



CONCORD PARKWAY /
ROBERTA CHURCH ROAD
SMALL AREA PLAN

This Plan was prepared for the City of Concord:

City of Concord Elected Officials

J. Scott Padgett, Mayor
David W. Phillips
Jim Ramseur
Allen T. Small
Alfred M. Brown, Jr.
W. Lamar Barrier
Dr. Hector H. Henry II
Randy Grimes

City Staff

Administration

Brian Hiatt, City Manager
Jim Greene, Deputy City Manager
Annette Privette, Public Information Officer

Business and Neighborhood Services

Jeff Young, Director
Steve Osborne, Deputy Director
Karl Fritschen, Urban Design Manager
Catherine Russo, Executive Assistant



Project Team



Craig Lewis, AICP, CNU Principal in Charge
Dave Malushizky, AIA
David Walters, RIBA
Catherine Thompson, LEED
S. Chad Hall
Ellen Cervera



Stephen Stansbery, AICP
Nik Nikolaev, ASLA, RLA



Kathleen Rose, CCIM
Diane Carter, CCIM



Landscape Architecture - Land Planning - Site Construction Documents
Tom Harrington, RLA

We would like to thank the City of Concord and the numerous citizens who participated in this first exciting small area planning process. This effort is a reflection of the community's vision and serves as the foundation for growth and development in this area. It is intended to guide the leaders of today and the visionaries of tomorrow.

*Craig Lewis
Principal in Charge*



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



| | |
|-------------------------------------|----|
| Executive Summary | 1 |
| Existing Conditions | 2 |
| Land Use Plan Summary | 4 |
| Existing Zoning | 5 |
| Public Design Charrette | 6 |
| Market Analysis | 8 |
| Transportation & Circulation | 13 |
| Sustainable Design | 19 |
| The Conceptual Plan | 21 |
| Weddington Neighborhood Center | 22 |
| The Neighborhood | 24 |
| The Mixed-Use Campus | 26 |
| Concord Farms Road South | 29 |
| The Great Wagon Road | 31 |
| School Site | 33 |
| Concord Parkway Neighborhood Center | 34 |
| Southside Employment Area | 36 |
| Transect Zone Classification | 37 |
| General Development Patterns | 38 |
| Development Analysis | 41 |

© 2005 by the City of Concord, North Carolina, and The Lawrence Group Architects of North Carolina, Inc.
Reproduction Permitted with Credit in Print

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Executive Summary

Overview

From November 29th through December 6th, 2004, planners and designers with The Lawrence Group, Rose & Associates, Southeast, Inc., Henson-Harrington, Inc., and Kimley-Horn & Associates, Inc. collaborated with the City of Concord to develop a vision for 780 largely undeveloped acres between the Coddle Creek floodplain and the proposed George W. Liles Parkway extension to Roberta Church Road. Weddington Road and Concord Parkway serve as the respective northern and southern boundaries of the plan area.

This area was identified in the 2004 Concord Land Use Plan as one of 10 Mixed-Use Districts. “Mixed-Use Districts are large areas at key intersections of major corridors; occurring in high-growth areas where the infrastructure can support denser development. The nature of these Districts is to allow them to evolve over time into an area that is made up of several different land uses, usually centered around some sort of public transit facility, which affords people the opportunity to live, work, shop and, in some cases, have immediate access to recreation facilities in one general area. The intent is that the mixture of uses in an area will work together and function as an integrated center allowing for pedestrian connections between developments and uses.” (Source: 2004 *City of Concord Land Use Plan*)

The Conceptual Plan that resulted from the visioning effort focuses on four key areas. First, it suggests a proposed alignment and design for the George W. Liles Parkway extension. A number of alternative alignments were evaluated and ultimately the easternmost path was preferred. This plan recommends the construction of a true parkway that includes a wide median planted with trees and separate multi-use paths on both sides. Finally, the plan shows an at-grade intersection with Concord Parkway, but preserves a trajectory for the future construction of a full single-point diamond interchange.

Second, the plan reserves locations for key civic structures including a school and a fire station. To supplement the community park and transportation systems, the plan recommends the extension of a greenway along the Coddle Creek floodplain as well as the preservation of key open spaces throughout the area. The path of the “Great Wagon Road” or “Old Stage Route,” purported to be traveled by President George Washington in 1791, is preserved as an active interpretive trail. Additionally, a multi-use path system is recommended along the north side of Concord Parkway.

Third, the plan establishes the location of major activity centers. A neighborhood center could be located on the north side of Concord Parkway. This center would likely be anchored by a grocery store or a large specialty retailer. A second, smaller commercial node could be located at the intersection of George W. Liles Parkway and Weddington Road. And, in the center of the area, the Plan recommends that any development be organized as an urban, pedestrian-friendly campus utilizing a grand boulevard.

Finally, the Plan recommends the creation of new zoning districts and design standards that are keyed specifically to this Conceptual Plan. Clearly, there should be adequate flexibility to accommodate shifts in market demand, but these standards should ensure a high level of quality for development in terms of both design and environmental sustainability.

Implementation

The Concord Parkway/Roberta Church Road Small Area Plan, when adopted, shall become a part of the Concord Land Use Plan. Future development decisions should be guided by the principles outlined in this Plan as well as the general intensity and land use patterns described herein. The Plan recommends creating standards in the City zoning Ordinance (UDO) requiring a mix of uses and design standards for all areas designated as Mixed Use Districts in the Land Use Plan. Such tools may include the creation of a new zoning district, overlay district, floating zone, text amendments to existing districts, or a combination of these methods. All Mixed-Use and Village Center districts will have design guidelines regulating building form and placement, building façade treatment, mixture of uses, landscaping, parking, and pedestrian amenities. Implementation strategies will be adopted separately from this Plan.

Key Principles of Sustainable Development

1. Mix Land Uses
2. Take Advantage of Compact Building Design
3. Create a Range of Housing Opportunities and Choices
4. Create Walkable Neighborhoods
5. Foster Distinctive, Attractive Communities with a Strong Sense of Place
6. Preserve Open Space, Farmland, Natural Beauty, and Critical Environmental Areas
7. Strengthen and Direct Development Towards Existing Communities
8. Provide a Variety of Transportation Choices
9. Make Development Decisions Predictable, Fair, and Cost Effective
10. Encourage Community and Stakeholder Collaboration in Development Decisions

Adapted from the Principles of Smart Growth - <http://www.smartgrowth.org>

Conceptual Development Opportunity

| | |
|---------------------|--------------|
| Residential Lots | 90 Units |
| Urban Residential | 1,390 Units |
| Retail | 190,400 sf |
| Small Office | 227,400 sf |
| Flex Space | 476,500 sf |
| Office (Class A) | 558,000 sf |
| Mixed-Use | 1,634,600 sf |
| Civic/Institutional | 309,400 sf |

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Existing Conditions

The study area is comprised of 780 acres located between the Coddle Creek floodplain to the west, the Philip Morris plant to the east, Weddington road to the north, and the south side of Concord Parkway. When viewed in the regional context, it is one of the last large, undeveloped areas in western Concord.

Aside from a few scattered retail buildings along Concord Parkway and the last remaining buildings of a farming operation along Concord Farms Road, the area is cleared and undeveloped. The eastern border is also contiguous with the proposed alignment for the Westside Bypass (also referred to as the extension of the George W. Liles Parkway).

Surrounding Neighborhoods

The study area has a number of mature neighborhoods bordering it as well. Sheffield Manor lies to the east, Carriage Downs, the Woodlands and Covington are to the north and west, and Roberta Farms lies to the south.

Propst Farm

The largest portion of the site, owned by the Propst family, was once a thriving duck farm. Those operations have long since ceased and now only limited farming and agricultural activities continue on the site. The property is gently rolling towards the creek. Aside from a number of obsolete poultry buildings, the site has few distinguishing characteristics. Though there are a number of rock outcroppings, there are only a few significant stands of trees and two watering ponds.

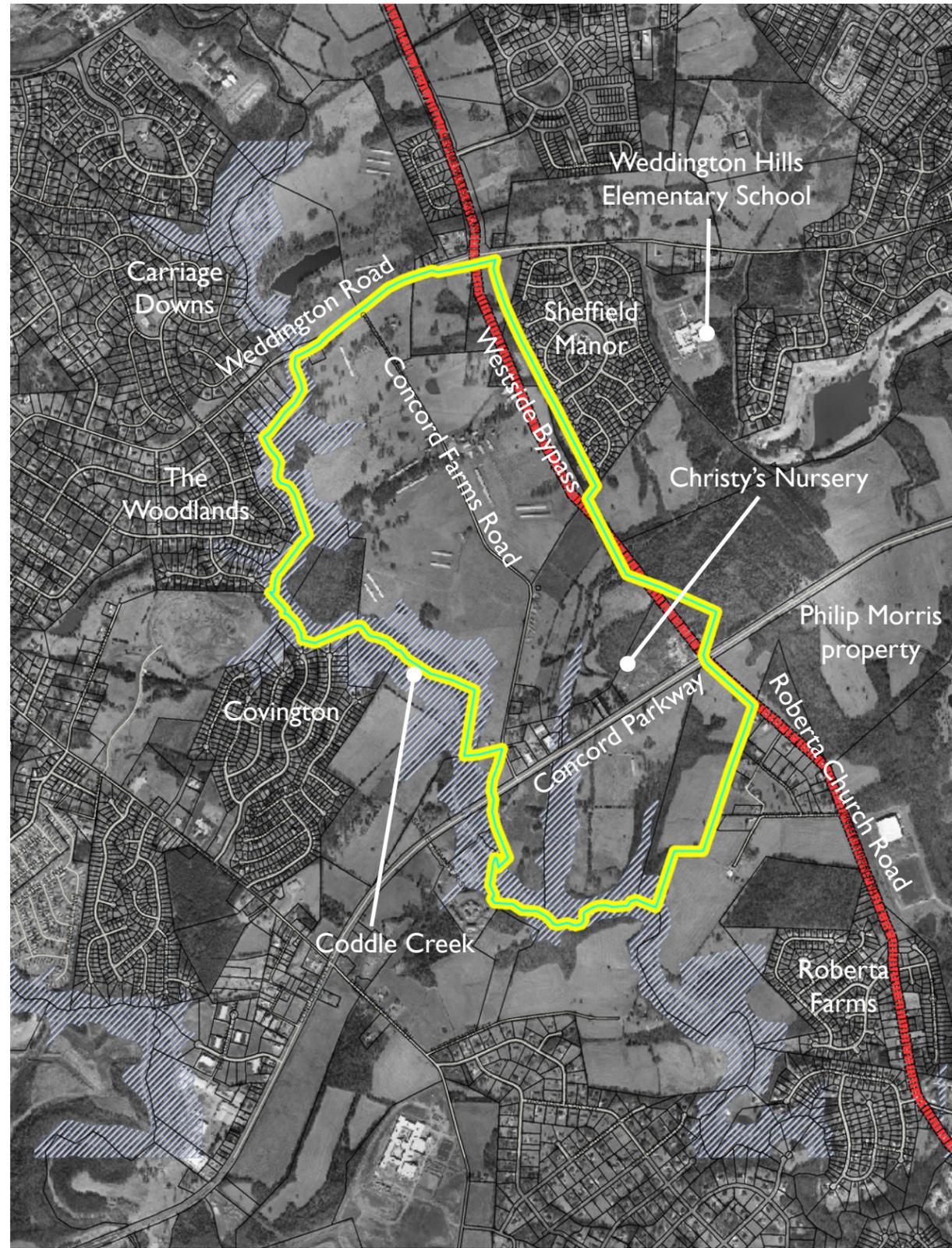
The most significant feature of the site is the presence of very large electrical transmission poles along Concord Farms Road. The poles were recently installed by the City of Concord electric system. In addition to the high steel poles, there are also a number of wood poles that serve as local “drops” for the homes and buildings along the road. They also appear to carry other aerial utility services such as telephone and cable.



High power line towers along Concord Farms Road



Coddle Creek near Weddington Road



Map of the study area showing the surrounding neighborhoods

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Coddle Creek

Coddle Creek, a meandering stream and floodplain along the eastern boundary of the study area has banks as wide as 12-16 feet in places. Further upstream, it has been incorporated into Dorton Park, a 24 acre park with tennis courts, playground equipment, soccer fields, Frisbee Golf, a 1.1 mile gravel walking trail, picnic shelters, restrooms and a concession stand. Dorton Park is located in Afton Village, a traditional neighborhood between Poplar Tent Road and George W. Liles Parkway.

The 100 year floodplain surrounding Coddle Creek is quite significant even though it's headwaters are impounded as Lake Howell. Coddle Creek travels southeast past Frank Liske Park and eventually ties into the Rocky River.

Christy's Nursery

Christy's Nursery is located east of the creek along Concord Parkway and occupies approximately 20 acres. As part of the Christy family holdings, there are an additional 75 acres to the north of the nursery. This family-owned operation has been in this location for many years and provides landscaping materials and services to residential and commercial customers throughout the Charlotte region. Much of the nursery stock is grown by the Christie family in other locations in North Carolina. The northern side of the current nursery operations is a tributary of Coddle Creek. This tributary is also within the Coddle Creek floodplain.

South Side of Concord Parkway

On the south side of Concord Parkway are a number of tracts owned by the Roush Corporation and Philip Morris. Previously proposed as a race shop with a test track, this petition was denied and the land has remained undeveloped. It is the former home to an equestrian center and has the same rolling topography as the rest of the area with a gentle slope towards the creek. There is an existing hedgerow that separates two parcels that meet at the intersection of Concord Parkway and Roberta Church Road. Additionally, there is another parcel on the west side of the creek tributary.

Philip Morris

To the east of the study area is the campus of the Philip Morris-Concord Plant. This massive facility is surrounded by a formally and informally landscaped buffer. The company has maintained a significant amount of preserved land creating a

parkway along both sides of Concord Parkway. This parkway is noteworthy for two reasons. First, it serves as a visually calming transition from the hustle and bustle of the Lowe's Motor Speedway area to the suburban retail area around the US 29/US 601 bypass. Second, Philip Morris has installed a brown fence along the its boundaries on both sides of the road. This fence is very typical of rural farming areas, but creates a unique appearance in this rapidly suburbanizing area.

Westside Bypass

The long planned Westside Bypass is being constructed in phases along its planned corridor as funding will allow. The first phase from Poplar Tent Road to just past NC 73 is complete. The current street section is a four lane road with a continuous two-way-left-turn lane and no sidewalks or landscaping. This phase also included a new interchange with I-85.

At the time of the charrette, clearing and utility relocation had begun on the next phase extending the five lane section south from Poplar Tent Road to Weddington Road.

In Concord, this bypass has been formally renamed as the George W. Liles Parkway. The section in Kannapolis north of I-85 is referred to as Crisco Road/Kannapolis Highway.



View across the Probst family farm



The parkway landscaping along Concord Parkway

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Land Use Plan Summary

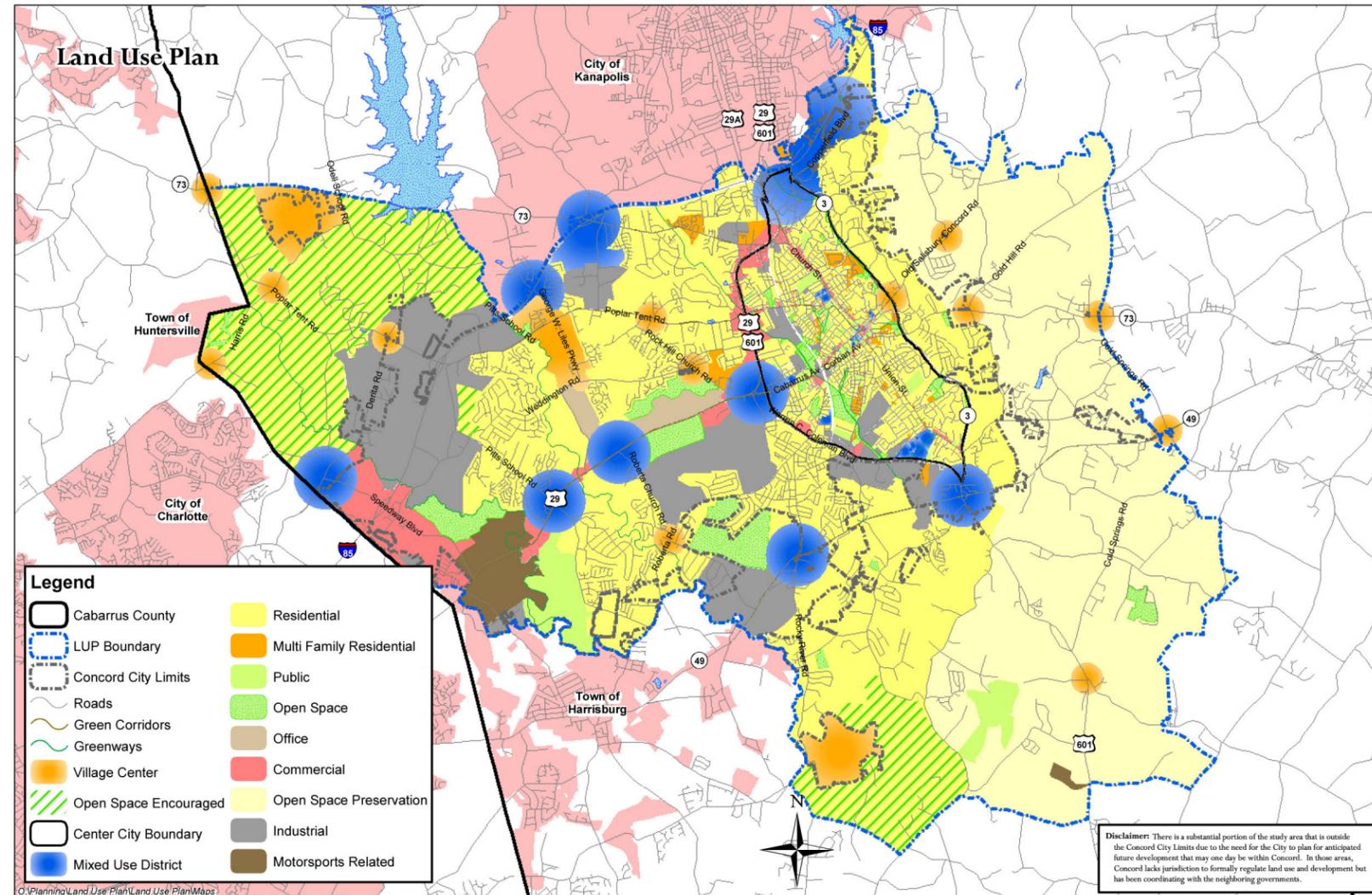
This area was identified in the 2004 Concord Land Use Plan as one of 10 Mixed-Use Districts. According to the Plan,

“Mixed-Use Districts are large areas at key intersections of major corridors; occurring in high-growth areas where the infrastructure can support denser development. The nature of these Districts is to allow them to evolve over time into an area that is made up of several different land uses, usually centered around some sort of public transit facility, which affords people the opportunity to live, work, shop and, in some cases, have immediate access to recreation facilities in one general area. The intent is that the mixture of uses in an area will work together and function as an integrated center allowing for pedestrian connections between developments and uses.” (Source: 2004 City of Concord Land Use Plan)

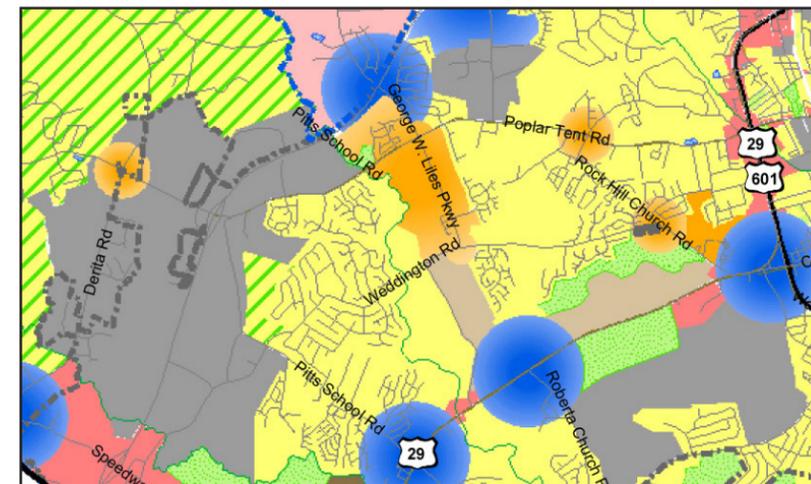
The Plan goes on to further identify certain land uses which are appropriate for this specific Mixed-Use District.

With the completion of George W. Liles Parkway, this District will include direct access to both I-85 and Highway 49 making this site ideally situated for office uses, as well as commercial and residential uses. Limited light industrial uses could also occur in this area. Uses Recommended – Commercial/Residential/Office/Light Industrial

The Land Use Plan is intended to serve as the framework for the Small Area Plans for the Mixed-Use Centers, of which this Plan is one. To that end, the Land Use Plan establishes the regional context including major transportation infrastructure, green networks, and general concentrations of employment, commercial activity, and neighborhoods. This Plan refines the recommendations of the Land Use Plan by evaluating the Land Use Plan’s goals on a site by site basis and creating a micro-framework on which specific development/redevelopment decisions can be made.



City of Concord Land Use Plan



Highlighted area of the Land Use Plan for this Small Area Plan

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

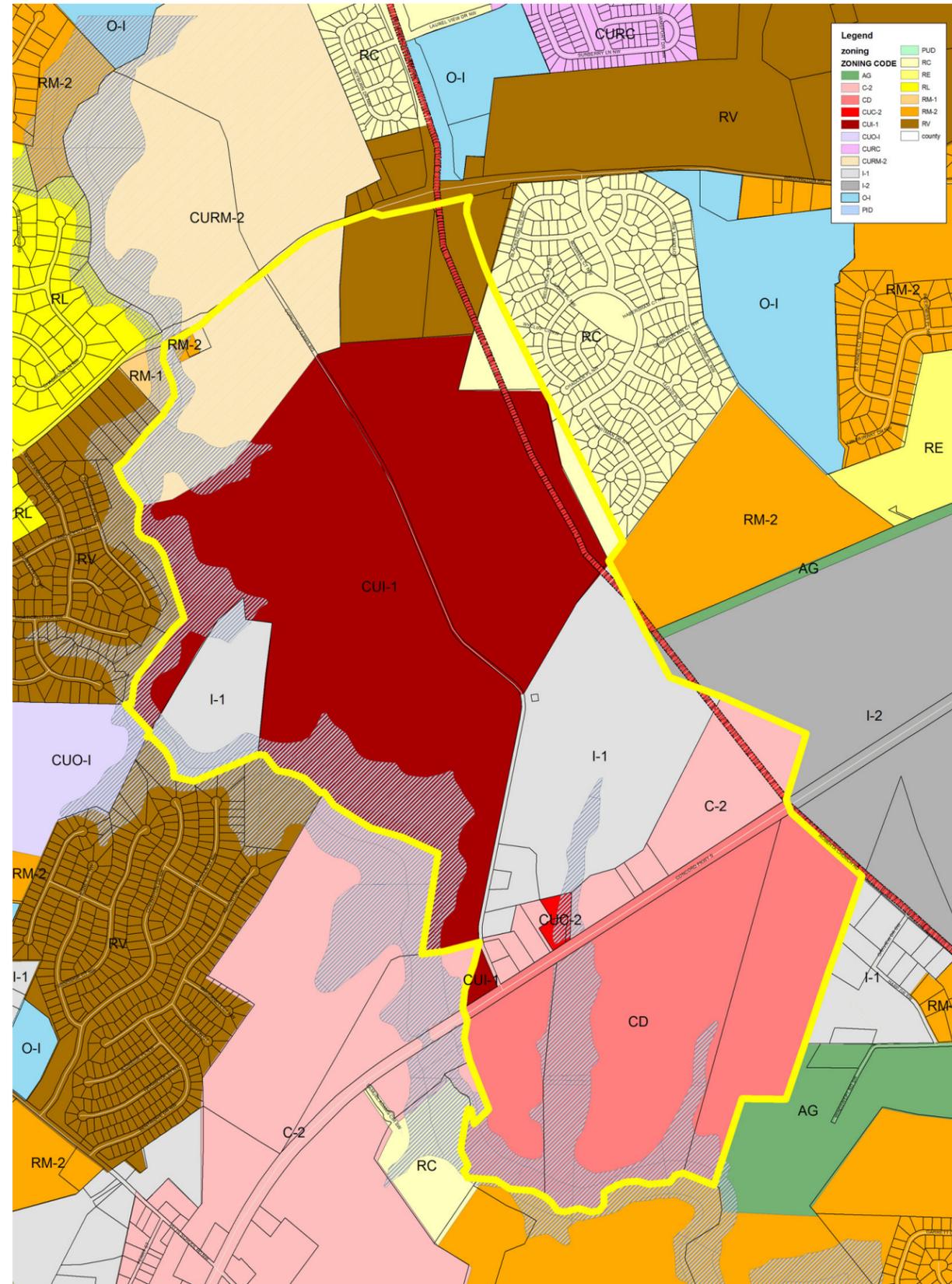
CITY OF CONCORD, NORTH CAROLINA

Existing Zoning

The study area contains nearly every zoning category available in the City. A summary of the applicable district provisions is below.

- AG – Agricultural District: Agricultural preservation areas.
- RE – Rural Real Estate: Low density SF uses; max 1 dua
- RL – Residential Low Density: Low density SF; max 2 dua
- RM-1 – Residential Medium Density: Medium density SF; 3 dua max., where adequate public facilities exist
- RM-2 – Residential Medium Density: Medium density SF; 4 dua max., where adequate public facilities exist
- RV – Residential Village District: Detached and attached SF with max. of 8 dua; design controls included ordinance.
- RC – Residential Compact: High density residential including SF attached, up to 15 dua; design controls included
- O-1 – Office and Institutional: Office and institutional uses; retail/wholesale trade prohibited.
- C-2 – General Commercial: General commercial activities; located on or near major thoroughfares
- CD – Campus Development: Mixture of employment and/or institutional uses; may include light manufacturing, office, warehousing, distribution, institutional and limited retail in campus setting with architectural design standards. Includes supplemental design standards:
 - no retail establishment greater than 70,000 sf. GFA
 - No more than 30% of property may be used for retail or commercial services
 - Minimum of 20 acres
 - Open space must comprise 20% of gross project area
 - All buildings or clusters shall be connected with sidewalks, paths, bikeways
 - Architectural Style and Appearance Requirements apply
- I-1 – Light Industrial: Mix of light manufacturing uses, office park and limited retail and services in business park setting. Should have direct access to thoroughfare.
- I-2 – General Industrial: Heavy and concentrated fabrication, manufacturing and industrial uses.

CU indicates that a site has a Conditional Use Zoning



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Public Design Charrette

A 5 day planning and design charrette was used to guide the planning process. This effort began with a kickoff meeting on November 29th consisting of an opening presentation and an interactive workshop.

Following the kickoff meeting, the publicly driven design charrette was held from November 30th through December 2nd, 2004 at the Alfred M. Brown Operation Center. A temporary design studio was set up in the Center, complete with design tables, meeting areas, computer equipment, and a presentation area. Numerous citizens and public officials attended this comprehensive workshop during the five day period. Throughout the week, meetings were held to discuss various topics related to the area's future including downtown retailing, signage, transportation, and parking.

The charrette concluded on Monday evening, December 6th with a full digital presentation of the plan's recommendations. This vision, intended to guide the area's future growth, is based on the consensus gained by the area's interested citizens, the City of Concord, and The Lawrence Group team.



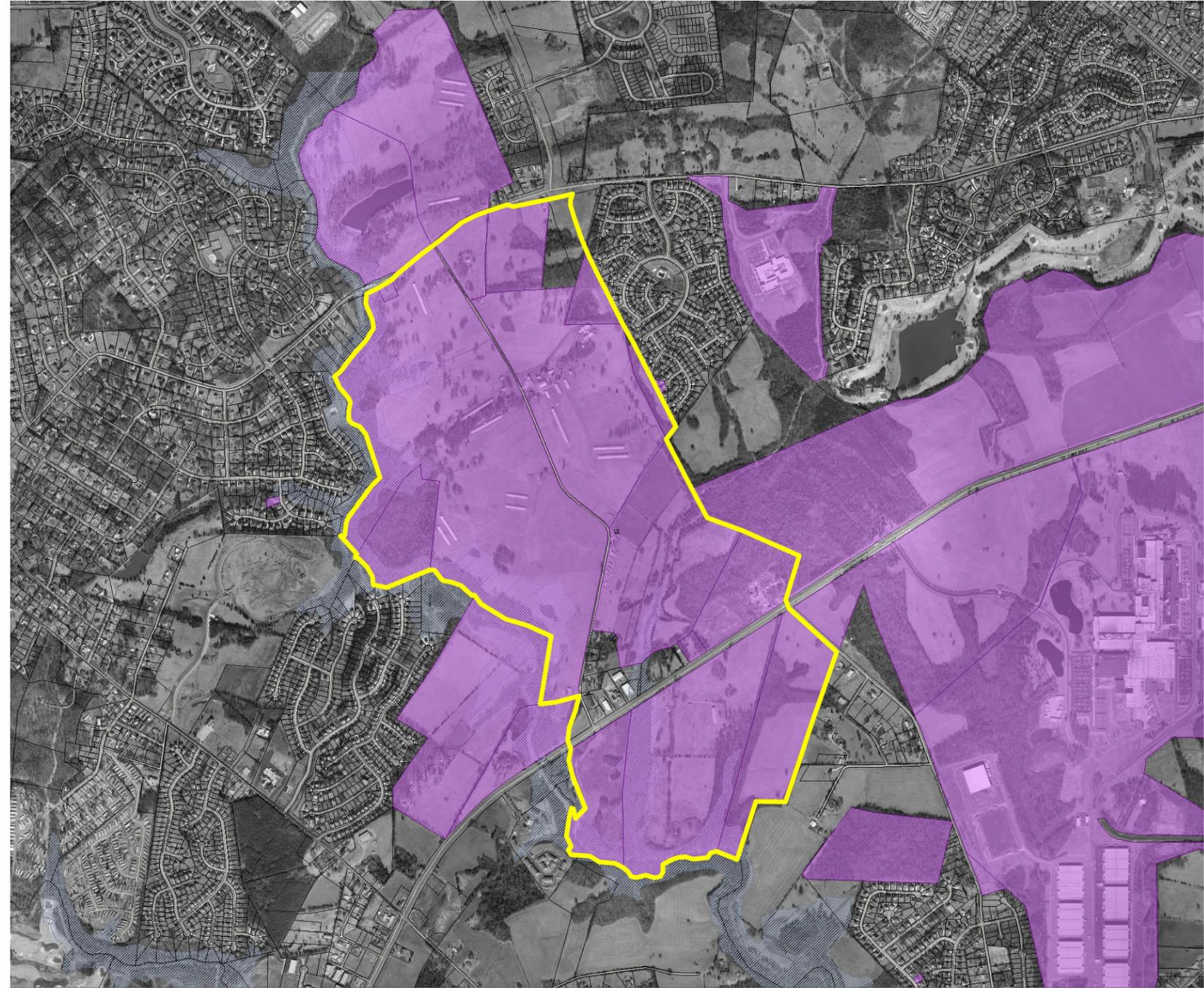
| | Monday 11/29/2004 | Tuesday 11/30/2004 | Wednesday 12/1/2004 | Thursday 12/2/2004 | Monday 12/6/2004 |
|-------|---|---|---|--|---------------------------|
| 9:00 | Breakfast | Breakfast | Breakfast | Breakfast | X |
| 9:30 | 9:00 Design Studio Setup | 9:00 Parks & Rec 9:00 Bob Dowless & Mark Kincaid - Concord Parks & Rec. 10:00 Doug Stafford & Bob Rourke - LMS | 9:00 Hold for Additional Meetings 9:00-10:00 Cherie Collins, Neighborhood Planner 9:00-10:00 Randy Holloway, Concord Fire Chief 10:00 Cabarrus Co. Schools | PLANNING & DESIGN | |
| 10:00 | Tour of Study Area | 11:00 Environmental Protection | 11:00 Hold for Additional Meetings | | Lunch |
| 12:00 | Market Study | Lunch | Lunch | PLANNING & DESIGN | |
| 1:00 | Presentation and Lunch | 1:00 Utilities Allen Scott - Env. Services Bill Seamone - Electric Joe Wilson - Streets Mark Fowler - Wastewater Henry Waldroup - Water Paul Campbell - Engineering | 1:00 Hold for Additional Meetings 1:00-2:00 Jonathan Marshall, Rodger Lentz - Cabarrus Co. 1:30-2:30 Carol Lovin - NEMC | | |
| 2:00 | NCDOT | 3:00 Codes and Development Standards 3:00 - 4:00 Dev. Services Dept. | 3:00 Hold for Additional Meetings 3:00 Ryan McDaniels - CEDC | 5:30 Pin-Up Session and Project Update | |
| 5:00 | 5:00 Dinner with Committee & Elected/Appt'd Officials | 5:30 Pin-Up Session and Project Update | 5:30 Pin-Up Session and Project Update | | |
| 6:00 | | Dinner | Dinner | X | 6:30 Reception |
| 7:00 | Opening Presentation and Facilitated Design Session | 7:00 Local Residents and Neighbors | 7:00 Local Residents & Neighbors | | 7:30 Closing Presentation |

Charrette Schedule



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



Map showing charrette participation by property ownership

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Market Analysis

Note: This Section was adapted from a report by Rose and Associates as a supplement to this Plan.

The Study Area

The study area is located along the Highway 29 corridor at Roberta Church Road and encompasses lands on both the east and west side of Highway 29, totalling approximately 800 acres. Within the study area is a planned widening and connection of Roberta Church Road and George W. Liles Boulevard, which would connect the southeastern area of town to Interstate 85 at exit 54.

Current land uses include agriculture, low-density residential and general commercial uses. Current zoning within the study area includes: I-1-CU, I-1, RM-2, RM-2-CU, as well as C2, and CD zones. The area includes Christy's Nursery and the area adjacent to the Philip Morris facilities.

History & Perspective

Concord was settled in 1750 and officially became the county seat in 1796. It has its roots in textiles and banking, which formed its economic base through the 1800s. Today, Concord has a diverse economy that includes auto-racing, manufacturing, industrial and professional services.

Socio-Economic Considerations

A fast-growing community, Concord's population has more than doubled since 1990, and the county seat of Cabarrus County is within close proximity to Charlotte. Feedback from civic leaders, government representatives and residents suggest that the community embraces its historic roots, quality of life and small town/rural character of the type found in suburban towns. Its challenge is to maintain its identity as the area grows, while creating a "sense of place" within a community that has developed over time in a sprawling fashion along its corridors.

Findings- Community

During discussions held with Stakeholders throughout the Charrette process, the following were noted:

- Opportunities exist for the area to grow its economic base, reducing its dependency on Charlotte and transitioning from a "bedroom community".
- Employment growth will drive demand for office and industrial uses.
- Population and income growth resulting from targeted economic development opportunities will drive demand for a mix of housing types, together with support services and retail.
- Business growth related to motorsports/automotive industry and new technologies is targeted.
- The community envisions to provide opportunity and locations for business growth.
- Local leaders want to provide a range of opportunities for citizens to work, live and play within the county boundaries.
- City of Concord's Council and Cabarrus Regional Chamber of Commerce goals have established a viable framework to position the community for future growth and prosperity.

Also discussed during the Charrette was the recent *Community Assessment Report* prepared by the Centralina Council of Governments (COG). The Assessment Report provides an overview of the region's strengths, challenges and opportunities for improving its economy.

Several of the major findings of that report support Cabarrus County's opportunity to create a business and mixed-use campus. The "target industries" identified were: defense and security, automotive, software development and security, bioinformatics, optoelectronics and fuel cell technology. The Charlotte Research Institute, in conjunction with the University of North Carolina at Charlotte, is currently pursuing five of the six industries.

These target industries and those specifically related to increasing "the region's Research and Development for the motorsports and optoelectronics industries" offer Cabarrus County its opportunity for diversification of its economic base.

The area of study (the Roberta Church Road and Highway 29 site) is ideally positioned to take advantage of the motorsport industry's growth and the industries that the Charlotte Research Institute is energetically pursuing. Additionally, benefiting this site is its access to an excellent regional transportation network. Another important development in the area is the proposed Convention Center on Speedway Boulevard, scheduled to begin construction in February 2005. The convention center will have 32,000 square feet of meeting space. The City of Concord also is giving the developer 4.7 acres on which to build a 308-room hotel. This Convention Center complex will assist with the tourism associated with Lowe's Motor Speedway, Concord Mills Mall and other area attractions. Additionally, it has the potential to serve area governmental functions, potential UNCC functions, and a variety of regional and community needs.

Conclusions/Recommendations:

Below is a summary of office, industrial, retail and residential conclusions for the study area. Detailed information can be found in the commercial and residential sections that follow this market overview.

Office:

- Identified demand for medical offices
- Increasing demand for general office space
- The current oversupply of office space is expected to be absorbed within 12-18 months
- Based on current job growth estimates, 100,000 square feet of office space may be absorbed annually subject to projected employment growth estimates

Industrial:

- Current oversupply of warehouse/manufacturing
- Approximately 30% of the existing industrial product is obsolete
- Future inventory requirements are contingent upon "new technology" business growth
- Approximately 120,000 square feet of new space may be added per year subject to projected employment growth estimates

Retail:

- 75,000-190,400 square feet in two phases is recommended based on a 3-5 year absorption
- A grocery anchored neighborhood shopping center is recommended to serve the proposed residential and office growth in the study area

Residential:

- 90 residential lots and 1,390 urban residential units are recommended for the study area
- There is a current oversupply of single-family homes in the marketplace
- The study area presents an opportunity to create a variety of higher density housing types in a wide range of prices.
- Urban residential units should represent a variety of product types to serve young professionals, empty nesters, retired couples and individuals, as well as families.

Relational Review – Demographic Comparisons

To assist in gaining perspective on the relationship of the study area to its environs, the market is evaluated from a macro to micro view. There are four levels at which data is collected to achieve such perspective:

- 1) MSA – The study area lies within the Charlotte-Gastonia-Rock Hill MSA (Metropolitan Statistical Area)
- 2) County – The study area is located within Cabarrus County.
- 3) Municipality (Incorporated Village, Town, or City) – The study area is located in the city of Concord, NC
- 4) Study Area – This provides a comparison view of a radius of 1, 3 & 5-miles around the subject area.

Charlotte-Gastonia-Rock Hill MSA

The subject site is located in the Charlotte MSA (Metropolitan Statistical Area), which ranks first in population and net worth, and second in household income compared to other MSAs in the state of North Carolina. There are currently approximately 719,259 housing units in the MSA, of which 64.5% are owner occupied, 28.8% are renter occupied and 6.7% are estimated as vacant. The 2000 census indicated that the median home value was \$115,421, an increase of 60% from the 1990 census estimates. Also notable is the rise in household income in the income segments above \$50,000 during that same period.

Cabarrus County

Based upon 2000 census data, the County is comprised of a total population of 131,063 with a median age of 35.4 years. The majority of the population is educated, with approximately 50% having a high school diploma and some college (no degree), and 26% having a college degree.

53% of residents have been in residence since 1995, while 26% are from a different county and 12% from a different state. Census data ranks the County as 13th in population and 62nd in household income growth among the 100 counties in North Carolina.

The workforce is diverse in that 29% of the population is involved in management/professional occupations, 28% in sales, and 18% in production, transportation or material moving occupations. Primary industries, as reflected in the County’s economic base, are in manufacturing (19% are employed in this sector, which is above the national average), education/health (17.3%) and retail trade (12.8%). The median household income is \$46,140 with the largest percentage of households in the \$50,000-\$75,000 range. Of the total households, 54% have incomes below \$50,000.

Among households, 74% are family households, with 35% having children under the age of 18 years. Existing housing units are approximately 94% occupied, with 75% being owner-occupied and 25% renter-occupied. The total housing stock includes 52,848 units, of which 72% are single-family detached houses, with the balance being a mix of attached multi-unit housing and manufactured (mobile) homes.

City of Concord

Based upon 2000 census data, the City is comprised of a total population of 55,977, or 43% of the County’s population, with a median age of 34 years. The demographic make-up of the City somewhat mirrors that of the County. The large majority of the population is educated, with 49% having a high school diploma and some college (no degree), and 30% having a degree. 46% of residents have lived in Concord since 1995, while 31% are from a different county and 16% from a different state.

The workforce is largely made up of the same diverse characteristics as the county, with manufacturing and education/health/social services being the dominant industries, followed by retail trade. This is directly related to the location within the City of the hospital, Concord Mills Mall, Phillip

| CONCORD 2004 DEMOGRAPHIC SNAPSHOT | | | |
|--------------------------------------|----------|----------|----------|
| | 1 Mile | 3 Miles | 5 Miles |
| Population | | | |
| Total Population | 2,083 | 24,826 | 69,560 |
| Median Age | 33.4 | 34.0 | 33.8 |
| Income | | | |
| Median HH Income | \$66,714 | \$60,832 | \$51,000 |
| Per Capita Income | \$27,051 | \$25,705 | \$23,627 |
| Average HH Income | \$73,758 | \$68,550 | \$59,679 |
| Households (HH) | | | |
| Total HH | 760 | 9,364 | 27,418 |
| Average HH Size | 2.74 | 2.62 | 2.49 |
| Owner Occupied | 86.0% | 80.2% | 65.9% |
| Renter Occupied | 9.0% | 14.2% | 27.4% |
| Vacant | 5.0% | 5.6% | 6.7% |
| Race | | | |
| White | 87.5% | 86.3% | 79.5% |
| Black | 8.8% | 8.9% | 14.6% |
| American Indian, Eskimo, or Aleut | 0.4% | 0.3% | 0.3% |
| Asian/Pacific Isle. | 1.8% | 1.5% | 1.3% |
| Other | 1.4% | 2.9% | 4.2% |
| Ethnicity | | | |
| Hispanic | 3.2% | 5.7% | 9.6% |
| Non-Hispanic | 96.8% | 94.3% | 90.4% |
| Employment | | | |
| Employees* | | | 52,686 |
| Employed* | | | 94.7% |
| Unemployed* | | | 5.1% |
| Not in Labor Force* | | | 29.25% |
| Armed Forces* | | | 0.13% |

Source: US Bureau of the Census, Experian/Applied Geographic Solutions, STDB online, and CCIM based on current year estimates. Race figures may not total 100% based on race and ethnicity reporting. * Only numbers gathered were for a 5-mile radius.

Morris and other manufacturing. The median household income is \$46,094, with the largest percentage of households in the \$50,000-\$75,000 range.

There are 22,460 total housing units in the city, of which 72% are single-family detached houses and the balance is a mix (under 10% each) of attached, multi-unit housing and manufactured housing. 72% of households are family households, with 35% having children under the age of 18 years. Existing housing units are approximately 93% occupied, with 68% being owner-occupied and 32% renter-occupied.

Market Area – Subject Study Area

The site was evaluated using a 1, 3 and 5-mile radius. The profile indicates trends similar to that at the City level, with some notable exceptions. Growth was more dramatic in the 1-mile radius, than the outlying 3 and 5-mile radius levels. Further, household incomes are substantially higher within the 1-mile boundary. Between 1990 and 2000, the number of households grew 204%, 82%, and 46% in the 1, 3, and 5-mile radii, respectively. Population and income also grew significantly during that period. However, projections for 2009 show more modest growth over the next 5 years.

Market Analysis - Commercial Uses

Demand Characteristics

Economic Base Analysis is utilized to evaluate real estate demand. The underlying theme suggests that jobs drive demand for real estate: for every basic job (such as manufacturing) that is created, a multiplier effect increases overall employment (both basic and non-basic jobs, such as service related jobs), thus increasing both population and income within an area benefiting from such job growth.

Over the past few years, Concord has enjoyed sustained prosperity and growth as a community. Concord benefits from its proximity to the Charlotte MSA, which has also shown substantial population and income growth. In addition to population growth, job growth in the non-manufacturing sectors has increased, demonstrating its transition from a manufacturing to a non-manufacturing (service-oriented) economy. As a result of this white-collar job growth, coupled with a quality of life that has attracted professionals and young families, growth in population and household income has occurred. This directly relates to real estate demand that includes residential housing (of a variety of types/styles) and

commercial (office, service and retail).

The market opportunities for Concord should be viewed from a macro to micro view. The primary economic sectors providing employment in the region include financial institutions, healthcare and retail operations. Of the largest employers in the region, most are located in the city of Charlotte.

Like many other small towns and cities, the Concord town center or central business district has evolved over time and is now scattered along primary corridors. Local neighborhood shopping centers are prevalent, with regional shopping outside of the downtown area on other major arteries/intersections. Based upon preliminary and subsequent findings, it is determined that the Concord market will continue to evolve from a suburban “bedroom” community, with the primary job base residing in the greater Mecklenburg County (Charlotte) area, to establishing its own economic base and job market.

This will be largely due to the Concord Mills regional shopping Mall, and three of the region’s top tourist attractions, which all focus on the motorsports industry: Lowe’s Motor Speedway, which is the region’s second largest tourist attraction with over 1,250,000 visitors per year; the Dirt Track at Lowe’s (ranked 12th); and Backing Up Classics (ranked 25th). Additionally, health services, the technology industry, and retail in the rapidly growing shopping and entertainment venues are contributing to job growth.

Employment within the community will continue to be primarily “non-basic”. However, job growth in basic employment, together with transportation planning and expansion, will provide future opportunities for economic development. This will create demand for flex office, light assembly and distribution uses. As a result of the multiplier effect of basic job growth, additional residential housing, recreation, retail and other support uses will follow.

The overall population growth for Cabarrus County over the past decade was 33%. Similarly, income grew by 56% over the past decade. It is projected to increase at a more moderate pace of about 12% over the next five years. Evaluation from macro (MSA) to micro (1,3 and 5-mile radius around the subject) suggests that population and income growth trends are expected to continue in keeping with the expected overall county growth rate of approximately 12%.

Supply Dynamics - Office and Industrial

The Concord market has experienced substantial business growth in recent years. From 1996, there have been approximately 1,230 new and/or expanded businesses entering the marketplace, utilizing approximately 14,658,000 square feet of commercial space. Currently, there is an estimated 4,581,309 square feet of commercial space available in Concord, including manufacturing, warehouse and office space. However, the majority of vacancy is in the warehouse and manufacturing sectors. Rising unemployment rates, attributable to the current economic cycle, have accounted for the climbing vacancies in the office and industrial sectors.

- Office Space: With approximately 365,000 square feet of space, this is the smallest segment of the commercial market, totaling 8% of the overall commercial space.
- Warehouse Space: With approximately 1,807,056 square feet of space, this is the largest segment of the commercial market, totaling over 39% of the overall commercial space.
- Manufacturing Space: With approximately 1,511,862 square feet, this segment totals 33% of the commercial space.

More detailed information to assess the depth of the market follows, including planned projects gathered from the planning department.

The office analysis reflects a current oversupply of space. After conversations with economic development officials, it is estimated that 10% of the current office product is obsolete, therefore, 10% was eliminated from the analysis. The absorption of the existing supply is expected to occur as the business climate improves.

The national average of office space per employee ranges from 150- 220 square feet per employee. As noted above, only 8% of the commercial space is attributable to office uses. One reason for this is that of the 36.53% of the market employees in the service sector, over 20% are employed at the NorthEast Medical Hospital Campus. NorthEast Medical has approximately 3,500 employees that work at the hospital campus or in its strategically placed centers in the County. Therefore, the largest employment in the service sector being based at NorthEast Medical, combined with 13.79% of the population employment in manufacturing and 26.74% in retail, the majority of employment is in sectors not directly attributable to office uses.

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Through interviews during the Charrette, a unique opportunity presented itself for the study area due to its strategic location between two large hospitals. In discussions with NorthEast Medical, it was revealed that there is demand for medical office in this area. Both the University Hospital in Mecklenburg County and NorthEast Medical compete for market share of the medical industry. To the south of the site is University Hospital and to the north is NorthEast Medical Center. The population has grown substantially to the north of the study area, nearly the entire distance to Kannapolis. The County continues to grow significantly along the Harrisburg side as well.

Additionally, the office product existing in the Lowe's Motor Speedway complex is, according to its real estate advisor, full and a demand exists for additional space for ancillary motorsports businesses.

One of the primary thrusts of the economic development of the City of Cabarrus and the Cabarrus Regional Chamber of Commerce is to promote growth of small business within the area. This continues the Chamber's plan to continue to diversify its economy and grow business within the community. The study area provides a perfect opportunity to advance this initiative. The "Southside Employment Area," "Concord Farms Road South," "Concord Parkway Neighborhood Center," "The Neighborhood" and the "Weddington Neighborhood Center" on the proposed Conceptual Plan provides the opportunity to encourage entrepreneurial or small business growth as well as space to meet the medical office demand. One of the benefits of clustering the office space in this small area plan is ensuring ongoing value for the development, which will result in continued opportunity for growth and business investment.

Absorption Analysis – Office Recommendations

To estimate future inventory requirements for office space, first any oversupply must be absorbed. The current 20,000 square foot oversupply of office is expected to be absorbed within 12-18 months as job growth continues. Future demand is estimated at approximately 120,000 square feet. With a stable office vacancy rate estimated at approximately 10%, approximately 200,000-300,000 square feet of a Class A and Medical Office space could be absorbed in 5-10 years, provided that job growth continues at an estimated at 1500 total jobs per year.

.Industrial

The industrial analysis reflects an oversupply of this product

type also. After conversations with economic development officials, it is estimated that 30% of the current industrial product is obsolete. Due to this fact, 30% was eliminated from the analysis.

Eliminated from this analysis is the Pillowtex property totaling approximately 6,490,214 square feet. This property, given its size and obsolescence, is considered to be a major adaptive reuse opportunity. Plans are currently being formulated for the redevelopment of this manufacturing complex.

The absorption of the remaining existing space is expected to occur as the business climate continues to improve in the community. The space that is considered obsolete will lie dormant or be redeveloped. No new industrial space that is primarily manufacturing is expected to enter the supply in the near future, unless a specific user enters the market with plans for a build to suit project.

The plan's proposed "Southside Employment Area" and "Mixed-Use Campus" are designed to offer the development of flex space within the proposed small area plan. Flexible space is critical to the ability to adapt the plan's proposed business park as the market grows and changes. A one-story (18-22 feet) high-quality brick building with office in the front can offer an array of business arrangements. It can contain retail and/or business spaces in the front with a "drive-in" or "dock" capacity in the back to assist in the activities of a variety of businesses.

An example of well-designed flex product is found in Research Triangle Park, NC, which serves a variety of high-tech and development industries such as pharmaceuticals and software. This type of product would be conducive to house the clean technology or "nano" type industry Cabarrus economic development seeks to encourage through the University of North Carolina at Charlotte. The motorsports industry could also utilize this type of space.

Absorption Analysis – Industrial Recommendations

Future inventory requirements for industrial space will be commensurate with new technologies and issues facing the manufacturing industry. This includes just-in-time delivery, new technologies and other factors impacting industrial space. The national average of manufacturing employees is 11.7%, with North Carolina at 14%. Cabarrus County's manufacturing employment is 14%, consistent with state estimates. However, economic development officials estimate that approximately 30% of the existing available inventory of industrial space is

obsolete. Therefore, demand estimates indicate that 120,000 square feet of new industrial space may be added to the inventory per year subject to employment growth estimates. This space should provide for flexibility of operations to meet the changing markets.

Retail

The largest commercial growth segment of the market has been retail, with a number of local and regional shopping venues with an array of local, regional and national retailers and restaurants in and around the Concord Mills Mall on Speedway Boulevard at exit 49 off Interstate 85. Combined, these retail centers total over 2,600,000 square feet of retail. The predominance of national and regional retail operators will preclude the development of many categories of retailers within the study area.

With the construction of additional retail space across from Concord Mills and other retail currently planned or under construction, the surrounding area (within a five-mile radius of the study area) will total over 3,000,000 square feet of retail, dominated by regional and national operators. It should be noted that while population and income in the MSA support this super-regional mall, Concord Mills is also drawing customers from a much larger area due to its appeal as a tourist attraction.

Additionally, a power center totaling approximately 700,000 square feet anchored by Target is rumored at the new interchange of I-85 and Crisco Road. This, together with Concord Mills and the "University City" shopping centers directly impact potential retail development for the study area.

However, the housing that currently surrounds the study area, combined with the recommended 1,390 multi-family units and 90 residential lots, will create the need for a neighborhood shopping center. Neighborhood retail will also serve the population working in the office, warehouse and flex product proposed to be developed within the study area as well. However, it should be pointed out that retail space demand is determined by local, regional and national operators based upon specific consumer expenditure patterns, economic, and other site criteria.

According to this Plan the "Weddington Neighborhood Center" and the "Concord Parkway Neighborhood Center" locations offer the best opportunity for retail.

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Retail Analysis- Recommendations

Appropriate uses for the study area include a grocery store-anchored neighborhood center together with additional neighborhood services such as dry cleaners, restaurants, banks and other business to serve the resident and employee population basic needs. Retail of approximately 75,000-190,400 square feet in two phases is suggested, based on a 5-10 year absorption.

Market Analysis - Residential Uses

Demand Characteristics

Review of the data reveals that there is a low-density of existing population within the 1 and 3-mile radii in the study area. A substantial portion of the study area includes single-family residential housing.

According to data supplied by Charlotte Regional Realtors Association, there are 1,450 single-family homes currently listed in the county between the range of \$14,900 and \$2,000,000, with the average price at \$182,933. There are 125 townhome/condominium listings between the price range of \$35,000 and \$1,260,000, with the average price at \$147,105.

In a study of the available housing product in Cabarrus County, there is little new product available designed as one-story and/or handicap accessible. Therefore, this market segment in Concord may be underserved.

According to demographic data, the estimated housing units for Cabarrus County for 2004 totals 62,082, of which approximately 6.4% are vacant. However, the forecasted growth in housing is estimated in 2009 to total 72,831 units. The future growth estimates are currently fulfilled with pipeline supply.

Housing Forecast

The estimated demand for additional housing units based on projected growth, the total demand for additional housing is 9,319 units. Of that total, 74% is projected for single family (detached dwelling ownership units) and 26% is projected for multifamily units. Existing supply consists of estimated available units (per MLS estimates for available inventory) and planned/permitted new construction units. Therefore, it is estimated that the projected market gap for single family will be a 5,316 unit oversupply. Multifamily will be under-supplied by 2,108 units.

Findings - Residential

More detailed information, necessary to assess the depth of the market, was gathered from City of Concord staff. Synthesis of the information reveals that:

- There is an oversupply of single-family housing in Cabarrus County
- The demonstrated oversupply of single-family homes in Cabarrus County merits caution with respect to adding additional product to the market, until such time as demand and new infrastructure is created.

Gap in multifamily

- The gap in multifamily is attributed to projected job growth in a stable occupancy environment. However, due to current high vacancies, the existing supply of rental apartments in the marketplace is still being absorbed. Additionally, the historically low interest rates have made home buying more affordable. These two facts should be considered as the multifamily product is designed in the study area.

Residential Analysis - Recommendations

The number of single-family homes has now consumed 55% of the land area within Concord's city limits and annexed area. This significant amount indicates a need to seek a housing product of higher density to utilize the land in the area more efficiently. Due to this land use consideration combined with the current oversupply of single-family, the following Master Plan densities are recommended by The Lawrence Group and concurred with by Rose & Associates:

Residential lots - 90 units
Urban Residential - 1,390 units

The study area presents an opportunity to create a variety of higher density housing product in a wider range of prices. "Urban residential" should represent a variety of product types to serve young professionals, empty nesters, retired couples and individuals, as well as families.

For the suggested 1,390 units, the following product types and price ranges are suggested with a 3-10 year absorption rate:

Ownership:

- 1000 units two-story with attached garages priced \$200,000-\$500,000
- 1000 units one-story with attached garages priced \$175,000- \$300,000
- 2000 single family detached in a "patio" or "courtyard" style with a "0" lot line \$250,000-\$400,000
- 500 unit mid-rise condominium community for active and retired adults, priced \$175,000-\$300,000

Rental:

- 200 unit assisted living facility
- 300 Class A apartment homes

DEVELOPMENT CAPACITY AND ABSORPTION SUMMARY

| Product Type | # of Units/ Square Feet | Absorption Estimates |
|-----------------------------|----------------------------|-------------------------|
| Single Family Homes | 90 | 3-5 years |
| Urban Residential | 1,390 | 1-5 years |
| Subtotal Residential | 1,480 | |
| Retail | 190,400 | 3-5 years |
| Small Office | 227,400 | 3-5 years |
| Office "Class A" | 558,000 | 5-10 years |
| Flex Space | 476,500 | 6-9 years |
| Mixed-Use | 1,634,600 | 10+ years |
| Subtotal Commercial | 3,086,900 | |
| Civic/Institutional | 309,400 | |

Estimates are based upon demand data, current estimated vacancy, and planned construction.

Transportation and Circulation

Note: This Section was adapted from a report by Kimley-Horn and Associates as a supplement to this Plan.

The study area is generally bounded by Concord Parkway (US 29) to the south and Weddington Road to the north. In addition, Concord Farms Road traverses north-south through the site connecting US 29 and Weddington Road. Other roadways within the vicinity include, Roberta Church Road to the south, Pitts School Road to the west, and George W. Liles Parkway with connections to Interstate-85 to the north. Basic information about the roadways in the vicinity is as follows:

Concord Parkway (US 29) in the vicinity exists as a four-lane divided roadway with a posted speed limit of 55 mph. The Roadway generally parallels Interstate-85 within the immediate area and provides connections to the south at I-485 in Mecklenburg County and connections to the north to downtown Concord with ultimate connections north of Interstate-85 to Kannapolis and Rowan County. The Concord Parkway intersection with Roberta Road is presently controlled with an at-grade, signalized intersection. Concord Parkway is classified as a major thoroughfare on the adopted urban area thoroughfare plan. The NCDOT 2002 average daily traffic count map indicates a recorded volume of 25,000 vehicles per day on Concord Parkway.

Concord Farms Road is a two-lane road primarily intended to provide access to adjacent agriculture activity on the east and west sides of the road. The road is approximately 20 feet in width with two, 9-foot travel lanes.

Weddington Road is a two-lane roadway classified as a minor thoroughfare that collects traffic from adjoining neighborhoods. The roadway has ultimate connections to Speedway Boulevard to the west. The average daily traffic volumes were recorded as 6,500 vehicles per day (vpd) west of George W. Liles Parkway. East of George W. Liles Parkway the roadway has a recorded volume of 8,700 vpd.

Roberta Church Road is a two-lane ribbon pavement roadway with approximately 6,400 vpd recorded in 2002. As a part of the Westside Bypass alignment the roadway is classified as a major thoroughfare. The roadway connects between Concord Parkway (US 29) on the north and Roberta Church Road to the south and has a posted speed limit of 45 mph.

Westside Bypass

The City of Concord is a member of the Cabarrus-South Rowan Metropolitan Planning Organization (MPO). The Long Range Transportation Plan (LRTP) and Thoroughfare Plan identify a future roadway that would connect NC 152 in Kannapolis to the new interchange at I-85 (George W. Liles Parkway). This roadway is also planned with a connection south into Concord via existing Crisco Road through the small area plan study area to Concord Parkway (US 29) and continuing southward via the Roberta Church Road alignment with ultimate connections to NC 49. The new interchange at I-85 is already open and the section of the bypass located between I-85 and Weddington Road is currently under construction. This roadway corridor is commonly referred to as the future Westside Bypass.

This proposed extension of the George W. Liles Parkway is classified as a major thoroughfare. The MPO has expressed a desire for a four-lane divided section with accommodations for pedestrians, cyclist, and transit. The proposed alignment as identified on the Thoroughfare Plan places this roadway along the eastern property boundary of the study area.

As a part of the design charrette process, a series of alternative alignments were evaluated. These options explored the possibility of shifting the alignment to the west essentially traversing the middle of the study area as opposed to following the eastern study area boundary. Careful examination of these options by the study team concluded that no significant benefits could be gained by departing from the existing alignment. The result was a proposed alignment that closely resembles the existing alignment proposed in the urban area's Thoroughfare Plan.

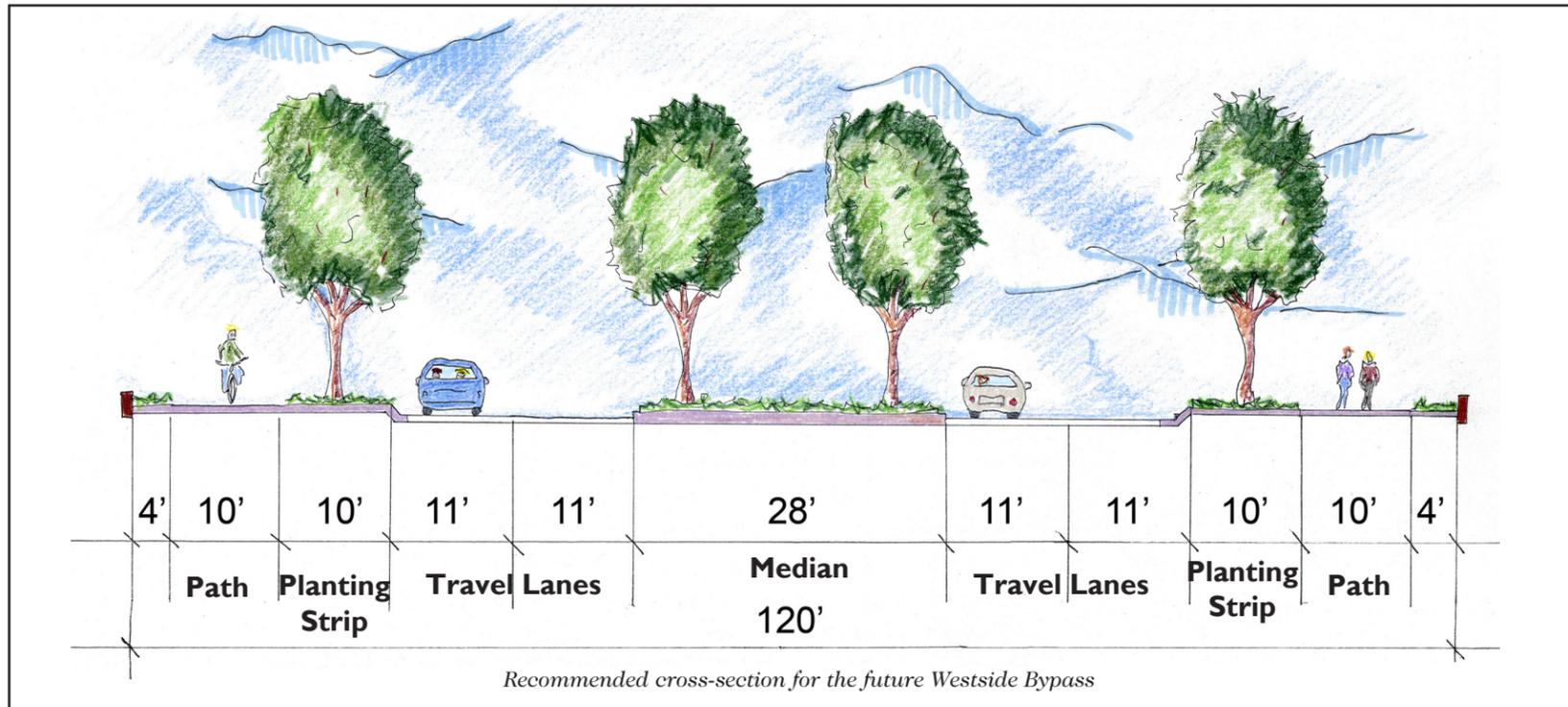
As future designs for this roadway are considered, the adjacent residential neighborhood to the east should be respected. This may be best accomplished by preserving the trees and other significant vegetation between the parkway and the neighborhood. Likewise, a true parkway design should be considered with narrow travel lanes, significant landscaping and accommodations for bicyclists and pedestrians. This north-south corridor represents a premier opportunity for future



Map indicating variety of George W. Liles Parkway extension options

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



Representatives from NCDOT have recommended that the future George W. Liles Parkway intersection with US 29 be accommodated via a grade separated interchange.

During the design charrette, representatives from the Division 10 office of NCDOT shared preliminary plans for a Single Point Urban Interchange (SPUI) configuration. This type of interchange is expensive to construct but extremely efficient at processing traffic. A single signal would be located under the bridge structure spanning US 29 which would facilitate all turning movements from and onto the parkway. NCDOT has developed a concept design for this interchange at a location just east of the current alignment with US 29.

The projected 2025 volumes on both US 29 and the future George W. Liles Parkway would not necessarily warrant an interchange configuration; however, the interchange option is the most efficient means to process the projected traffic volumes. A less costly intersection alternative may be feasible. However, it is likely that the desire for an interchange at this location is in response to the growing concern for special event traffic associated with the Lowe's Motor Speedway located west of the study area. The addition of an interchange with George W. Liles Parkway would provide an additional travel route for speedway patrons with direct access to Interstate-85. While the interchange would be an efficient means to process the projected traffic there are a number of disadvantages including:

public transit service as well as pedestrian and bicycle linkages. In order to provide a clear separation from automobiles a typical section that includes a multiuse path has been proposed. The recommended section is in keeping with the MPO's multimodal vision for this corridor.

The current 2001 Long Range Transportation Plan (LRTP) includes future year projections for this roadway. These projections are a result of travel demand forecasting performed by the Cabarrus-Rowan MPO using the travel demand model for the region. This model is largely influenced by the model network and projected socio-economic data. It is important to note that a new model and LRTP are currently being developed. Results from the new model were not available at the time of the small area plan design charrette. The following information reflects the projected volumes for specific links along this roadway for the year 2025:

- NC 49 to Roberta Road - 18,000 ADT
- Roberta Road to Roberta Church Road - 19,900 ADT
- Roberta Church Road to US 29 - 21,100 ADT
- US 29 to Weddington Road - 25,300 ADT
- Weddington Road to Poplar Tent - 34,000 ADT

ADT: Average Daily Traffic



Single Point Urban Interchange alternative with US 29-Concord Parkway

- Excessive cost when compared to an at-grade intersection treatment
- Expanded right-of-way (any interchange design will require more right-of-way than an at grade intersection primarily due to the grades associated with the structure spanning US 29) and areas for free flowing ramps.
- Reduced access (the installation of an interchange increases the linear distance from the intersection where side street access can be taken (both public street and private drive-type access. This is true for the tangents along US 29 as well as George W. Liles Parkway. These increased distances are necessary to reduce the conflicts associated with traffic weaving that occurs when vehicles transition from ramps to through travel lanes.
- Vehicular speeds are increased-given the freeway like conditions, through movements along the parkway are likely to be higher despite posted limits. This is

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

especially true if vehicles are influenced by the relative straight alignment, vertical change in grade (vehicles traveling down hill from the bridge structure, and the typically wide travel lanes. As speeds increase along the parkway, the chances of encouraging multimodal alternatives decreases.

It is recommended that further study be conducted by the MPO and NCDOT to determine the most appropriate design treatment for this intersection. Issues that should be considered during this process include: traffic operations, area circulation, impacts to site access, multimodal accommodations (bike, pedestrian, and public transportation) cost, travel speed and others. In order to insure that motor vehicle traffic operations are not the single determination criteria, stakeholders from various interest groups should be included in the study process. The results of this study should be expressed in the form of a resolution by the MPO endorsing a particular option. It will be important to conduct this study in the near future as decisions regarding land access and site development are currently underway.

Access Management

It is clear that the George W. Liles Parkway represents an important north south corridor for the community. It's likely that development within the study area will occur in the near future. Therefore, it is recommended that a policy of both general and specific access management guidelines be developed for the corridor. Consideration should be given to a variety of resources during the development of these criteria, including the City of Concord Zoning Ordinance, NCDOT Driveway Manual, as well as the Transportation Research Board and Center for Urban Transportation Research (University of South Florida) publications that describe and compare policies across the nation. The following represent preliminary recommendations that also should be considered during the development of a corridor access management policy.

Recommendations:

- New non-residential developments located adjacent to each other should be encouraged to provide cross-access so that parking lots and driveways are connected and shared.

Encouraged cross-access between adjacent developments reduces the number of vehicles that are required to re-enter the major roadway. Keeping additional turning traffic off the major roadway



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

enhances efficient and safe operation.

- Minimum lot frontages should be considered for non-residential developments along the major roads (Weddington Road, US 29, and George W. Liles Parkway).

Typical access management standards for similar corridors would ideally recommend a minimum of 300 foot spacing between non-residential driveways. In order to feasibly enforce this spacing, adjacent commercial properties would need to have well over 200 feet of frontage. Encouraging minimum frontage prevents driveways from being too closely spaced.

- Larger developments, such as shopping centers, should be required to provide internal access to outparcels.

Providing access to outparcels is another facet of cross-access that encourages internal traffic circulation and keeps unnecessary turning traffic off the major roadways.

- Implement right-turn deceleration lanes for developments generating significant peak hour traffic as determined through development/traffic impact study process.

Right-turn deceleration lanes minimize the effect of slowing traffic exiting the traffic stream on the major roadway. This improves safety and allows the major roadway to operate at more desirable speeds. Where deemed necessary by a traffic impact study (TIS), deceleration lanes should be constructed within the property of the proposed development.

- Right-in/right-out only driveways should be encouraged as secondary access on major roadways for non-residential developments.

If appropriate, when a new development requests more than one driveway, the feasibility of a right-in/right-out driveway as a secondary access should be evaluated and encouraged.

- For new developments that front both a major and a side street, primary access via the side street should be encouraged.

Restricting major road access to service entrances or right-in/right-out driveways (where side street

access is available) reduces the impact of turning movements on the major roads. It also may reduce or eliminate the cost to a developer when associated with constructing a deceleration lane on the major road.

Site Access

The concept master plan identifies an optimum location for a full movement signalized intersection on the future section of George W. Liles Parkway located at the midpoint between Weddington Road and US 29. In addition, the Plan identifies optimum locations for additional median breaks along this corridor. By establishing these locations early in the process the overall area circulation pattern can be set. This early decision making will insure a balance between the mobility needs of the region and the degree of access necessary to accommodate future development. Consistency with the NCDOT driveway manual and access management policy should be consulted prior to the issuance of any permits along this future roadway.

Additional external access will occur along the Weddington Road and US 29 (Concord Parkway) corridors. In order to curtail the potential for a strip pattern of development, access to these roadways should be limited to public street-type access with limited use of private driveways. Given the presence of large parcels along these frontages, internal site access can easily be achieved through responsible design. The access management recommendations listed above should serve as guidance when considering potential public (driveway-type) access. Right-in, right-out access points should be encouraged as well as directional cross-overs where public street access isn't able to be achieved.

Traffic impact studies should be required in order to understand the incremental impacts of development as it occurs and as a vehicle to encourage connectivity and internal site circulation. The small area plan study area is largely a flat undeveloped greenfield site with few constraints and yet there are few if any opportunities for connectivity to the local neighborhood street network. This is in large part due to the lack of adjacent street stubs and the presence of a creek on the western edge of the area.

While external connectivity will in large part be limited to Weddington Road, George W. Liles Pkwy (future) and US 29, there is an opportunity to promote internal mobility through a well designed and coordinated transportation network. A rigid grid system of streets is not a prerequisite for this to occur; however the orderly creation of blocks that range between

400 and 1,000 feet can successfully provide for enhanced connectivity within the future development.

These streets should be appropriate in scale and responsive to their intended purpose. A series of street sections were developed during the design charrette that communicates roadway types according to their intended function. The basic anatomy of these streets should include minimum width travel lanes (10-11 feet preferred) with a clearly defined pedestrian realm (typically accommodated by a planting strip and a minimum 5-foot wide sidewalk on both sides of the road) and on-street parking where appropriate. Future development should limit the use of dead-end or cul-de-sac streets. Instead, connections to existing and future streets are preferred. The resulting interconnected system of streets will allow for dispersion of traffic and act as a conduit for other modes especially walking and bicycling.

Support Biking and Walking and Transit Use

The study area is bounded on the east and west by an established, low density, residential development pattern. The proactive planning that has taken place through this plan process represents an opportunity to create a new place that is not entirely dependent on the automobile for every trip. The regular block lengths, connectivity, and street designs depicted in the concept master plan illustrate and infrastructure and development pattern that is supportive of mixed-use development and walkability.

A clearly defined pedestrian realm combined with short blocks and buildings appropriately placed will encourage mode choices especially for relatively short trips. This development pattern will also provide enhanced opportunities for ridership on Concord's new fixed-route RIDER transit system. As the study area begins to develop and the George W. Liles Parkway is extended, public transportation should be expanded to service the study area. The anticipated density, mix of land uses, and pedestrian scale of the development exhibit development characteristics that are supportive of transit ridership. Likewise, the wide sidewalks and the implementation of an enhanced greenway system can provide a safe and enjoyable place for cyclist and walkers to travel within and through the study area.

Additional Recommendations

The small area plan describes existing conditions and a vision for transportation design and infrastructure that supports the desired land use outcomes. In order to insure that this vision is implemented the following summary recommendations are provided:

- Conduct a comprehensive transportation evaluation of the master plan area that includes trip generation characteristics and expected internal capture for the study area as well as expected trip distribution. This information can be used to refine the socio-economic data of the regional travel demand model and can be used to consistently support future traffic studies within the area.
- Perform a study that determines the ultimate section and intersection treatments for the Westside Bypass. As a part of this study it will be important to understand the future travel demand in the vicinity. The outcome of this study should be a recommendation that considers land use, desired development patterns, impacts to adjacent neighborhoods, operations, costs, travel speeds and multimodal accommodations. Endorsement by the MPO and City should be sought to insure that responsible parties adhere to the preferred design treatment as the roadway is designed and implemented.
- Adopt an access management strategy for the Westside Bypass and Concord Parkway corridors. The master plan depicts proposed external access points. These locations should be further discussed and negotiated with NCDOT, property owners, developers, and the City of Concord. By clearly defining the access locations now, developers can accurately predict and safeguard necessary circulation patterns which will be required to service properties located both east and west of the future Westside Bypass.
- Adopt the recommended greenways and multi-use paths recommended in the small area plan. Seek installation of segments as development occurs.
- Install a multi-use path along Concord Parkway to provide for a regional northeast-southwest bicycle route.
- Limit the use of cul-de-sacs and dead end streets where reasonably feasible to insure good internal circulation and adequate external access.

- Promote good street designs that reduce the need for future traffic calming and provide enhanced bicycle and pedestrian accommodations. Balance should be sought between automobiles and non-motorized modes.
- Upon development of the study area, consider expansion of the Concord Public Transit System (RIDER).
- Require traffic impact studies (TIS) for significant development within the area (typically 100 peak hour trips and greater). Request that the TIS evaluate consistency of the proposed development with the small area plan as a part of the study process.



Existing conditions along Concord Parkway



Image of recommended multi-use path along Concord Parkway

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

KEY RECOMMENDATIONS FOR TRANSPORTATION AND CIRCULATION

- New non-residential developments located adjacent to each other should be encouraged to provide cross-access so that parking lots and driveways are connected and shared.
- Minimum lot frontages should be considered for non-residential developments along the major roads (Weddington Road, US 29, and George W. Liles Parkway).
- Larger developments, such as shopping centers, should be required to provide internal access to outparcels.
- Implement right-turn deceleration lanes for developments generating significant peak hour traffic as determined through development/traffic impact study process.
- Right-in/right-out only driveways should be encouraged as secondary access on major roadways for non-residential developments.
- For new developments that front both a major and a side street, primary access via the side street should be encouraged.
- Conduct a comprehensive transportation evaluation of the Master Plan area that includes trip generation characteristics and expected internal capture for the study area as well as expected trip distribution.
- Perform a study that determines the ultimate section and intersection treatments for the Westside Bypass.
- Adopt an access management strategy for the Westside Bypass and Concord Parkway corridors.
- Adopt the recommended greenways and multi-use paths recommended in the small area plan.
- Install a multi-use path along Concord Parkway to provide for a regional northeast-southwest bicycle route.
- Limit the use-of cul-de-sacs and dead end streets where reasonably feasible to insure good internal circulation and adequate external access.
- Promote good street designs that reduce the need for future traffic calming and provide enhanced bicycle and pedestrian accommodations.
- Upon development of the study area, consider extension of the Concord Public Transit System (RIDER) to this area.
- Require traffic impact studies for significant development within the area (typically 100 peak hour trips and greater).

Sustainable Design

Stormwater

By their nature, mixed-use centers are inherently urban. That is, the coverage of building footprints, parking areas, and hardscape are much higher than in suburban or rural areas.

As development occurs within this area, protection of the floodplains in the area is critical. Unmanaged upstream urbanization of a floodplain results in a dramatic increase in the flood storage needs of the creeks as they traverse Concord. With an increase in the width of the floodplain comes a greater incidence of flooding and a reduction in overall amount of property available for development.

If this area is to thrive as a pedestrian-friendly, mixed-use center, it must have wide sidewalks, small lots, and buildings built close to the street and to each other. An important tool in managing stormwater quantity and water quality is the use of Low Impact Development (LID) Standards. (See “What is Low Impact Development” on the next page)

The City should investigate implementation of Low Impact Development standards such as those adopted by the Town of Huntersville, North Carolina. According to the Huntersville Ordinance, “the goal of LID is to develop site design techniques, strategies, and BMPs to store, infiltrate, evaporate, retain, and detain runoff on the site to more closely replicate pre-development runoff characteristics and to better mimic the natural and unique hydrology of the site thereby limiting the increase in pollutant loads caused by development.”

In urban areas, these techniques will range from conventional underground retention to rain barrels and planted roofs. In addition, the City should consider regional structures that serve a larger area within the drainage basin.

Sustainable Building Design

This plan also encourages the use of the LEED guidelines for certifying all new public buildings. Developed by the USGBC membership, the Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a national consensus-based, market-driven building rating system designed to accelerate the development and implementation of green building practices. In short, it is a leading-edge system for designing, constructing and certifying sustainable buildings.

In furtherance of this goal, the City should encourage the use of “green” roofs such as a planted garden or white roof for all new construction, particularly for public uses such as fire stations and schools. Such roofing systems not only reduce energy costs on the buildings, but they can also be designed to capture and filter stormwater during a rain event. This type of technology reduces the environmental footprint of a building and promotes sustainable development practices.

KEY RECOMMENDATIONS FOR SUSTAINABLE DESIGN

- As development occurs, ensure complete protection of the floodplain areas around Coddle Creek.
- Consider implementing Low Impact Development (LID) Standards for the City.
- Encourage the application of LEED building standards for all new public buildings.

What is LEED?

The LEED (Leadership in Energy and Environmental Design) Green Building Rating System® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council (USGBC) representing all segments of the building industry developed LEED and continue to contribute to its evolution.

LEED was created to:

- define “green building” by establishing a common standard of measurement
- promote integrated, whole-building design practices
- recognize environmental leadership in the building industry
- stimulate green competition
- raise consumer awareness of green building benefits
- transform the building market

LEED provides a complete framework for assessing building performance and meeting sustainability goals. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.

LEED standards are currently available or under development for:

- New commercial construction and major renovation projects (LEED-NC)
- Existing building operations (LEED-EB)
- Commercial interiors projects (LEED-CI)
- Core and shell projects (LEED-CS)
- Homes (LEED-H)
- Neighborhood Development (LEED-ND)

Source: <http://www.usgbc.org>

What is Low Impact Development (LID)?

LID is an ecologically friendly approach to site development and storm water management that aims to mitigate development impacts to land, water, and air. The approach emphasizes the integration of site design and planning techniques that conserve natural systems and hydrologic functions on a site. The practice has been successfully integrated into many municipal development codes and storm water management ordinances throughout the United States. Specifically, LID aims to:

- Preserve Open Space and Minimize Land Disturbance;
- Protect Natural Systems and Processes (drainage ways, vegetation, soils, sensitive areas);
- Re-examine the Use and Sizing of Traditional Site Infrastructure (lots, streets, curbs, gutters, sidewalks) and Customize Site Design to Each Site;
- Incorporate Natural Site Elements (wetlands, stream corridors, mature forests) as Design Elements; and
- Decentralize and Micromanage Storm Water at its Source.

LID Benefits

In addition to the practice just making good sense, low impact development techniques can offer many benefits to a variety of stakeholders.

For Municipalities

- Protect regional flora and fauna
- Balance growth needs with environmental protection
- Reduce municipal infrastructure and utility maintenance costs (streets, curbs, gutters, sidewalks, storm sewer)
- Increase collaborative public/private partnerships

For Developers

- Reduce land clearing and grading costs

- Potentially reduce infrastructure costs (streets, curbs, gutters, sidewalks)
- Reduce storm water management costs
- Potentially reduce impact fees and increases lot yields
- Increase lot and community marketability

For the Environment

- Preserve integrity of ecological and biological systems
- Protect site and regional water quality by reducing sediment, nutrient, and toxic loads to water bodies
- Reduce impacts to local terrestrial and aquatic plants and animals
- Preserve trees and natural vegetation

Hydrologic Comparison between Conventional Storm Water Management and LID

Hydrologic alterations within the landscape occur whenever land is developed. Conventional development approaches to storm water management have used practices to quickly and efficiently convey water away from developed areas. Usually these practices are designed to control the peak runoff rate for predetermined storm events, usually the 2- and 10-year

storms. While these systems have worked to some degree, they still have not accounted for the increased runoff rates and volumes from smaller, more frequent storms, nor have they addressed the larger watershed functions of storage, filtration, and infiltration.

In contrast, LID utilizes a system of source controls and small-scale, decentralized treatment practices to help maintain a hydrologically functional landscape. The conservation of open space, the reduction of impervious surfaces, and the use of small-scale storm water controls, such as bioretention, are just a few of the LID practices that can help maintain predevelopment hydrological conditions.

For More Information

Low Impact Development Center
<http://www.lowimpactdevelopment.org>

Prince George's County, Maryland
<http://www.goprincegeorgescounty.com>

NAHB Research Center Toolbase Services
<http://www.toolbase.org>

U.S. EPA
<http://www.epa.gov/owow/nps/urban.html>

Source: Municipal Guide to Low Impact Development, National Association of Home Builders



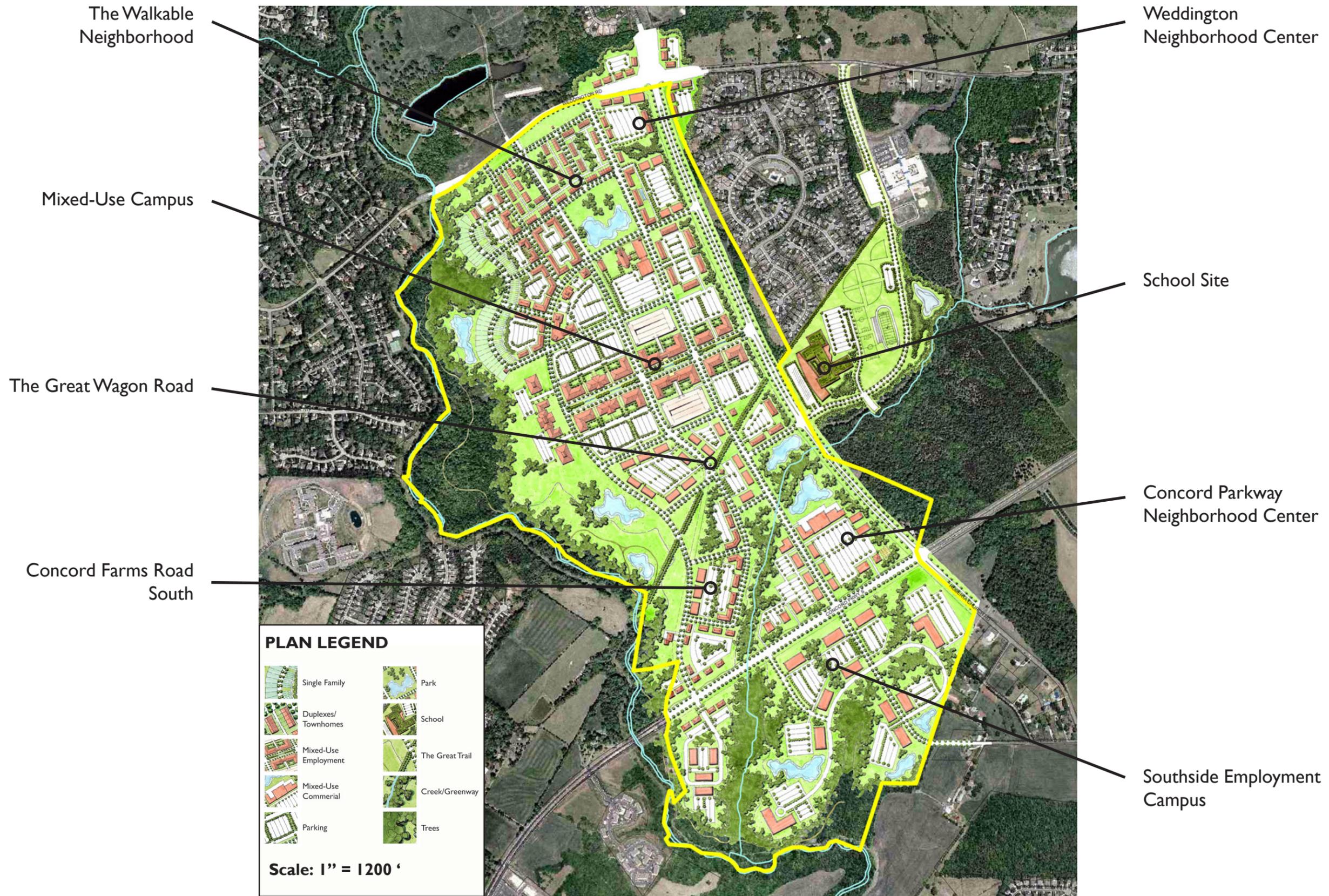
"Green" garden roof on Chicago City Hall



Bioretention rain garden at North Carolina State University

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Weddington Neighborhood Center

Though the surrounding neighborhoods do not have homes that front on Weddington Road (most have landscaped berms or rear fences/walls) there was a general sense conveyed by the public at the charrette that this is a residential area.

The five-lane George W. Liles Parkway approaching from Poplar Tent Road has a physical footprint that will make residential development unlikely given the pedestrian-unfriendly road design and increased traffic volumes. This is compounded by two additional conditions that are increasing traffic volumes and speeds in the area

- The lack of neighborhood connectivity and alternate entrances for the neighborhoods requiring most of the trips outside of the neighborhood to utilize Weddington Road.
- The connection of Weddington Road to Speedway Boulevard.

Observations by charrette team members walking along the Weddington Road noted a very hostile pedestrian environment with no sidewalks and high travel speeds. This is also aggravated by a new bridge over Coddle Creek that was clearly planned to accommodate a wider road (4 lanes) in the future.

Interestingly, It is important to note the presence of Weddington Hill Elementary School just east of the study area. In spite of its obvious proximity to a cluster of neighborhoods, it is not considered to be in a “walk zone” due to the surrounding road conditions.

Transition the Development Pattern

In an effort to mitigate against the potentially deleterious effects of oversized road infrastructure, while preserving development opportunities for the properties, this Plan recommend permitting a small mixed-use center located at the intersection of Weddington Road and George W. Liles Parkway. Overall, the four quadrants of the neighborhood center should be planned to accommodate up to 150,000 square feet of office and some



Weddington Neighborhood Center

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

limited retail uses in relatively small buildings.

The largest retail use envisioned by the Plan is approximately 15,000 square feet (a typical national-chain drug store). Limiting not only the amount but also the type of retail development that may occur here will allow the function of Weddington Road and George W. Liles Parkway to continue to operate at a successful level of service by not creating “destination” retail which would be better sited elsewhere in the study area (see Concord Parkway Neighborhood Center) and in nearby commercial nodes (George W. Liles Parkway and Poplar Tent Road).

Keep the Residential Character

In order to maintain the “residential character” of the Weddington Road corridor the Plan recommends the use of design standards that permit mixed-use in a predominately residential building type. At build-out, it should appear like the corridor was a historic corridor with large old homes that converted to commercial uses. Buildings should incorporate residential detailing including windows with shutters (if stylistically appropriate), lap siding, pitched roofs, and porches and/or stoops. Vertical mixed-use is encouraged and buildings should generally not exceed 2-3 stories.

Improve the Infrastructure

As mentioned previously, the existing street infrastructure is almost exclusively auto-oriented. At a minimum, sidewalks should be added to both sides of Weddington Road. Also, a trail head to the greenway along Coddle Creek should be planned from Weddington Road. Consideration should also be given for bike lane or widened street shoulders to accommodate bicyclists along the corridor.

Finally, this Plan encourages the use of parallel on-street parking to the west of the planned Parkway on Weddington Road. The presence of on-street will serve to provide convenient parking for business fronting on the street as well as create a traffic calming device.



Examples of new commercial uses in residential-type structures (Top photo from Cornelius, NC, Bottom photo from Village of Baxter, Fort Mill, SC)

KEY RECOMMENDATIONS FOR THE WEDDINGTON NEIGHBORHOOD CENTER

- Permit small office and limited retail.
- Require design standards that maintain a residential character for the area.
- Install sidewalks and on-street bicycle lanes along both sides of Weddington Road.
- Construct a trail head from Weddington Road to the planned Coddle Creek greenway.
- Permit on-street parking along Weddington Road to encourage a convenient, pedestrian-oriented streetscape and traffic calming.

The Neighborhood

There was a clear consensus from the beginning of the plan process that the City and the surrounding residents did not want another subdivision to further crowd schools and remove land from higher tax value activities. Taken in isolation, single-family residential development, while clearly in high market-demand, is largely “more of the same” in this area. Because the focus of this Plan is on the development of a mixed-use center across a 800+ acre area, it is important to integrate all building types.

Mix and Variety...Not More of the Same

A primarily residential area is envisioned in the northwest corner of the study area. Encompassing approximately 135 acres, the conceptual plan includes a wide variety of housing including large and small single-family lots, townhomes, loft apartments, condominiums as well as senior housing. The housing should be high quality, incorporating durable materials and appropriate detailing. Because of the size of the neighborhood it is possible to provide housing at many different “price points” to reach higher income levels (particularly backing up to the Creek) and those that are more modest.

Open Space

Open space serves as the organizing armature of the area with a greenway trail and large natural area preserved along the floodplain, housing fronting on public lawns or squares that preserve some of the existing, field-grown canopy trees, and a large, 10 acre park that preserves a stand of trees, rock outcroppings, and incorporates a rain garden or permanent detention pond for the area.

Civic/Institutional Site

In addition to the neighborhood and the parks, the plan also recommends that a suitable site be reserved for a church or other civic/institutional use. Like our schools, most churches vie for land in the urban fringe where the land is cheaper and more



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

plentiful. Historically, these buildings served as the anchors for Concord's neighborhoods and provided for not only the spiritual needs of the community, but its civic needs as well with large meeting rooms and multi-purpose gymnasiums.

The location of such a building is strategic for a number of reasons:

- It provides a unique and identifiable anchor for the neighborhood.
- It fronts on a large park and could provide a vibrant and active user of the space like the squares in Savannah or the New England Town Greens.
- It is sited near the high point of the study area, enabling it serve as a visual anchor for the greater community.
- It serves as a transition use between the neighborhood and the Mixed-Use Campus.
- Parking is adjacent to the commercial uses, permitting the shared use of the space during off-peak hours.
- It is located on the first street into the area with full access giving it prominence from the north and the east.

As an alternate to a church, the site is of a sufficient size for a elementary school, charter school, or private school.

Density

The Conceptual Plan shows the design potential for 800-1000 units in this neighborhood or roughly 6 to 7.5 units per acre. While higher in density than the surrounding subdivisions, the intent is that a neighborhood of this size is supported by and supports a vibrant mixed-use core. With the proposed intensity of development across the site including a large employment area and two neighborhood centers, this density optimizes internal trip capture (the number of destinations that can be accessed within the development), thus minimizing the overall transportation impact. It also provides opportunities for residents to walk and bike to work and store rather than using their cars.

This density is also tempered by the significant amounts of public open space mentioned previously. Twenty to thirty percent of the area is proposed to be some type of open space. Less density would not provide the walkability needed to differentiate this area from the surrounding subdivisions. It



A new neighborhood with a church as as a key anchor



High quality housing in Afton Village

would also not provide as much economic encouragement to protect open space or provide locations for important civic buildings.

Transition to the Parkway

The Plan encourages mixed-uses such as flexible office space and live-work units. Two or three story building should front the eastern edge of the park, but the remaining buildings could be single-story. Typical uses for this type of development include professional offices, medical offices, or small tenant service businesses.

KEY RECOMMENDATIONS FOR THE NEIGHBORHOOD

- Permit a variety of housing at a medium density.
- Preserve key open spaces noted on the Plan including the floodplain/greenway and the neighborhood park.
- Reserve an area for a key civic/institutional building such as a church or a school.
- Permit mixed-use such as flexible office space or live-work units near the Parkway.
- Permit on-street parking along Weddington Road to encourage a convenient, pedestrian-oriented streetscape.

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Mixed-Use Campus

The central component of the Conceptual Plan is a mixed-use, walkable employment center with the capacity of up to 1.5 million square feet. The multi-story buildings are situated along a linear parkway forming a campus environment. This compact development pattern represents a new type of development for Cabarrus, one which is intended to attract high quality tenants looking for an urban atmosphere in a suburban location.

Primary access to the site would be via a traffic signal at George W. Liles Parkway or by way of the many roads that parallel the Parkway.

Linear Rain Garden

The centerpiece of this type of development is its environmental stewardship. The central boulevard includes a linear rain garden in its wide median. As a rain garden, this would serve as a dry detention/filtration area. Another option would be to create a wet linear lake. Most of the buildings in the campus would have frontage along this tree-lined wide boulevard.

The Anchor

At the western terminus of the boulevard is a prominent site that should be reserved for key anchor tenant. The site is bound to the west with a significant stand of trees (the most prominent in the area) and a knoll. It also connects directly to the planned Coddle Creek greenway. In addition to serving a prime location for a national company's headquarters it would be equally prominent for school or other similar institutional/civic uses. Regardless, the building that terminates the axis of the boulevard should have architecture that establishes its prominence and should be a minimum of 3 stories tall.

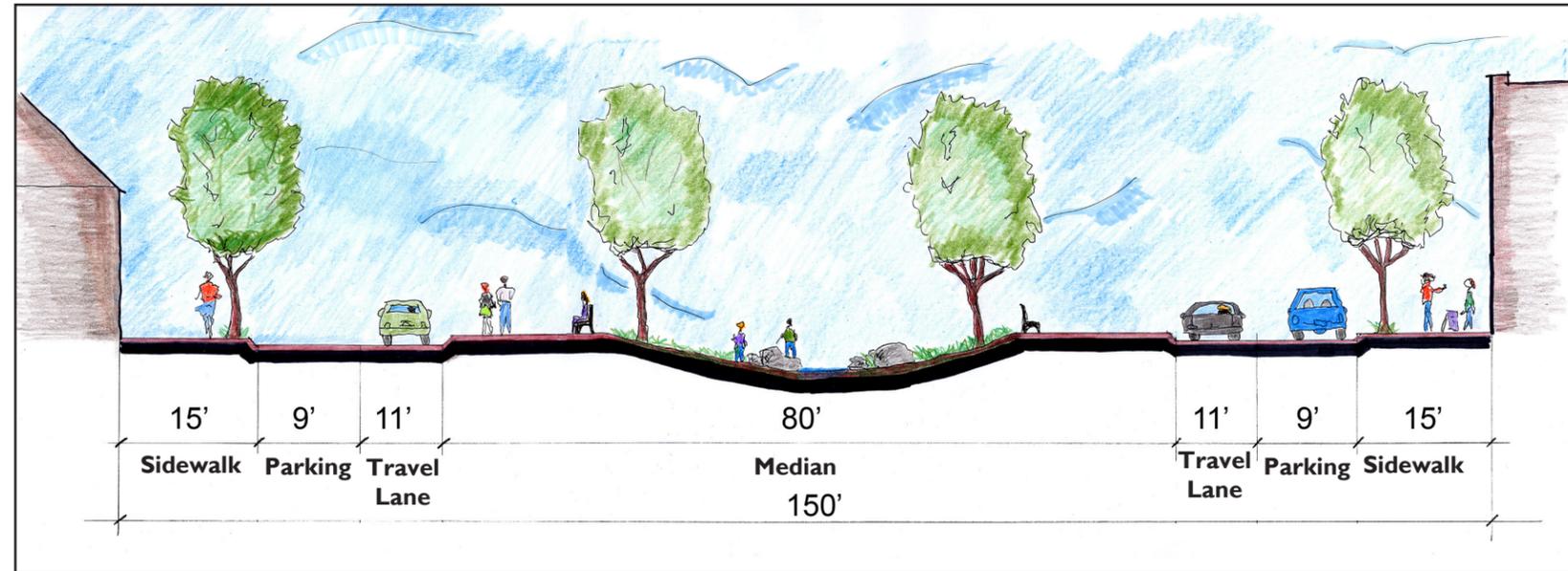
Parking

Parking for the buildings would be handled on-street in parallel or diagonal spaces and to the rear of the buildings in open lots or parking decks. The decision to use parking decks, which are more costly, is a function of the size of the potential buildings in the campus. Also, it is a function of the density of employees in each building. Call centers, for example, have exceptionally high





Images of a median-divided boulevard beginning in a downtown (top) and terminating at the golf course club house (bottom) in Celebration, Florida



Proposed street section for the Campus Avenue with rain garden in the median



Conceptual birdseye of the Campus Center with multi-story buildings and a wide median with a rain garden

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

needs for parking, requiring a minimum of 16 spaces per 1000 square feet. Typical office uses are much lower ranging from 4 to 6 spaces per 1000 square feet.

The use of parking decks also allows the buildings to be closer together increasing the urbanism along the boulevard and encourage greater pedestrian accessibility. Decks, while more expensive, permit a more efficient use of land, and are warranted when the employment density and land value are high enough to support it.

National Models

Similar types of compact campus development have been constructed across the county. Most are in suburban conditions not unlike those in this area. The images shown on this page include the Centennial Campus at NC State University and Irvington Center at King Farm in Rockville, Maryland.

Centennial Campus is a public-private research and development environment. It is easily served by the local transit service and compact enough to encourage walking between the buildings, even though each are quite large, often exceeding 100,000 square feet in size. To the rear of many of the building sites is a wetlands reclamation area that also serves as the regional bio-retention area for the development.

Irvington Center is a private office development in the King Farm traditional neighborhood. It has a major thoroughfare access at its gateway and is convenient to a Metro commuter train station into Washington, DC.

Buildings at Irvington Center area designed as Class A offices for multiple tenants but can be adapted to accommodate single tenants such as a corporate headquarters. Four buildings have been constructed on the site and a fifth is being pre-leased. Parking is handled in decks to the rear of the buildings. Like Centennial Campus, there is a large bio-retention area and floodplain that traverses the site.



Centennial Campus at North Carolina State University in Raleigh, NC



Irvington Center at King Farm in Rockville, MD

KEY RECOMMENDATIONS FOR THE MIXED-USE CAMPUS

- Encourage multi-story mixed-use buildings.
- Preserve the forest stand and knoll on the western edge of this area as an undisturbed area.
- Reserve the prominent site for a key corporate tenant or institutional use and require exceptional architecture on the facades.
- Encourage the use of Low Impact Design Standards such as a linear rain garden in the median to manage stormwater impacts.
- Encourage the use of parking decks in lieu of surface parking to create a more compact development.

Concord Farms Road South

During a charrette interview with the Public Works staff a comment was made about “The Great Road” sewer outfall along the branch of the Coddle Creek. In fact, there is a old wagon trail that traverses the study area. The remnants of this path follow old hedgerows that cut across the land and are clearly visible on an aerial photo. It appears that the path actually cuts through the middle of Weddington Hills Elementary School (see page 32).

The area also has a branch of the Coddle Creek as well as a portion of the floodplain that extends into this area. There is some scattered development close to Concord Parkway and a wireless telecommunications tower towards the middle of this area.

Historic Road Preservation

The Master Plan shows this trail line as being preserved and celebrated within the site, especially due to its proximity to the elementary school. Restoring the historic route is worthy of grant funding, particularly under the NC DOT enhancement grant program. This plan recommends the installation of a 10-12 foot wide greenway trail with planted sides and interpretive signage along its path. This path would tie into the Coddle Creek the greenway trail that meanders through the study area on the western side of the site.

Transitional Development

The conceptual plan suggests mixed-use development of 1-3 stories in height in this area. North of the “Great Wagon Road” is a development accommodating small flexible office/retail/service tenants. South of this area along the creek branch is a site appropriate for upscale garden apartments or other higher density residential development. This location takes advantage of the the creek as an amenity and preserves its frontage with a parkway rather than the conventional method of backing development up to it.



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Concord Farms Road Realignment

The existing alignment of Concord Farms Road is recommended to adjust to the west and provide a third north-south connection through the area. It would parallel a new street that would connect Concord Parkway with Weddington Road. This, when combined with the realigned Concord Farms Road and the George W. Liles Parkway would provide an excellent network to help disperse the expected level of traffic in this area.

New Fire Department Location

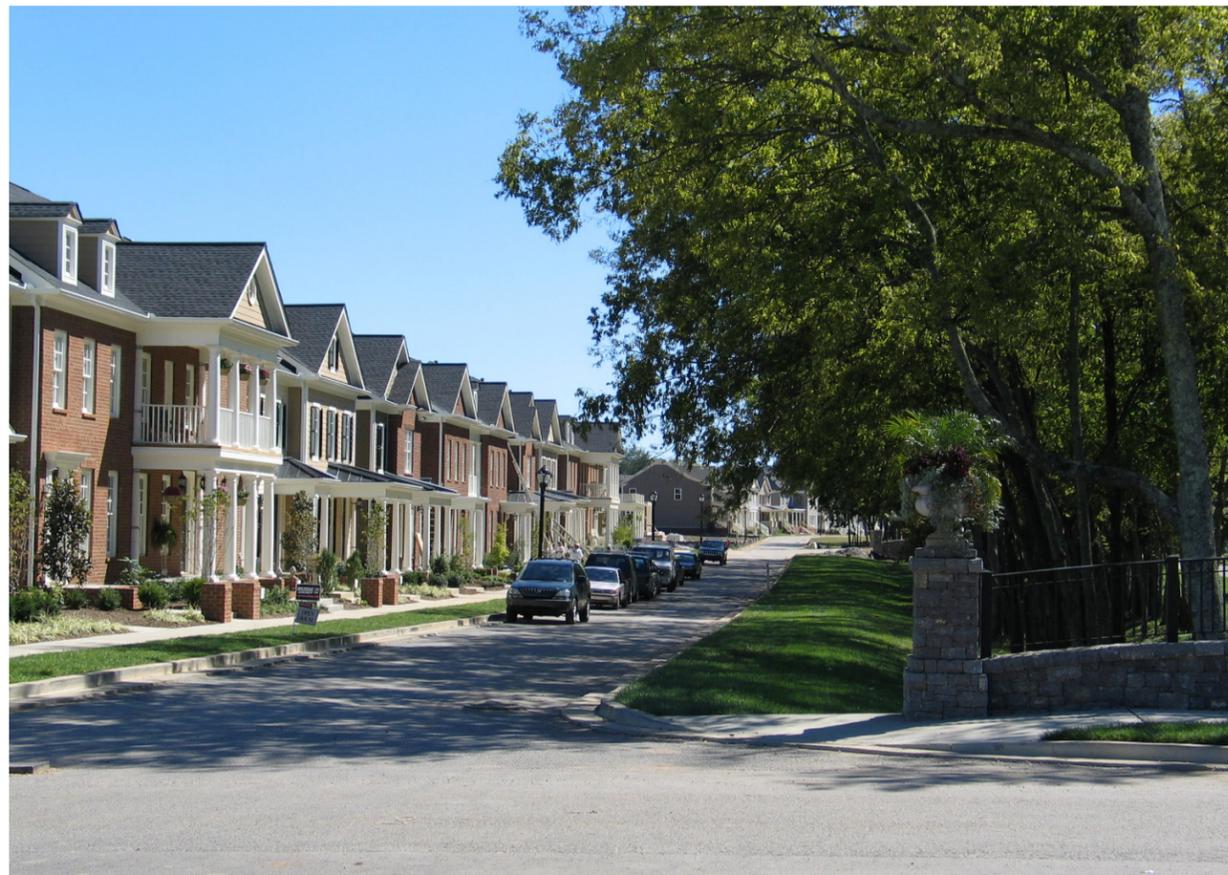
Throughout this planning process government agencies were surveyed to identify needs or gaps in service for this area. One of the key gaps exists in fire protection coverage. Coverage for this area is being provided by Station 5, 8, 4 and 3 and the response times are approximately 6-8 minutes. Because Station 5 on Pitts School Road is undergoing renovation rather than relocation, this area was identified for a new station as part of the City's Capital Improvement Program (CIP).

The current CIP has planned expenditures for the construction of Station 11 beginning with land acquisition, planning and design in Fiscal Years 2005 and 2006 and construction in Fiscal Year 2007.

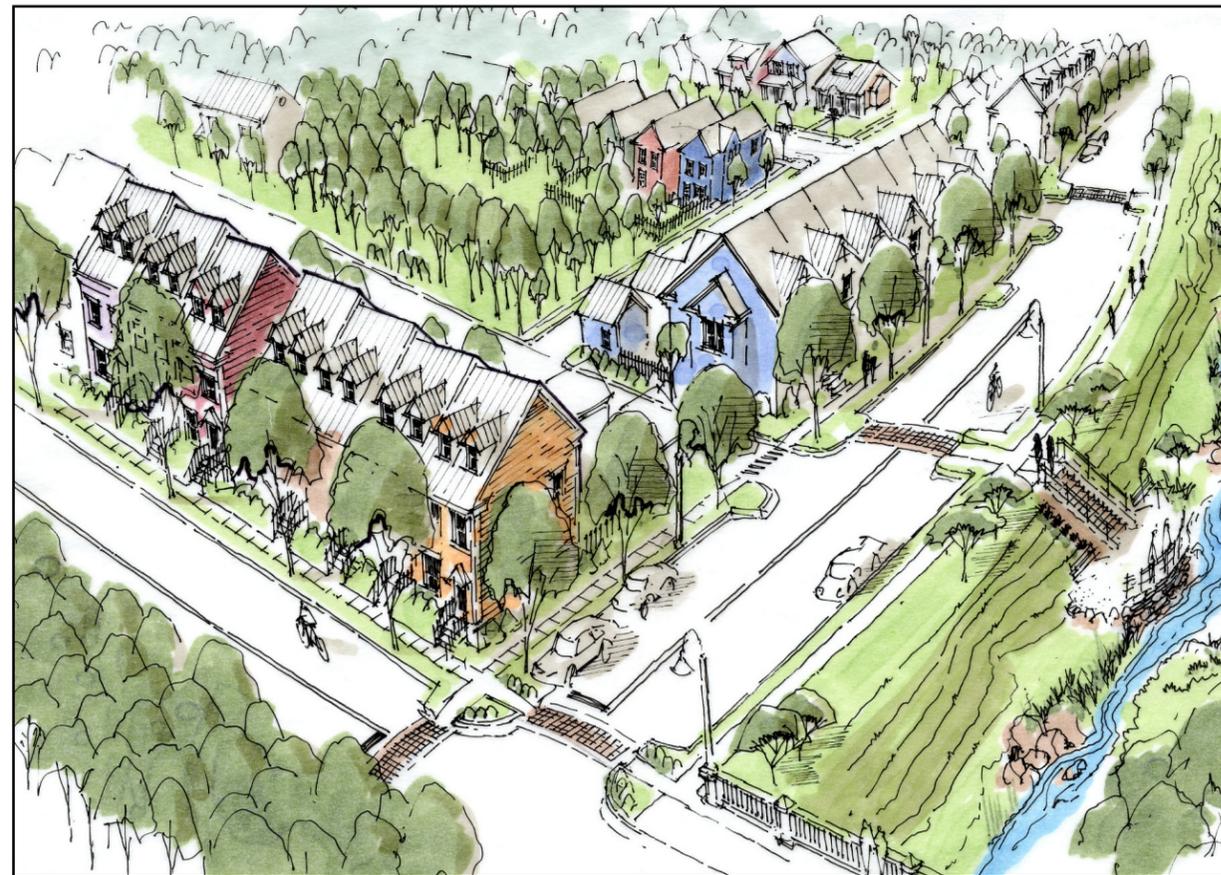
In short, this area would serve as an ideal location for a new Fire Station. Additional locational criteria include convenient access to Concord Parkway and the planned George W. Liles Parkway. Therefore, the Plan recommends the location of the fire station along Concord Farms Parkway near the intersection with Concord Parkway. This intersection would provide full movement and the potential for a signal making it ideally suited to provide coverage in all directions.

KEY RECOMMENDATIONS FOR CONCORD FARMS ROAD SOUTH

- Construct a greenway trail with interpretive signage along the route of the Great Wagon Road.
- Realign Concord Farms Road to create an additional north-south connection.
- Permit transitional mixed-use low-scale development including higher density residential and flexible office, retail, and service.
- Reserve a site and construct a new Fire Station near Concord Parkway.



Picture of townhomes overlooking a creek area in the Westhaven Traditional Neighborhood in Franklin, TN



Birdseye perspective of townhomes overlooking a creek

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

The Great Wagon Road

“In the last sixteen years of the colonial era,” wrote historian Carl Bridenbaugh, “Southbound traffic along the Great Philadelphia Wagon Road was numbered in tens of thousands. It was the most heavily traveled road in all America and must have had more vehicles jolting along its rough and tortuous way than all the other main roads put together.”

When the British captured Philadelphia, the Continental Congress escaped down the Pennsylvania Wagon Road. Daniel Boone and Davy Crockett traveled it. George Washington knew it as an Indian fighter. John Chisholm knew it as an Indian trader. Countless soldiers-Andrew Jackson, Andrew Pickens, Andrew Lewis, Francis Marion, Lighthorse Harry Lee, Daniel Morgan, and George Rogers Clark, among them-fought over it. Both the North and South would use it during the Civil War.

And down this road, this glorified overgrown footpath through the middle of nowhere leading to even greater depths of nowhere, came those people looking for a better life for themselves and their children, down it came those settlers, those hardworking stubborn Scots Irish and Germans: the preachers, the blacksmiths, and farmers.

When the crops were in, on a day like today, they started.”

Author Unknown

Source: http://www.electricscotland.com/history/america/wagon_road.htm

For nearly 150 years after North America was settled, it remained a green wilderness. Only a few trails cut through the vast forests which spread from New Hampshire to Georgia, for the Appalachian Mountains thrust a stern barrier between the Atlantic plateau and the unknown interior of the continent.

As settlers moved inland, they usually followed the paths over which Indians had hunted and traded. Many of these trails had been worn down in earlier ages by buffalo, which once roamed the eastern uplands in search of grazing lands. These

paths usually followed valleys and river shores. Few trails in early America were more important than the Indian route which extended east of the Appalachians from Pennsylvania to Georgia. This ancient Warriors' Path was long used by Iroquois tribesman of the north to come south and trade or make war in Virginia and the Carolinas. Then, by a series of treaties with the powerful Five Nations of the Iroquois, the English acquired the use of the Warriors' Path. After 1744, they took over the land itself.

The growth of the route after 1744 into the principal highway of the colonial back country is an important chapter in the development of a nation. Over this Great Philadelphia Wagon Road, vast numbers of English, Scotch-Irish, and Germanic settlers entered this continent and claimed lands. The endless procession of new settlers, Indian traders, soldiers, and missionaries swelled as the Revolution approached. “In the last sixteen years of the colonial era,” wrote the historian Carl Bridenbaugh, “southbound traffic along the GREAT Philadelphia Wagon Road was numbered in tens of thousands; it was the most heavily traveled road in all America and must have had more vehicles jolting along its rough and tortuous way than all other main roads put together.”

As the principal highway of the eighteenth-century frontier southward from Pennsylvania, the Wagon Road also played an important part in the French and Indian wars and in the American revolution. Daniel Boone and Davy Crockett traveled it as explorers. George Washington knew it as an Indian fighter. Countless soldiers - Andrew Jackson, Andrew Pickens, John Sevier, Andrew Lewis, Francis Marion, Lighthorse Harry Lee, Daniel Morgan, and George Rogers Clark among them - fought over it.

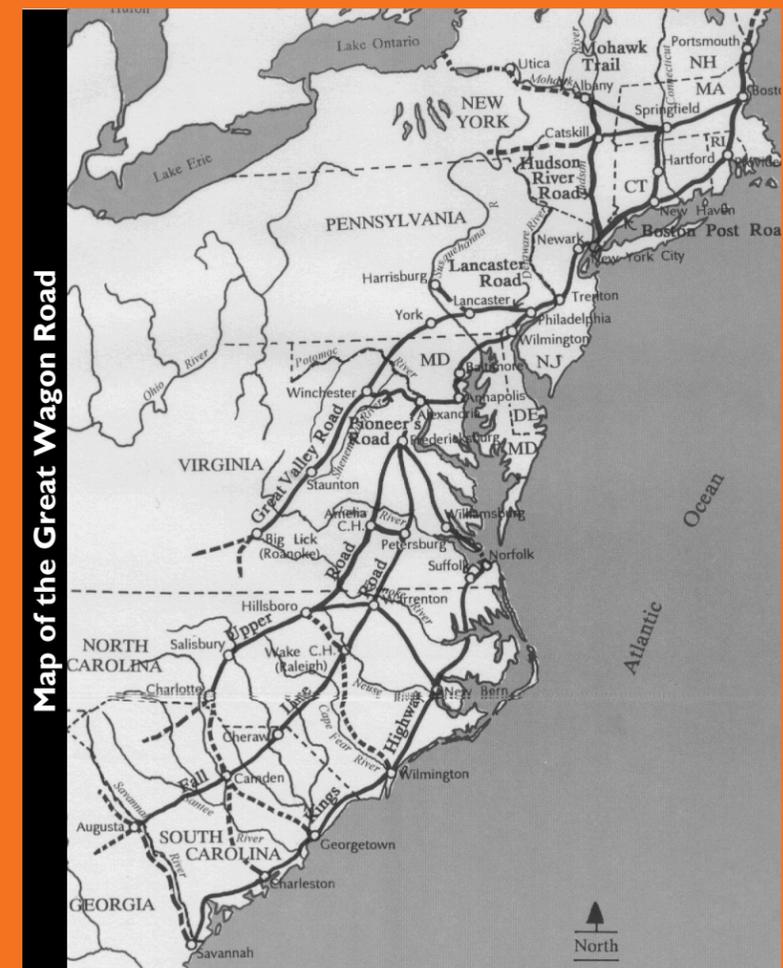
When British forces captured Philadelphia early in the Revolution, the Continental Congress escaped and fled down the great Wagon Road to York. Cornwallis and his troops traveled the Wagon Road in their attempt to neutralize the southern colonies. Many important battles were fought on or near the Road which became the War's western front: Kings Mountain, the Cowpens, Gilford Courthouse, Salisbury, and Camden were some of them.

From the Great Wagon Road, pioneers passed through Cumberland Gap and the Holston River Settlements into the territories which became Kentucky and Tennessee. This route, which Daniel Boone opened in 1775, became an

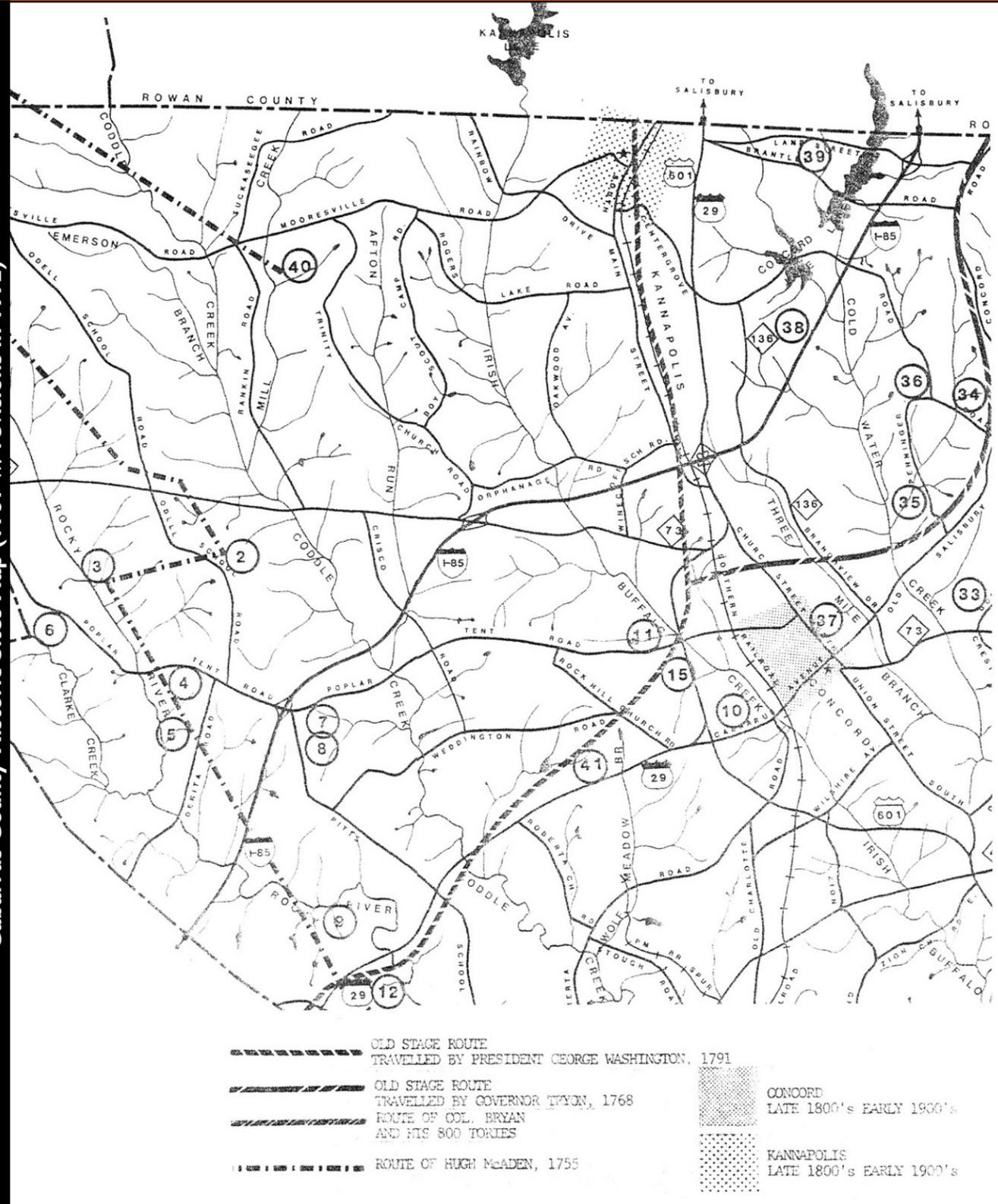
umbilical cord by which the first sizable trans-Appalachian settlements were nurtured to statehood. Over this Wilderness Road went Henry Clay and the forebears of Abraham Lincoln, among countless others.

The chronicle of the Wagon Road is the chronicle of infant America, from 1607 until the age of the railway. It is the story of achievement against great odds. Breaking with European traditions which they brought to America with them, the diverse settlers along the Wagon Road began to create the new American society which changed the nineteenth-century history of the world.”

*Source: “The Great Wagon Road” by Parke Rouse, Jr.
http://www.lowerys.info/wagon_road.htm*



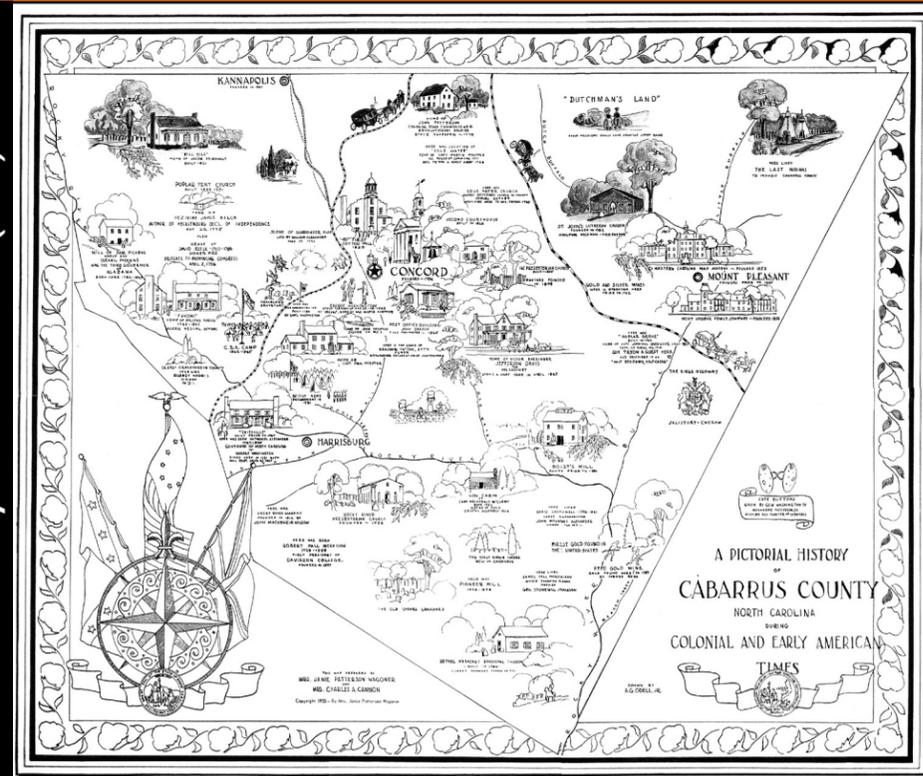
Cabarrus County Historic Sites Map (1981 w/ revisions in 1992)



2004 Color Aerial of the Study Area



Pictorial History of Cabarrus County during Colonial and Early American Times (1935)



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

The Great Wagon Road

School Site

Located between the Great Wagon Road path and the Philip Morris property is a beautiful open field enclosed by hedgerows and forest stands. It forms the informal backyards for many residents from the adjacent Sheffield Manor neighborhood.

Because of its proximity to the neighborhoods and to the existing elementary school, this 64.25 acre site is optimal for a public middle school or a private school. The school facility is illustrated with a garden roof as one means of integrating sustainable practices into its design. The site could easily accommodate a public school facility and related parking with the balance of the site constructed as a public park with athletic fields.

This site is immediately west of a proposed full-movement intersection along the George W. Liles Parkway and should connect by a public street to the elementary school. This would provide the elementary school with a second point of access and the new school and park with access to Weddington Road, thereby improving the surrounding traffic network. The plan also recommends a street stub to the Philip Morris tract to the south to accommodate any future development (none is currently planned).

KEY RECOMMENDATIONS FOR THE SCHOOL SITE

- Acquire the site and construct a school and public park.
- Continue the Great Wagon Road path along the northern boundary.
- Connect to Weddington Hills Elementary School with a new street.
- Provide a street stub to Philip Morris' tract to the south.



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Concord Parkway Neighborhood Center

The Concord Parkway Neighborhood Center is bounded by the George W. Liles Parkway to the east, Concord Parkway to the south, and the Coddle Creek tributary to northwest.

From a signalized intersection at Concord Parkway, a new main street provides access to the site. Mixed-use, commercial, and office buildings front along a new street to create a true “Main Street” feel. On-street parking provides both convenience parking as well as a safer sidewalk system.

Buildings along Concord Parkway are set back a considerable distance to allow for a vast swath of “green” that extends the parkway effect from the Philip Morris campus through this area. This setback allows for tree plantings to occur in more “natural” clusters. Also within this setback is an area for a 10 foot wide multi-purpose path that could extend from US 601 to Pitts School Road.

Like most neighborhood centers, this Plan contemplates the presence of one or two medium sized anchors with at least 50,000 square feet such as a grocery store. The Plan recommends that Christy’s Nursery be retained along Concord Parkway.



Concord Parkway Neighborhood Center

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

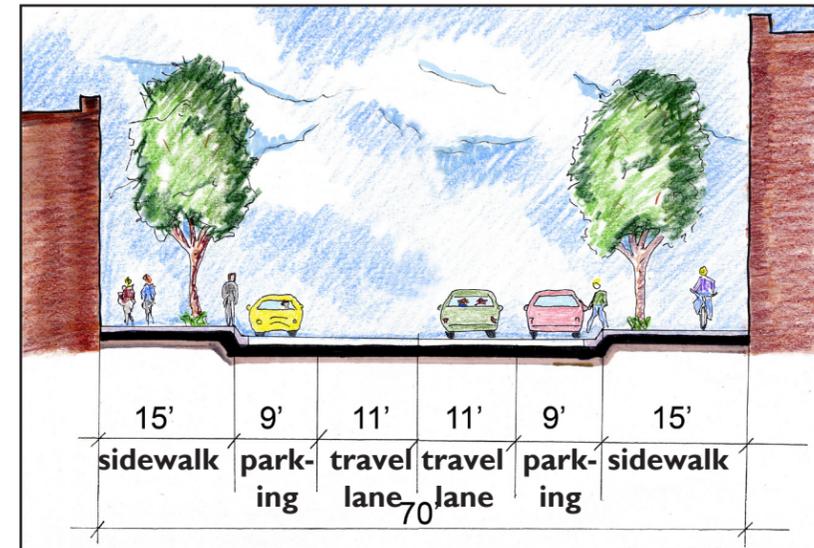
CITY OF CONCORD, NORTH CAROLINA



Perspective drawing showing the Neighborhood Center at the entrance from Concord Parkway

KEY RECOMMENDATIONS FOR THE CONCORD PARKWAY NEIGHBORHOOD CENTER

- Require the construction of a new Main Street that extends from Concord Parkway across the creek.
- Permit the construction of a neighborhood shopping center.
- Require a 100 foot informally planted setback with a 10 foot multi-use path along Concord Parkway.



Street section for the main street through the Neighborhood Center

**Concord Parkway
Neighborhood Center**

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA

Southside Employment Area

Located on the south side of Concord Parkway, the Southside Employment Area is composed of a variety of flexible buildings for office and light industrial uses. The direct access to Concord Parkway make this portion of the plan ideal for larger industrial-type uses that require truck access and are less hospitable to true mixed-use development. The plan illustrates the opportunity for over 500,000 leasable square feet.

As with the buildings located on the north side of Concord Parkway, buildings on the south side of Concord Parkway are to be set back a considerable distance (approximately 100 feet) to allow for a parkway aesthetic. With the large footprint buildings and even larger fields of parking, it is essential for as much vegetation on site to be preserved as possible, especially any vegetation that may help to screen buildings and/or parking from Concord Parkway. This principle still applies, although to a slightly lesser degree, to the primary roads within the Southside Employment Area as well.

Per the Master Plan recommendations, two points of access into the site will be signalized. A road located at roughly the midpoint of the site along Concord Parkway is to be right-in/right-out. A secondary road connection is provided that would link Roberta Church Road with Windswept Road.

KEY RECOMMENDATIONS FOR THE SOUTHSIDE EMPLOYMENT AREA

- Permit the construction of an office and industrial campus on both sides of the creek.
- Require a 100 foot parkway setback along Concord Parkway with a multi-use path.
- Construct a connection to Roberta Church Road via Windswept Road.
- Full movement access with traffic signals is to be from the proposed roads that connect to the north.



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

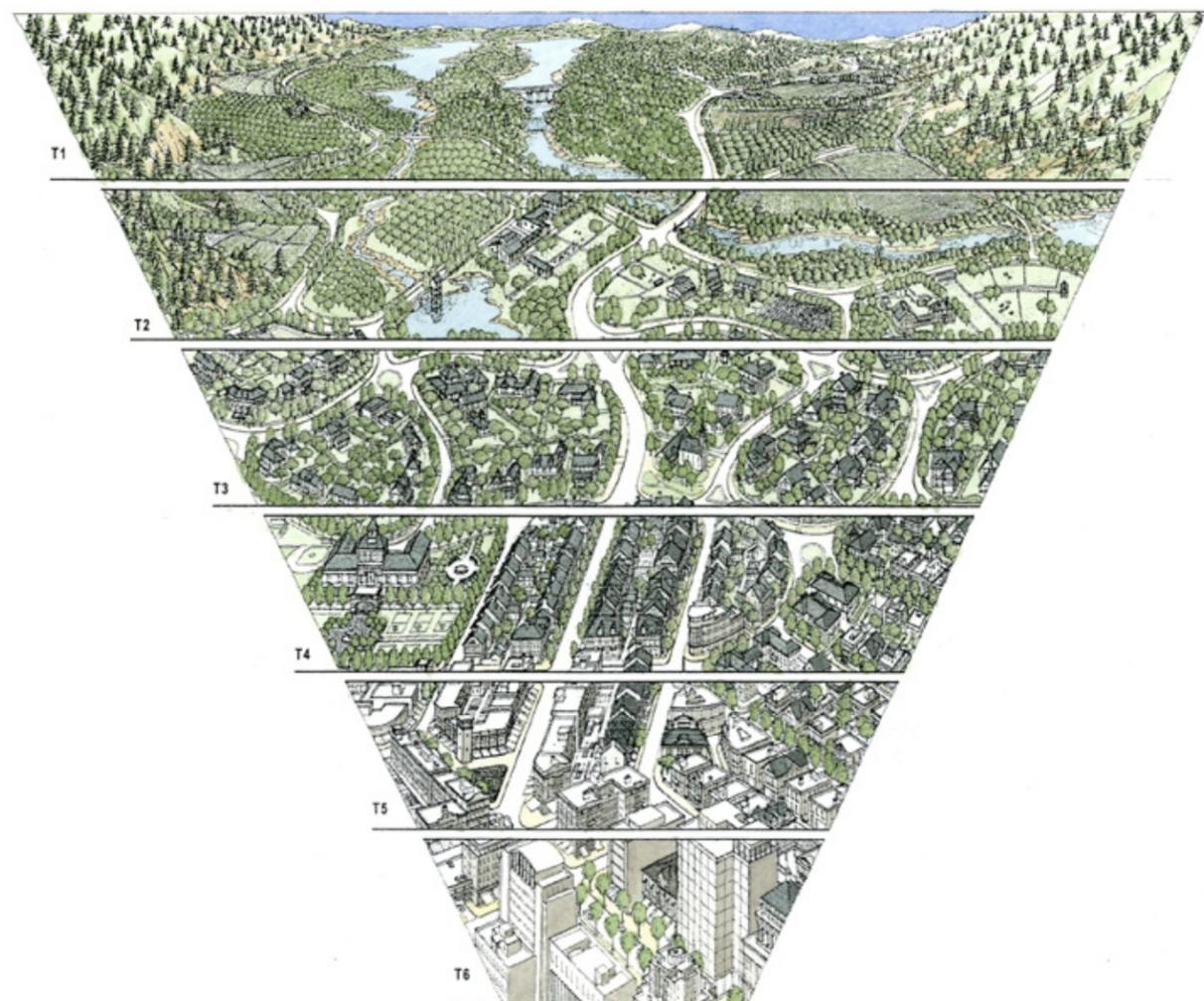
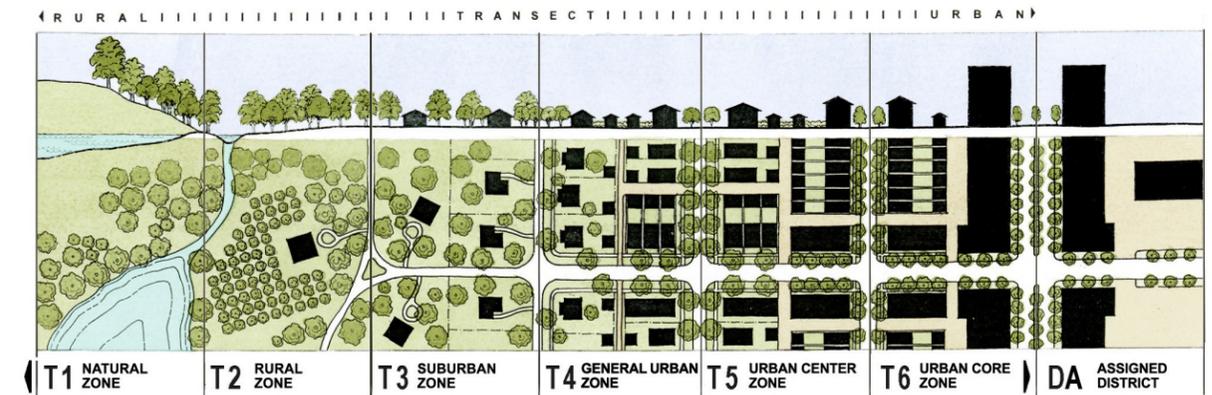
CITY OF CONCORD, NORTH CAROLINA

Transect Zone Classification

The Transect is a method of classifying the natural and built environment as a continuum of six conditions, ranging from rural to urban. The value of the Transect is that it serves to locate any given place within a context in which all of the parts fit together harmoniously. For example, a rural street typically has no curbs or sidewalks and its buildings look like farmhouses or barns. An urban street, depending on the intensity of urbanism, may have curbs and gutters, regularly placed street trees, sidewalks, and building forms that include common walls, flat roofs, and cornices. Each Transect zoning category has detailed provisions for each neighborhood, for density, height, street design, the design of public spaces, the mix of uses, building design, parking, and other aspects of the human environment.

The following Transect Zones are applied to this Small Area Plan. Variations to this Plan based on individual site plans are expected but shall be subject to the Transect-based classification. Individual T-zone boundaries may be moved provided that the overall distribution in land area is generally maintained.

| | |
|-----------------------|--|
| Transect Zone by Area | T1-Natural Zone Coddle Creek Floodplain Area |
| | T4-General Urban Zone The Walkable Neighborhood Concord Farms Road South School Site |
| | T5-Urban Center Zone Weddington Neighborhood Center Concord Parkway Neighborhood Center |
| | T6-Urban Core The Mixed-Use Campus |
| | DA-Assigned District Southside Employment Area (CD-Campus Development) |



Transect Diagram illustrating the rural to urban continuum

General Development Patterns

Much of the land surrounding the study area is developed with single-family homes. The market study indicates a very different program for the site, making transitions to the existing fabric critical.

Along the northern edge of the study area, care was taken to provide smaller scale buildings, areas of open space, and like uses to relate to both the existing conditions as well as the potential development pattern of the properties across Weddington Road.

Along the eastern edge, the extension of George W. Liles Parkway creates the transition. Per the Master Plan, the Parkway was located such that a significant stand of trees was preserved near the Sheffield Manor neighborhood. The trees will help reduce noise pollution from the new parkway and also provide a better backdrop for the private space behind homes in Sheffield Manor.

On both the north and south sides of Concord Parkway, an increased setback continues the parkway-like feel that is prevalent in the area, especially along the Philip Morris frontage property to the east. Furthermore, large plate buildings on the south side of Concord Parkway are indicated as being tucked into stands of trees, where feasible. This will preserve the viewshed along the Parkway with minimal visibility of those large buildings and their associated parking fields.

To the west, a large expanse of wooded area and floodplain provides an expansive open space transition to the existing residential. A significant stand of trees atop a knoll is preserved along the greenway trail that follows the creek along this western edge.

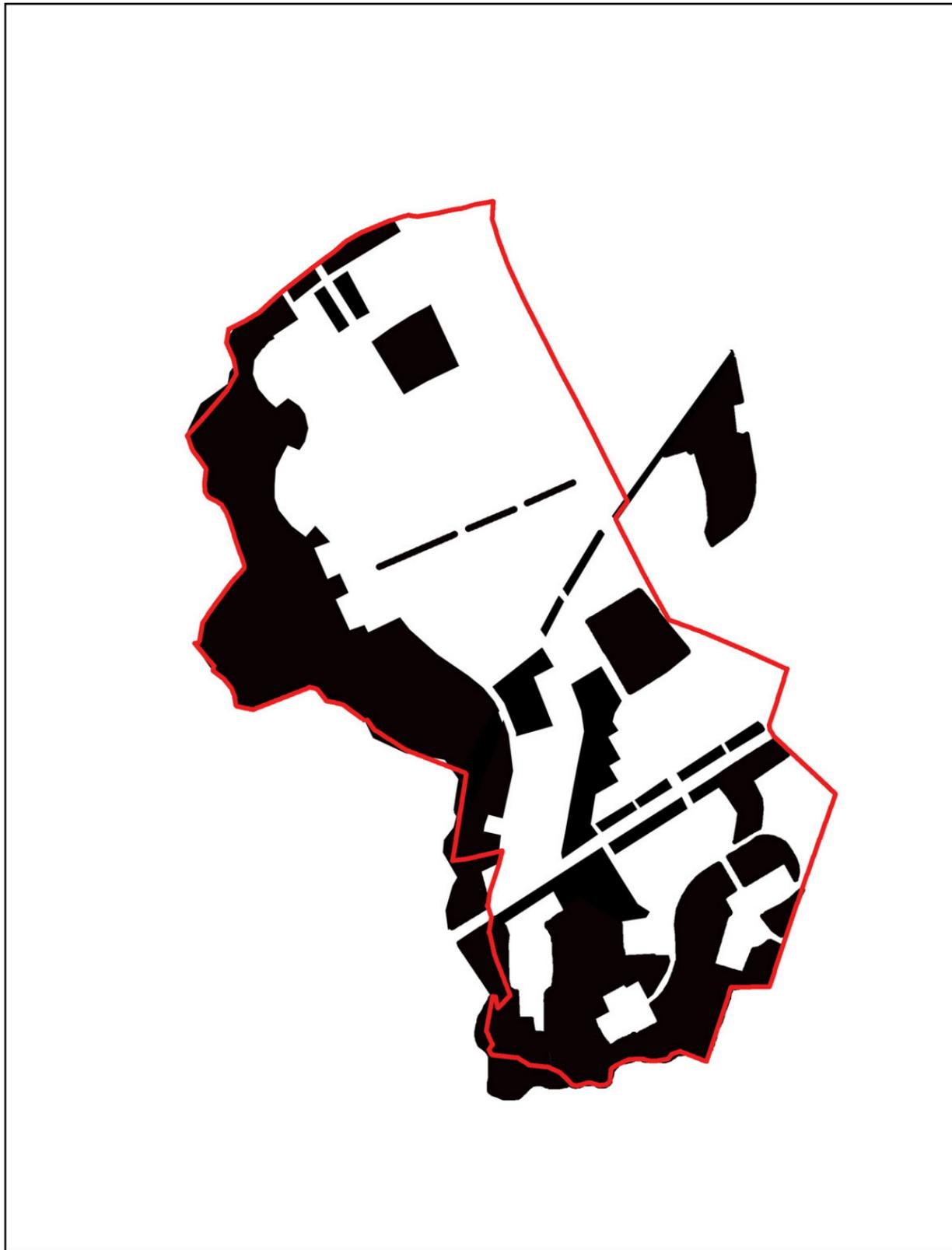
The diagrams shown in this section illustrate the general development pattern expected in this area and relate directly to the conceptual plan illustrated throughout this document.



Development Pattern Diagram 1: Circulation Network

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



Development Pattern Diagram 2: Green Infrastructure Network



Development Pattern Diagram 3: General Massing and Development Intensity Pattern

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

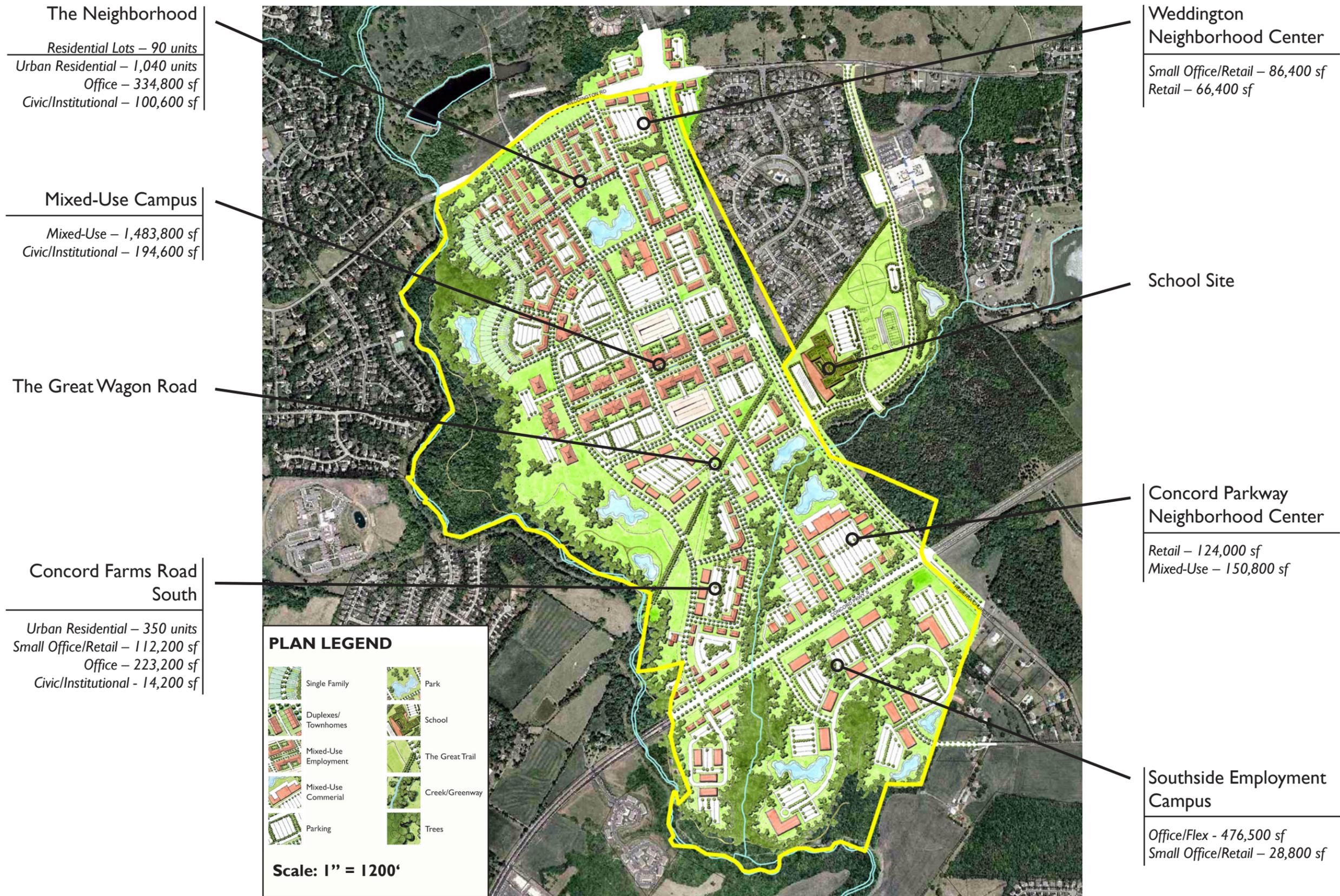
CITY OF CONCORD, NORTH CAROLINA



Development Pattern Diagram 4: Composite Development Pattern with Green Infrastructure

CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



CONCORD PARKWAY/ ROBERTA CHURCH ROAD SMALL AREA PLAN

CITY OF CONCORD, NORTH CAROLINA



City of Concord
Business and Neighborhood Services
66 Union Street
Post Office Box 308
Concord, NC 28026-0308
704.920.5122 Phone
704.795.0983 Fax
www.ci.concord.nc.us

THE LAWRENCE GROUP
TOWN PLANNERS & ARCHITECTS

Post Office Box 1836
108 South Main Street
Suite B
Davidson, North Carolina 28036
704.896.1696 Phone
704.896.1697 Fax
www.thelawrencegroup.com