was mainly a result
of the Public Works Department concern that street trees are a hazard.

The development team met with the Urban Forester and the head of Public Works
to petition to allow new trees in the planting strip and crediting of existing street trees,
but no progress was made. Finally, instead of waiving the requirement, they petitioned to
change it and sought another text amendment. This one, approved by the Planning
Commission, allowed new trees in the planting strip, and credits for existing street trees,
as long as it was within a historic district. This allowed the development team to
proceed, but again demonstrates how a strict, and perhaps flawed, regulation was
changed for only one zone overlay, not universally.

V. Conclusions about Putting New Urbanism into Practice

The challenges identified throughout this analysis are valuable examples of
typical hurdles faced by developers attempting to implement creative designs and New
Urbanism principles. In addition, they reveal some key considerations about the process
as a whole. The Southern Village development project was achieved through regulatory

29 City/County of Durham Zoning Ordinance. Section 10 “Buffer and Landscaping Requirements” City
flexibility, balanced by multiple government reviews. In contrast, the Trinity Heights development worked within the confines of the regulations, and dealt with problems in a piecemeal manner. There are benefits and drawbacks of either approach. But neither would have been successful without the cooperation and coordination with the local jurisdictions’ planning departments and elected officials.

Brokering Flexibility

By applying for conditional-use zoning, the Southern Village development team anticipated a flexible approval process that would enable them to implement all of the components of their concept design, in one way or another. Although the general concept was built, and although there are several features in Southern Village that exemplify the flexibility of conditional-use zoning, it was clearly not a smooth process. The multitude of required special use permits all needed thorough evaluation, rather than streamlined approval like most standard permits. The approval process was often contentious, overly detail-oriented, and simply put, confusing and difficult.

However, as demonstrated by the ease with which Chapel Hill’s second conditional-use site has been approved, perhaps both the town and the involved developers have learned some lessons from the experience of building Southern Village. In time, if New Urbanism and other creative and alternative designs become more prevalent, the ease with which they are approved may also improve.

Finding Creative Solutions

The development team that built Trinity Heights worked from start to finish searching for innovative ways to gain the flexibility they needed. Applying the cluster subdivision option, redesigning the concept plan, and skirting a few unyielding issues by
taking advantage of their historic district designation are all examples of creative solutions to their problems. However, the unique situation of this site is a crucial element that cannot be overlooked. Having the support of Duke University, a highly influential stakeholder, played a major role in convincing the city to be flexible. In addition, having historic district designation proved to be a significant asset that allowed for text amendments and changes to the zoning code that were relatively easy for the planning commission to approve. Sites not located in Duke’s backyard, and not within a historic district would probably have a much more difficult time implementing the creative solutions that were able to be utilized in Trinity Heights.

Even so, it was the development team and the planning department that worked to make the most of this unique situation and to come up with inventive solutions that allowed the project to be built as it was intended. Their creativity allowed them to work within the confines of the city’s regulations, but still develop a New Urbanism style neighborhood.

*Constant Communication*

The overwhelming lesson to be learned from both of these examples is the emphasis that both development teams placed on constant communication. Prior to beginning any approval process, both developers worked hard to gain support for their projects and to establish trust and rapport with the planning departments. Not only did this make the process less contentious, it made the planning department staff willing to go above and beyond their normal responsibilities to work with the developers. The detailed special use permits necessary to approve Southern Village, and the variety of creative solutions employed to build Trinity Heights both demonstrate how the staff
support and involvement was critical. In addition, communication with the public and with elected officials also can resolve potential issues and challenges. The value of fostering collaboration and cooperation throughout the approval process cannot be underestimated, and it is evident that without it, these projects would have had a much more difficult road.

New Urbanism may not be the solution to all of society’s ills, as many advocate. In the long run, it may not even prevent “sprawl suburbs.” However, if these two local projects are any indication, then New Urbanism is a popular success. The Southern Village neighborhood has enjoyed real estate appreciation rates significantly higher than the rest of Chapel Hill, the town green is packed on movie nights in the summer, and the elementary school’s mascot, Scrogg’s Froggs, are on t-shirts throughout town. Meanwhile, Trinity Heights boasts a negligible vacancy rate, there has been significant investment in surrounding properties since its construction, and graduate students and professors alike can be seen walking across the street towards campus in the morning. There is a thriving market for the New Urbanism style developments like these. Yet, there are still significant challenges to implementing creative New Urbanism designs considering the regulatory limitations. Today’s cities and towns need to recognize the discrepancy between what citizens desire and what is allowed.

Not only are Southern Village and Trinity Heights good examples of New Urbanism, they are good neighborhoods. Fortunately for their residents, the developers and planning departments who worked to build them had the insight and the persistence to build them in the way they envisioned, despite the regulatory obstacles.