

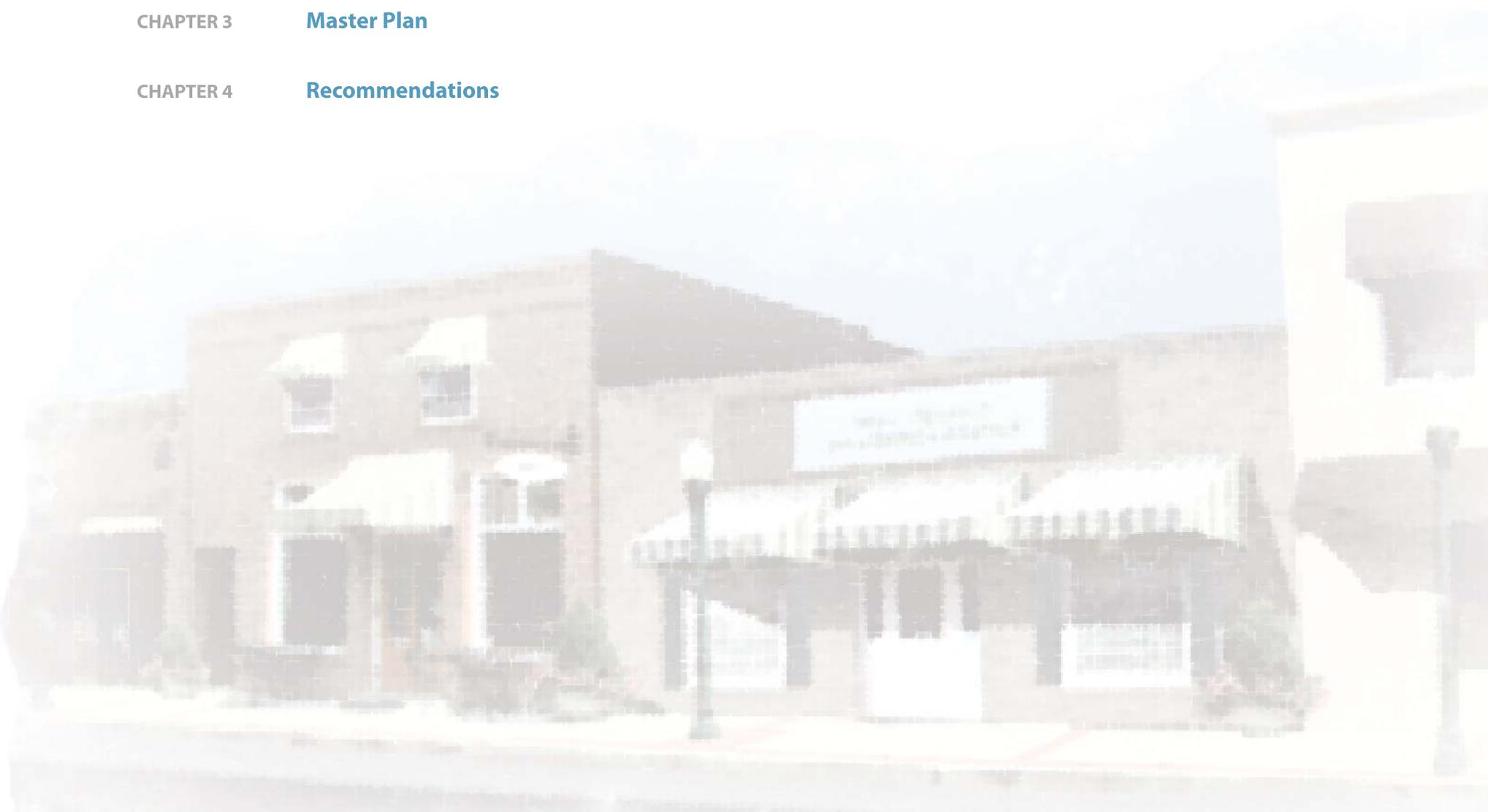
YADKINVILLE'S DOWNTOWN CONCEPTUAL MASTER PLAN

TOWN OF YADKINVILLE, NORTH CAROLINA
PREPARED BY HSMM, SEPTEMBER 2007



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CHAPTER 1

Introduction

Master Planning Process

YADKINVILLE MASTER PLAN

The purpose of the Yadkinville Downtown Master Plan is to help guide growth by providing design recommendations and guidelines for the municipality. In general, master plans are tools for cities and towns to use when planning their growth and development. The Yadkinville Downtown Master Plan provides general and specific design guidelines for the downtown area and should serve as a living document to help guide future decisions and development.

Community input, such as mapping workshops, public meetings, and public surveys are important components of any planning document. Public input played a large role in the development of the Yadkinville Downtown Master Plan. The Yadkinville master planning process included all of the community input methods listed above. This helped define the goals and objectives of the Plan and better understand residents' and business owners' concerns and priorities. The Yadkinville Downtown Master Plan highlights the elements necessary for the Town to improve the overall "pedestrian friendliness" of the Town and better define the edges of the Town through apparent and impressive gateways.

GOALS OF THE MASTER PLAN

The goals of the Yadkinville Master Plan include improving the overall quality of the pedestrian environment through better connectivity and accessibility of the pedestrian system. Enhancements such as plantings and the incorporation of decorative paving materials not only improve the visual quality of the pedestrian environment, but also increase its safety.

Introduction

The Yadkinville Master Plan also seeks to improve the four gateways of the Town. A strong entrance into the Town will reflect the character and values of the Town and its residents. The design recommendations provided herein will better define the boundaries of the Town.

Yadkinville at a Glance

BACKGROUND AND LOCATION

Yadkinville, a modest town of approximately 50 acres and 3,000 citizens, rests at the foot of the Appalachian mountain range. It is nestled among North Carolina's rolling hills and rich vineyards of the western Piedmont. Since 1851, the Town of Yadkinville has served as the County Seat for Yadkin County, which rightfully gains its name from the Yadkin River that creates the County's northern and eastern most edges. Yadkinville is located at the heart of Yadkin County at the intersection of Old US 421 and US HWY 601 between Winston Salem and Wilkesboro.

HISTORY

Historically, both Yadkin County and Yadkinville are revered as farming communities, harvesting and curing cash crops such as tobacco. The introduction of the rail system in 1881 in bordering Surry County, across the river to the north, brought new wealth and prosperity to the area. However, such fortune was slow to spread throughout the region, taking nearly 10 years to extend the railroad to southern areas of the county.



Citizens of Yadkinville and members of the HSMM design team exchange ideas at the first public mapping workshop



Current EMS station located on Cherry Street



Decorative paving was incorporated into the intersection of Jackson and Elm Streets

PRESENT

Presently, Yadkinville is experiencing a steady growth rate due to increases in the residential, commercial, and industrial sectors. Yadkinville boasts a fusion of old world agriculture and a growing industrial economy supporting such large corporations as Unifi Textiles, the county’s largest employer. Yadkinville’s convenient location in the Yadkin Valley viticulture area adds to their growing agritourism industry and makes the Town an attractive destination for residents, visitors, and passers-through.

ECONOMY

Employment in the Town of Yadkinville is diverse and ranges from manufacturing (34%), health, education, and social services (18.9), sales and trade (11.4%), construction (10.1%), and transportation and warehousing, and utilities (4.2%). The aforementioned industries provide these job types:

- 33.9% Manufacturing
- 18.9% Educational, health and social services
- 11.4% Retail trade
- 10.1% Construction
- 4.2% Transportation and warehousing, and utilities
- 3.9% Arts, entertainment, recreation, accommodation and other food services
- 3.7% Professional, scientific, management, administrative, and waste management services
- 3.3% Public administration

- 3.2% Finance, insurance, real estate, and rental and leasing
- 2.5% Wholesale trade
- 2.9% Other services (except public administration)
- 1.5% Information
- 0.5% Agriculture, forestry, fishing and hunting and mining

Yadkinville’s movement towards industrial growth, with the advent of Unifi and other similar corporations’ relocation to the Town, strongly contributes to its economy. Yadkinville’s historic roots as the original county seat, its opportunities for recreation along the Yadkin River, and its flourishing viticulture make it an attractive hub with a small town feel that has something to offer everyone.

DEMOGRAPHICS

According to the 2000 US Census Bureau, the median household income for the Town was \$31,250 in 1999, while the median income for a family was \$45,000.

The 2000 Census Bureau reports that Yadkinville is a town of 2,818 people within a land area of 2.72 sq. miles. There is a wide age and race distribution within the town limits with the median age being 38.7 years. The majority of the population within Yadkinville is Caucasian (85%). The African American population is next highest, comprising close to 7%, leaving another 7% comprised of persons of other races, and 1% of the population comprised of two or more races.

Below is a summary of the age distribution in the Town of Yadkinville.

Ages: 0-14	19.7%
Ages: 15-24	11.5%
Ages: 25-44	27.2%
Ages: 45-64	20.3%
Ages: 65+	21.3%

It is projected that by the year 2010, the Town of Yadkinville will have a population of 3,240. This is an 8% increase over 10 years.



Introduction

CHAPTER 2

Existing Conditions

Status Quo

LAND USE

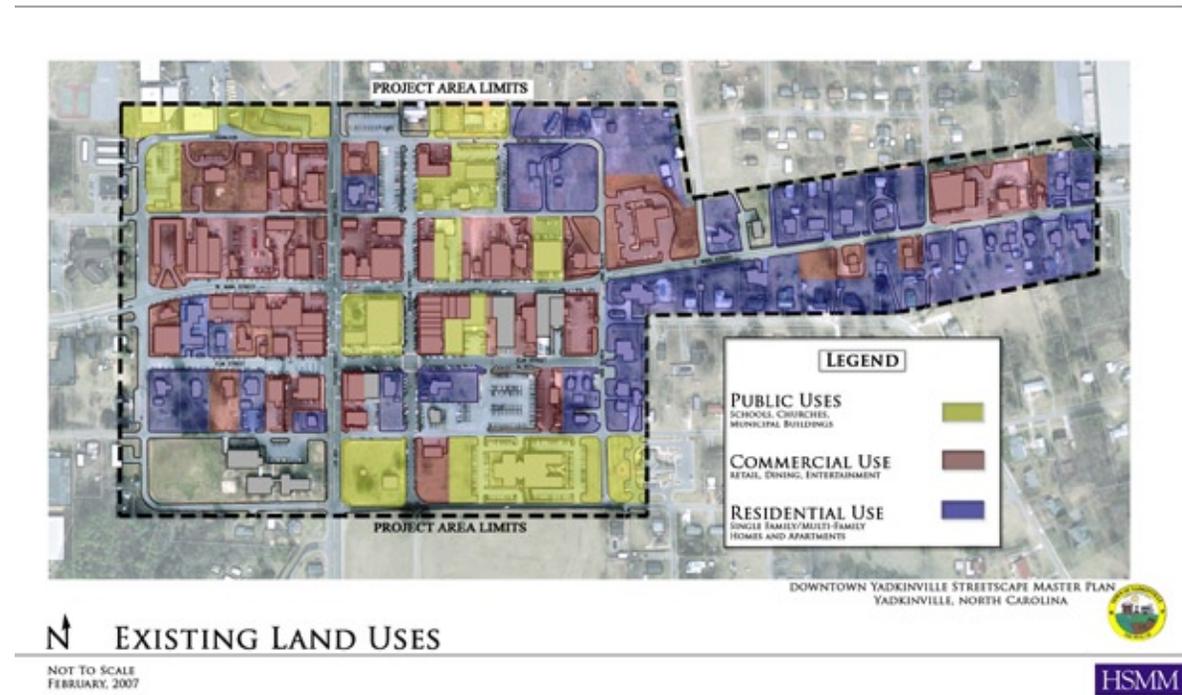
Downtown Yadkinville has a mixture of uses including commercial, residential, and institutional. However, the organization of these land uses is not optimum. Single family homes are the primary residential type and are mainly located outside the confines of downtown, limiting the number of people living in the downtown area.

Currently, there are no “mixed use” buildings in downtown Yadkinville. Residential units are concentrated on the periphery of downtown, while the commercial and government/institutional buildings are scattered throughout. Commercial buildings are located on the west side of downtown, while most of the residential units are located on the eastern side. This limits the amount of residents who are able or willing to walk the moderate distance to the businesses.

This pattern of land use does not support a lively, accessible, and economically thriving downtown. At the close of business hours, there are few reasons to remain in the heart of Yadkinville. By combining uses such as residential and commercial, a town increases the number of people downtown twenty four hours a day. Not only does this result in more patrons for businesses such as restaurants, it also increases the safety of areas previously void of people.

STREET ENVIRONMENT

Many opportunities exist to improve the aesthetic and functional qualities of the downtown Yadkinville street environment. The current



physical character of downtown Yadkinville consists of overhead power lines, damaged sidewalks, and minimal vegetation. Also, many of the sidewalks are narrow, containing obstructions, and do not comply with the (ADA) Americans with Disabilities Act, making it difficult for pedestrians to navigate through downtown.

Pedestrian facilities such as sidewalks, crosswalks, pedestrian refuge islands, street furniture, and a planted buffer are all important components of a safe and comfortable pedestrian environment. These facilities are absent or not consistent

throughout downtown. The sidewalks which are present are in poor condition and do not always comply with ADA regulations.

The street environment in Yadkinville is not a supportive environment for visitors, residents, or business owners. It does not encourage use or reflect the richness of the Town’s history and character.

Existing Conditions

OPEN SPACE

Open space in Yadkinville consists of large parking lots, vacant lots, and small pockets of mostly unprogrammed greenspace. There are numerous large parking lots in Yadkinville. These account for most of the open space in the Town. There are no formal parks or gathering spaces in downtown Yadkinville for residents and visitors.

Parks and open space add to the diversity of destinations within a downtown. These areas often act as gathering spaces for informal activities such as picnics, games, and people watching. They are also areas where larger tracts of vegetation can be incorporated into the “urban” fabric.

Incorporating small public open space into downtown Yadkinville, will improve the visual and environmental quality of the Town. These areas can be used for a variety of events and activities, as well as provide a place of respite and pause within the hustle of a lively downtown.

PARKING

As mentioned above, Yadkinville has a large amount of parking. The available parking is a mixture of on-street parking and internal parking lots. Existing parking lots do not have vegetation and are not consistently striped to designate parking stalls.

One of the challenges in Yadkinville is enforcement of parking regulations, particularly parking time limits for on-street parking. There is a severe lack of handicap parking spaces throughout downtown. Both of these issues were brought forth at the public meetings and mapping workshops. Parking should be broken into smaller lots which incorporate vegetation, and scattered throughout the downtown.



OPEN SPACE ASSESSMENT

NOT TO SCALE
FEBRUARY, 2007



EXISTING PARKING MAP

NOT TO SCALE
FEBRUARY, 2007



Existing Conditions

TRAFFIC PATTERNS AND CORRIDORS

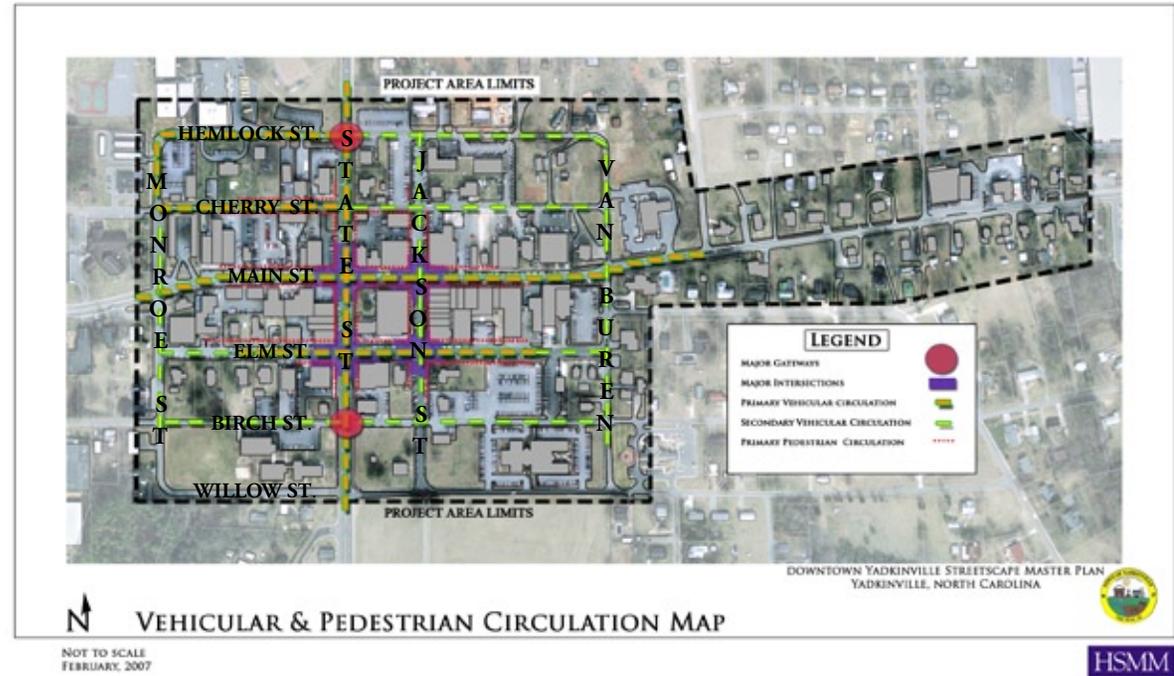
Downtown Yadkinville’s street system is organized by a grid system of blocks. All streets, with the exception of one block on the western portion of Cherry Street and Hemlock Street, allow for travel in both directions. One of the benefits of one-way streets is increased safety for motorists and pedestrians. One way streets simplify decision making to one direction of traffic.

Primary north-south corridors in downtown Yadkinville include State Street (HWY 601) and Jackson Street. The primary east-west corridor in downtown Yadkinville is old Main Street (US HWY 421). Main Street has the highest pedestrian traffic, while State Street handles the highest vehicular traffic.

Major intersections are located at Elm and State Street; Elm and Jackson Street; State and Main Street; and Jackson and Main Street. These intersections are problematic mainly because they lack a designated left turning lane. This is especially a concern at peak hours, which occur between 7-8AM and 3-5PM, when traffic stacking and general congestion occurs. Pedestrian facilities are lacking on all streets in Yadkinville. The condition and presence of sidewalks, crosswalks, and pedestrian signalization are a significant challenge in creating a walkable and safe downtown environment.

BARRIERS

Major access barriers in downtown Yadkinville include State Street (HWY 601), large and irregular blocks in downtown, and the problematic intersections described above.



State Street is a four lane roadway which runs north-south through the Town. Currently traffic volumes on State Street are the heaviest in Yadkinville; there is traffic congestion at peak hours, and there is a lack of pedestrian facilities (crosswalks, pedestrian refuge islands, pedestrian signalization) to aid in crossing.

Downtown Yadkinville is organized into a grid of irregular blocks. The irregularity is found in the length of each block; they are all different with the exception of those between Jackson Street and

State Street (HWY 601). The elongated blocks and lack of small internal streets or connectors limit access between streets and businesses.

The intersections at Elm and State Street; Elm and Jackson Street; State and Main Street; and Jackson and Main Street are barriers for motorists. This is due to congestion described above. These intersections are also a barrier for pedestrians due to a lack of crosswalks, pedestrian signalization, and other pedestrian facilities.

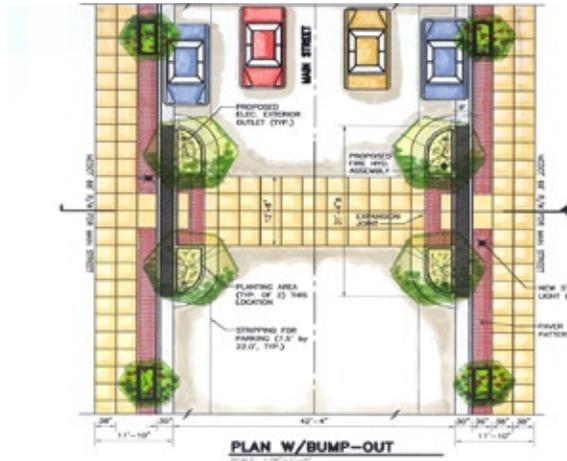
Existing Conditions

IN REVIEW

In order to achieve the goals of the master plan, the Town of Yadkinville needs to meet the challenges outlined in this chapter. It is recommended that the Town of Yadkinville implement the following:

- Provide consistent and safe pedestrian facilities
- Introduce traffic calming measures
- Increase the amount of open space and gathering areas
- Increase vegetation in the downtown area
- Reorganize parking to optimize parking availability
- Provide a positive first impression of the Town through conspicuous and attractive gateways.

Fortunately, Yadkinville is committed to improving the quality of life for its residents and building upon the growing tourist economy of the surrounding region. The Master Plan is described in detail in the following chapter and provides guidance in achieving the goals expressed in the preliminary planning of this project.



Existing Conditions

CHAPTER 3

Master Plan

Master Plan Elements

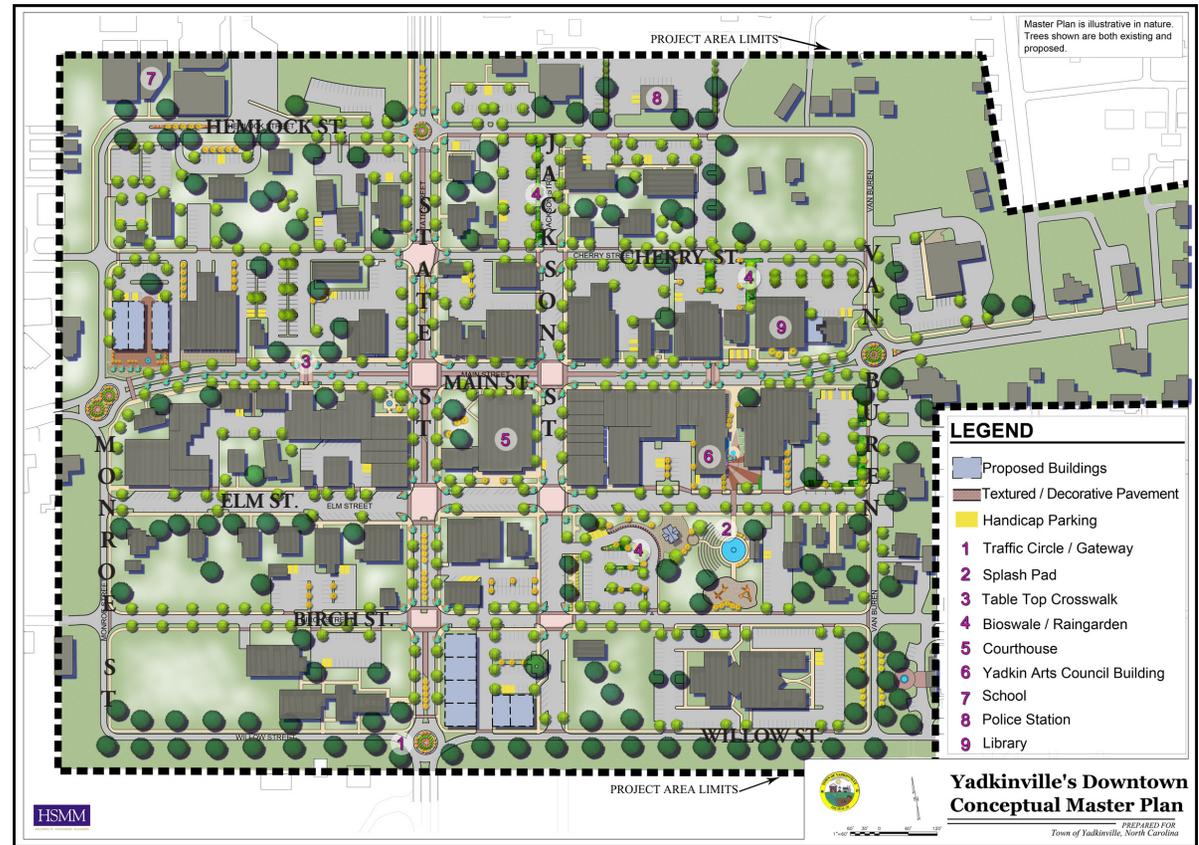
The purpose of this Master Plan is to provide a framework for both present and future growth in Yadkinville while maintaining an accessible and navigable human scale environment. Following an analysis of existing conditions in the Town of Yadkinville, design decisions were made to improve traffic circulation, pedestrian and motorist navigation, pedestrian accessibility and pedestrian safety.

The Yadkinville Downtown Master Plan focuses on circulation corridors with special attention paid to pedestrians. A detailed downtown master plan, a street tree plan, four gateway entrance master plans, and two detailed designs of important nodes and gathering areas were developed. These are discussed below.

DOWNTOWN MASTER PLAN

The goal of this Master Plan is to unite the east and west sides of downtown Yadkinville. Currently they are divided by State Street (HWY 601). The master plan incorporates a series of “road diets” on State Street and reduces it to two (2) travel lanes and a shared turn lane through Yadkinville. The road diet improves pedestrian connectivity through improved crosswalks and other pedestrian facilities.

The Master Plan proposes a series of street tree plantings throughout the Town which provide a sense of consistency and unity. The Street Tree Plan clearly delineates streets and pedestrian zones and provides a pleasant atmosphere for downtown.



The trees selected will provide year-round interest and are deciduous; providing shade in the summer and allowing sun through in the winter.

The Master Plan further develops the gateways into the Town through signage recommendations and other enhancements such as landscaping. The Gateway Master Plan designates a hierarchy of entrances into the Town based on current and

projected traffic volumes.

Entrances into the downtown have also received special attention in order to better define the edges of the downtown and welcome residents and visitors into the center of Yadkinville.

Master Plan

STREET TREE PLAN

Street trees are beneficial for a number of safety and aesthetic reasons, all of which add to the magic and activity of a downtown. For example, an allee of trees lining a street creates a visual separation between motorists and pedestrians. Street trees help to define the pedestrian zone and enhance the safety and walkability of a community. A tree-lined street also frames views and provides an organized environment for pedestrians. Incorporating street trees into the pedestrian environment will enhance the current “START WITH YOUR HEART” walking system, which winds through the downtown area. Street trees also help soften the architecture of building lines and create a more inviting and pleasant pedestrian environment. Trees draw the visual cue to a human scale and create a more private pedestrian corridor between the store fronts and curb, giving the illusion of an outdoor room which will be used for gathering and socializing.

In some instances plant material and street trees can successfully direct motorists; such is the case with Yadkinville’s Street Tree Plan. It was the goal of the Town of Yadkinville to have a strong correlation between the names of the streets and the tree species chosen. With the implementation of this plan, motorists and pedestrians alike will be able to navigate through the downtown blocks using the tree species chosen as their compass. For example, Cherry Street will be lined by an allee of Yoshino cherry trees, which flower in later winter and early spring. Birch Street will boast a colonnade of shady River Birches, and Willow Street establishes itself as a southern gateway into town with its stately



Crape Myrtle



Yoshino Cherry



Red Bud



Zelkova



Ginkgo



Willow Oak



Sycamore

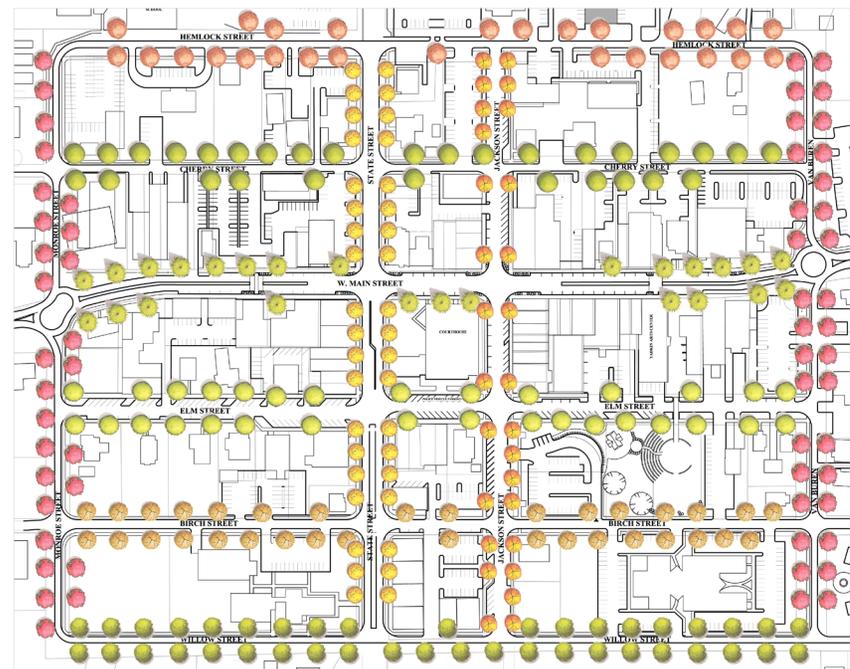


Lacebark Elm



Zelkova

- HEMLOCK STREET
Ginkgo
- CHERRY STREET
Yoshino cherry
- W. MAIN STREET
Japanese zelkova
- ELM STREET
Lacebark elm
- BIRCH STREET
River birch
- WILLOW STREET
Willow oak
- MONROE STREET
VAN BUREN STREET
Eastern redbud
- STATE STREET
Kousa dogwood
- JACKSON STREET
Crape myrtle



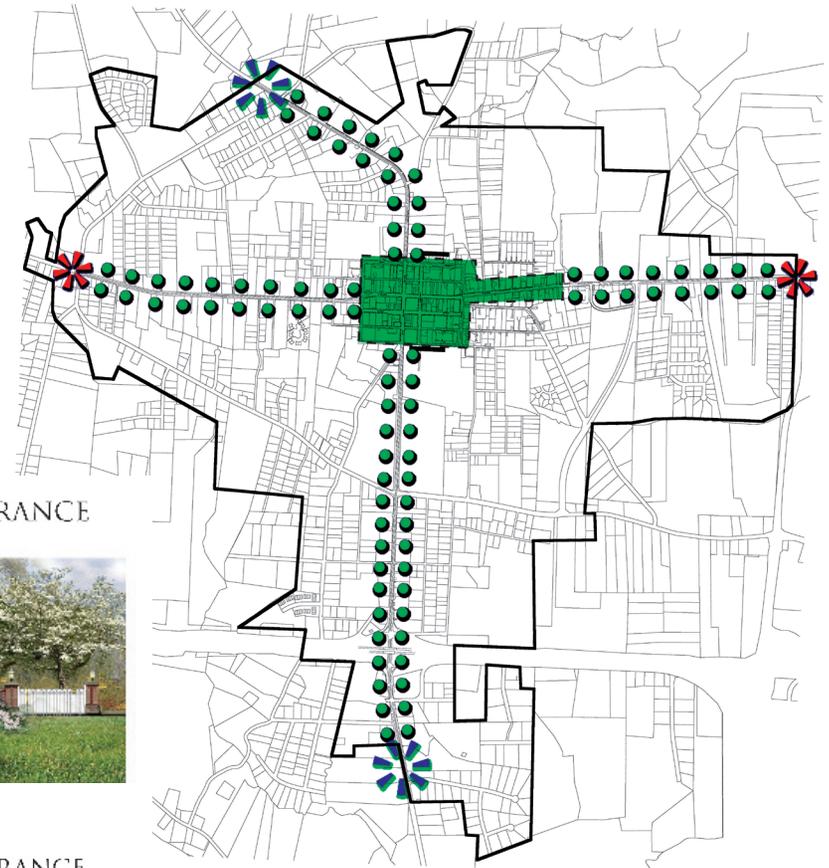
Willow Oaks. Not only do the street trees bring life to the downtown atmosphere, they also serve as a visual threshold for motorists and visitors, stretching from the gateways at the town limits into the heart of downtown Yadkinville.

GATEWAY MASTER PLANS

The four entrances at the Yadkinville town limit boundary will serve as conspicuous *gateways* which notify and welcome visitors to the Town of Yadkinville. The Gateway Master Plan for these four gateways is based upon the designation of each entrance as either a primary or secondary entrance. The designation of primary and secondary gateways is based upon the daily volume of traffic. The North and South Gateways along HWY 601 are designated as the two Primary Gateways while the East and West Gateways experience significantly lower levels of traffic and as a result are designated as the Secondary Gateways.

A typical *Primary Gateway* will consist of a stately entrance sign accented by a variety of flowering and evergreen plant material. The entrance signs will announce the Town of Yadkinville and will welcome residents and visitors into the Town.

A typical *Secondary Gateway* will consist of a slightly smaller, yet still elegant and effective, entrance sign and similar plant material. Plant material and signage will be less elaborate but will still welcome people into the Town.



 PRIMARY GATEWAY ENTRANCE



 SECONDARY GATEWAY ENTRANCE



Following the initial entrance sign, each gateway will feature a corridor lined with a rhythmic series of large shade trees, evergreen, and flowering ornamental trees to provide interest during all seasons and to provide a seamless transition into the downtown area. These trees also tie into the proposed Street Tree Plan.

NODES AND GATHERING AREAS

Within the Master Plan there are significant gathering spaces which embody the essence of downtown Yadkinville. These gathering spaces are those areas which harbor the social activity and nightlife of the town and create the communal small town intimacy that makes Yadkinville such an attractive and pleasant place to be. These areas were further developed in our plan to provide the Town of Yadkinville with a template for future gathering hubs or nodes. In addition, this plan illustrates examples of social gathering spaces and seating arrangements which facilitate interaction and socialization.

A series of elements are required to design a successful activity hub. For example, strategic seating design can encourage users of a space to face one another. This type of seating arrangement provides an opportunity for interaction and conversation. Also, the appropriate arrangement of vegetation in a gathering space can create small private outdoor rooms for a more intimate environment or generate a larger gathering space for a family or small groups. Designing and implementing spaces for many different users of all ages and backgrounds is important to serve the needs of everyone.

Plant material also plays a large role in how the space is used during each season. A successful plaza, for example, will provide ample seating in the sun, while also providing for respite in the shade during warmer months. Depending on plant selection, a space can also provide warm sunny spots to sit during the chillier winter months, making it more functional all year round.

These areas can be located in small open spaces within the urban fabric of downtown or adjacent to residential properties. Wherever located, they must be easily accessible through multi-modal transportation (i.e. walking, biking, automobile, etc.) and for citizens of all activity levels.



Proposed Urban Pocket Park at Main Street and State Street



Proposed Park Extension of Yadkin Arts Council Plaza

Master Plan

ONE WAY STREET SYSTEM

A driving force behind many of the design decisions derived from the grid layout of the downtown area and the creation of a one way system of streets. The grid system of blocks lends itself well for the implementation of one way streets at various critical points in downtown Yadkinville. One way streets allow pedestrians to be concerned with only one direction of traffic at a time, making it safer and easier to cross intersections. They are particularly helpful for younger pedestrians and elderly citizens, who might require more time to cross a roadway.





Before: Existing view down South Jackson Street



After: View looking South down Jackson Street once pedestrian facilities and amenities such as benches and planters have been incorporated into the downtown in combination with the implementation Street Tree Master Plan



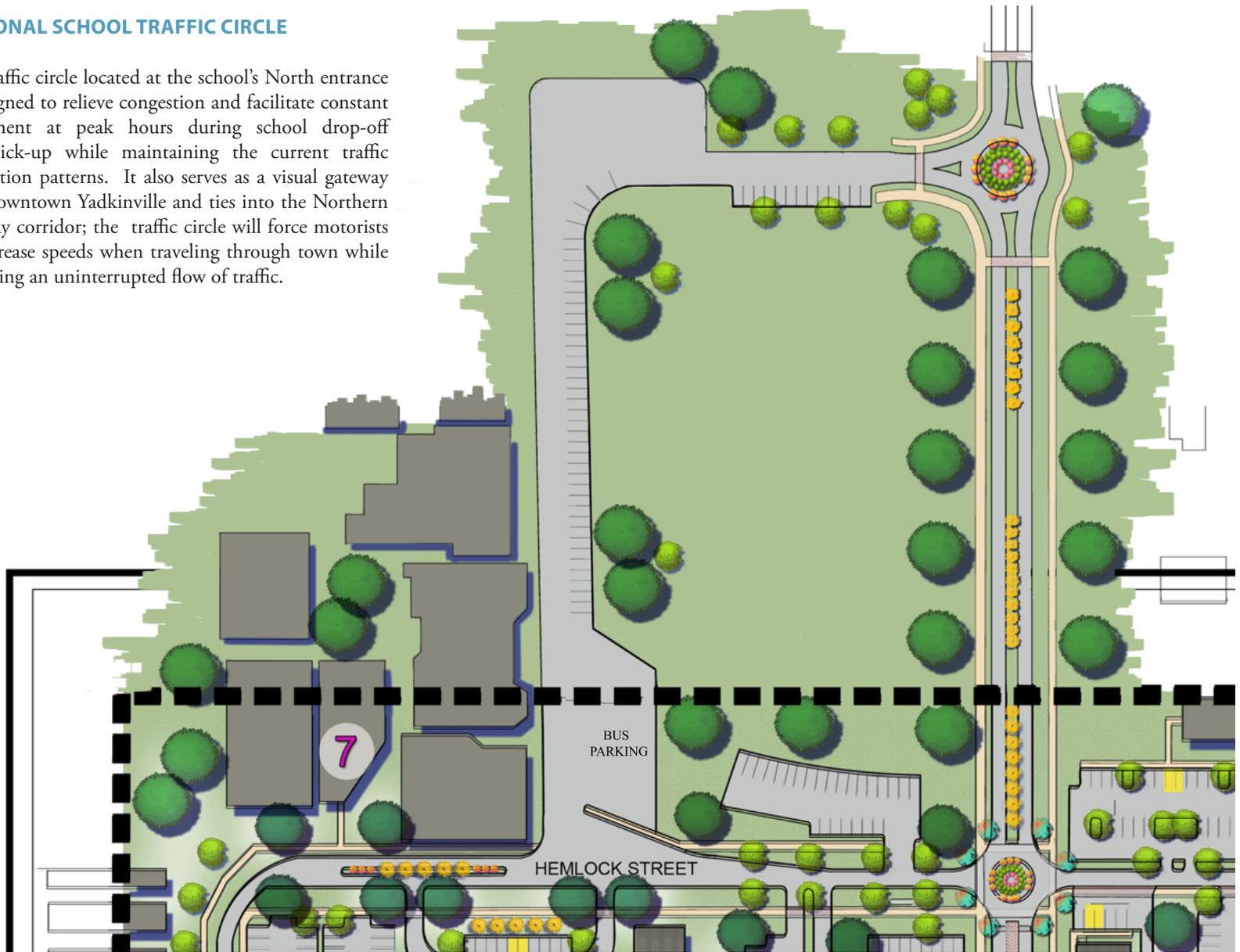
Before: View of Businesses located on Main Street



After: Storefronts of local businesses on Main Street once ordinances and amenities such as pedestrian lighting and planters have been incorporated

OPTIONAL SCHOOL TRAFFIC CIRCLE

The traffic circle located at the school's North entrance is designed to relieve congestion and facilitate constant movement at peak hours during school drop-off and pick-up while maintaining the current traffic circulation patterns. It also serves as a visual gateway into downtown Yadkinville and ties into the Northern gateway corridor; the traffic circle will force motorists to decrease speeds when traveling through town while providing an uninterrupted flow of traffic.



CHAPTER 4

Recommendations

Introduction

The following are proposed standards and guidelines for physical elements included in the Yadkinville Downtown Master Plan. The guidelines described herein shall be incorporated into the Yadkinville Downtown Master Plan. These guidelines will not only improve the Town’s compliance with the Americans with Disabilities Act (ADA) and the North Carolina Department of Transportation (NCDOT) standards for pedestrian facilities, they will also contribute to the overall livability of the community by improving the quality of the physical environment, Town character, and access to amenities.

Specific physical elements addressed in the Master Plan are grouped into the following categories:

- Transportation
- Pedestrian Facilities
- Parking
- Stormwater
- Landscaping/Vegetation
- Signage and Wayfinding
- Site Amenities
- Open Space

The design guidelines are general and applicable to most municipalities, however, specific guidelines which apply to the Town of Yadkinville are listed in the beginning of each section.



Recommendations

Transportation

DESIGN GUIDELINES

- Four traffic circles are proposed in the Town of Yadkinville.
- Incorporate appropriate signage for traffic circles to direct pedestrian and motorists traveling through them.
- Provide crosswalks at all traffic circles for pedestrians and bicyclists.
- All table tops are to have decorative pavement.
- *Road Diet* State Street: Reduce four (4) lanes to two (2) lanes in order to slow traffic and improve the pedestrian environment.

PHYSICAL ELEMENTS

Traffic Circles

Traffic circles are small landscaped islands located in an intersection to provide geometric control of traffic and act as a traffic calming device.

Traffic circles reduce vehicular speeds, as drivers need to slow down in order to maneuver around them. Studies have shown that traffic circles reduce the number of turning crashes and are effective in reducing vehicle speeds in the immediate area. Traffic circles are a more costly device for traffic calming and require extensive evaluation to determine their effectiveness in a particular location.

If planted, traffic circles also increase greenspace in a community. Landscaped traffic circles greatly enhance the visual quality of a community and can add character to the street environment. Traffic



Traffic Circle with Pedestrian Amenities

circles are most useful in residential areas and other lower volume streets. When possible, traffic circles should be planted with native vegetation to reduce maintenance operations and costs.



Traffic Circle in Neighborhood Credit: www.wsdot.wa.gov

Roundabouts

A roundabout is similar to a traffic circle, as it uses a circular island rather than the typical stop sign or traffic signal, however it is often much larger and handles more than two streets. The following benefits of roundabouts and traffic circles include:

- Lower vehicle speeds
- Fewer accidents
- Increased pedestrian safety
- No signals to fail or maintain
- Provide opportunity for beautification

Roundabouts should be used for a variety of reasons including operations and safety improvements at intersections, as well as for traffic calming. Roundabouts also provide space in the center island for vegetation and signage which can enhance the overall appearance of the street environment. For this reason roundabouts are often used along heavily travelled thoroughfares and gateways/entrances into communities. Roundabouts can be confusing and dangerous for pedestrians and cyclists. Therefore, it is essential that bicyclist and pedestrian circulation is considered in the initial scoping and design of a roundabout.



Typical Modern Roundabout Credit: Reid Middleton, Inc.

Recommendations

Table Tops/Raised Intersections

Raised intersections, also known as table tops, are flat raised areas (about 3-6 inches) with ramps on all approaches. The entire area of the intersection is raised from the surrounding street grade and constructed of a contrasting surface material (pavers, stamped concrete) with the existing roadway material (asphalt). Raised intersections are recommended in the following locations:

- Areas of high pedestrian traffic
- Commercial areas
- Business districts
- Areas in need of traffic calming

Raised intersections are not recommended for roadways with an existing steep grade or intersections located on sharp turns. It is necessary to consider emergency vehicle access, as raised intersections reduce speeds to 15 miles per hour. Finally, raised intersections need to be visible on all approaches.



Raised Intersection

Road Diet

The term *road diet* refers to the modification of a roadway by reducing the number of lanes and widths of the street in order to increase access and mobility for all users. Road diets are typically used on four-lane undivided roads. The four lanes are usually reduced to three lanes consisting of two travel lanes and one center turning lane. The fourth lane is then used for bicycle lanes, sidewalks, on-street parking, or some combination. This conversion creates space for other modes

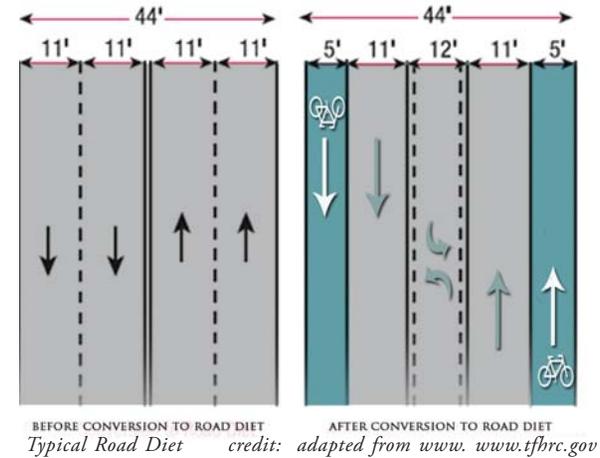


4 Lane Road Reduced with Turning and Bike Lanes

of transportation such as walking and bicycling, and improves the overall quality of the street environment.

Road diets have numerous benefits for motorists, pedestrians, bicyclists, and the larger community. These benefits include the following:

- Creates a safe, efficient way to move *all* modes of transportation (vehicles, pedestrians, bicyclists, transit)



- Reduces the number of lanes a pedestrian needs to cross in order to access the opposite side of the street
- Reduces vehicle speeds, lane changes, and collisions
- Designates areas for bicycles and therefore increases safety for cyclists
- Improves the overall quality of the street environment and the livability of a community.

Not all streets will benefit from a road diet. The following is a list of ideal road types to undergo a road diet:

- Roads with low to moderate traffic flow
- Roads where safety is an issue
- Roads with heavy pedestrian and bicycle traffic
- Transit corridors
- Designated bicycle routes
- Commercial areas and business districts
- Roads which serve schools and other heavy use areas
- Roads in historic districts

Recommendations

Pedestrian Facilities

DESIGN GUIDELINES

- Provide a separation between vehicles and pedestrians with a planting strip (4' minimum).
- Sidewalks should be a minimum of 5' in width and be provided on both sides of the street.
- Crosswalks should be a minimum of 8' in width except along Main Street and NC HWY 601 where they should be a minimum of 10' in width.
- Decorative paving should be used for all crosswalks and turning lanes.
- All sidewalks and crosswalks are to be ADA compliant.
- Decorative pedestrian lighting should be provided along Main Street, NC HWY 601, Jackson Street, and Elm Street.
- Pedestrian refuge islands should be incorporated into the medians on Main Street and NC HWY 601.

PHYSICAL ELEMENTS

Sidewalks

Sidewalks are important public spaces for all communities. Sidewalks are located between the edge of roadway to the edge of the right-of-way. They not only provide a designated space for pedestrians to walk; they also serve gathering and social purposes, as sidewalks are often the place where community members interact.

The appropriate width of a sidewalk depends on its location and use. Wide sidewalks provide more space for a variety of activities to take place. The minimum width of a sidewalk, excluding curb and other obstructions such as signal poles, signage,

parking meters, and street furniture, shall be at least five feet (5') in residential areas. This is the minimum width necessary for two pedestrians to walk side by side or for two pedestrians to pass one another comfortably. Sidewalks should be wider in areas of heavy pedestrian traffic such as



Recommended Sidewalk Width and Streetscape Zones

commercial areas, near schools, and along heavily used corridors. In these areas a minimum width of eight feet (8') is recommended.

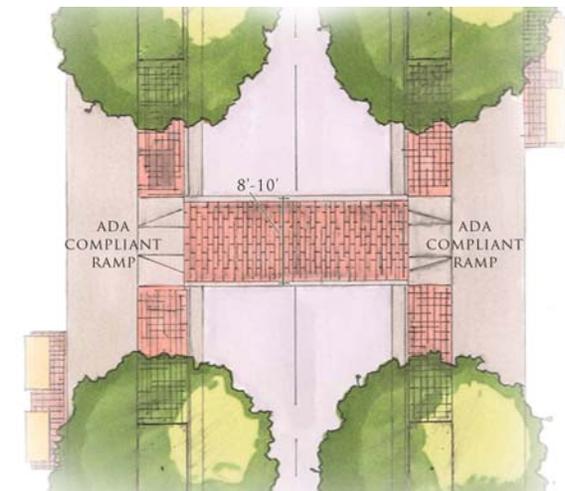
A separation of four to eight feet (4'-8') is recommended between the back of curb and sidewalk. This separation is beneficial for the safety and comfort of pedestrians and acts as a transition between the vehicular zone and pedestrian areas. Often this separation consists of a planting strip with street trees and/or low maintenance vegetation such as groundcover or grass. See "Landscaping/Vegetation" for more information.

Crosswalks

Marked crosswalks are an important part of the pedestrian environment as they delineate the pedestrian zone across a roadway. It is essential that all crosswalks be designed in accordance with the Federal Highway Administration's Manual of Uniform Traffic Control Devices (MUTCD).

There are many types of crosswalks available and these range from simple white striped crosswalks to highly decorative ones with stenciling and alternative materials. It is recommended that crosswalks be striped with continental markings as they have been proven to be the most visible to motorists. In historic and high use "downtown" areas a more decorative crosswalk can be installed, provided it meets ADA regulations and is not too bumpy or difficult for handicap users.

Crosswalks should be installed at all intersections where there is a traffic light or stop sign. Crosswalks should not be installed where sidewalks



Decorative Crosswalk

Recommendations

are not present or in locations where there is not appropriate ADA compliant accessibility on both sides of the street. All crosswalks should be at least eight feet (8') wide and ten feet (10') wide in high use areas such as around schools and commercial areas.

Pedestrian Refuge Islands

Pedestrian refuge islands are raised islands located in the center of a roadway. They are often located at an intersection or at mid-block crossing locations for pedestrians. Pedestrian refuge islands protect pedestrians from vehicular traffic by providing a safe place for them between traffic lanes. This allows a pedestrian to be concerned with one direction of traffic at a time and is particularly helpful for elderly, disabled, and young pedestrians as these users often need more time to cross a roadway.

Pedestrian refuge islands not only provide a safe place for pedestrians, they also can be used as a traffic calming device. Incorporating landscape elements and colored pavement into the design of an island makes it more visible to motorists. These

enhancements also contribute to the character and overall “friendliness” of the pedestrian environment through increased vegetation and decorative elements.



Pedestrian Refuge Island

Credit: www.saferoutes.org

Pedestrian signalization or push buttons can be installed on either side of the refuge island to further help pedestrians negotiate traffic. Pedestrian refuge islands should be used on streets with multiple lanes of two-way traffic, high speeds, and pedestrian activity.

Vegetation should be incorporated into the median to help alert drivers of the pedestrian refuge island as well as increase vegetation and improve the character of the street environment. It is necessary to ensure that vegetation does not reduce visibility of motorists and pedestrians. A crosswalk should be incorporated into the design of the refuge island to alert drivers and designate a crossing for pedestrians. Crosswalks and walks through the median should be a minimum of eight feet (8') in width. Signalization, pedestrian push buttons and

signage will improve the safety and accessibility of pedestrian refuge islands and should first be installed in areas of high pedestrian activity.

Pedestrian Signalization

Pedestrian signals are an important element in the pedestrian environment. Typically pedestrian signals are installed at intersections where there is a need to control pedestrian traffic. There are two types of pedestrian signals: pedestrian sensors (usually a button a pedestrian pushes to cross) and automatic signals. Pedestrian sensors are useful in areas where pedestrians may experience a delay waiting for the light to turn red and in areas where vehicular traffic signals have a short green light. A pedestrian sensor will increase the amount of time the light is green for vehicles and pedestrians.

Pedestrian signals consist of illuminated symbols, either the words “walk” and “don’t walk” or an image of a person walking or a raised hand. Countdown pedestrian signals are very effective as they all display the amount of time a pedestrian has to cross a street. This eliminates the ambiguity of how long a pedestrian will have the right of way. It is also important to provide audio



Pedestrian Refuge Island

Credit: www.fhwa.dot.gov



Countdown Signal

Credit: www.tfhr.gov

Recommendations

support at signalized intersections to assist visually impaired pedestrians. This increases the safety of all pedestrians.

Pedestrian signals should be installed in the following locations:

- Areas of heavy pedestrian use, such as at a central business district or a school.
- Intersections which have complex or multiple traffic patterns, or at intersections where it may not be clear to a pedestrian when it is safe to cross.
- Intersections where there is poor visibility and it may be unclear to a pedestrian when it is safe to cross.

Parking

DESIGN GUIDELINES

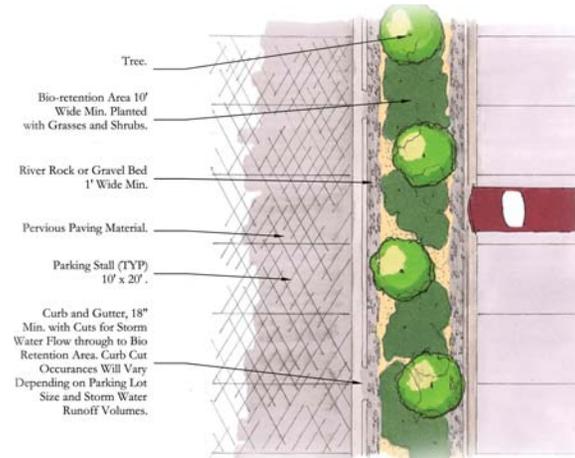
- A mix of 90 degree and angled parking is to be used in the Town of Yadkinville.
- Pervious paving should be used in parking lots where appropriate. Porous asphalt, porous concrete or grass pave may be used.
- Canopy trees should be incorporated into all parking lots to provide shade, screen unattractive views, and to help reduce heat islands in the Town.

PHYSICAL ELEMENTS

Parking Pavement

Impervious pavement in parking areas should be minimized in order to reduce stormwater runoff and the volume of water entering the stormwater infrastructure, as well as increase stormwater infiltration. When using impervious pavement such as asphalt and concrete it is necessary to interrupt stormwater flow through the use of raingardens, bioswales or other vegetation (See

“Stormwater” for more information). This reduces water velocity and provides an area to help detain and filter stormwater on-site and thereby improve the quality of water entering the stormwater system and local watershed.



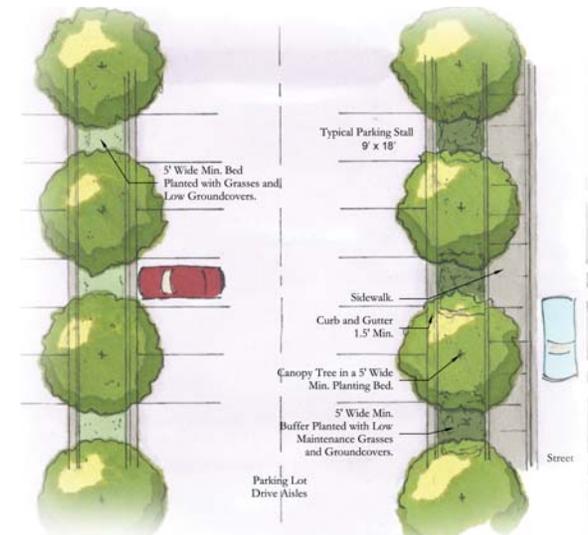
Parking with Bio-Retention Area and Pervious Paving

The use of permeable pavement in contrast to traditional asphalt and concrete can reduce the amount of stormwater runoff and is the recommended treatment. Examples of pervious pavement include unit pavers (laid on sand, or other permeable material), porous asphalt, porous concrete, gravel and grass paving systems which provide small cells for grass to grow or for gravel. Grass paving systems are most useful for overflow parking, emergency fire lanes, and parking spaces around trees to allow for infiltration.

Parking Layout

Typical parking lots, consisting of large expanses of asphalt have large impacts due to the amount of vegetation cleared and grading of landforms. In

contrast, “scattered parking” reduces the clearing of vegetation and disturbance to landforms and features. Dispersing parking throughout a site requires more effort in siting and staking the parking spaces and is most suitable in sensitive areas such as forested parcels



Parking Lot with Canopy Trees and Planted Islands

Even in non-sensitive sites it is important to break up parking areas into smaller clusters in order to incorporate vegetation and allow water to drain into adjacent raingardens, bioswales, or other unpaved areas.

In all cases, parking areas shall integrate vegetation through perimeter plantings, screening, planted islands, bioswales, or some combination. Large canopy trees should be used to reduce the heat

Recommendations

island effect, block winds, and filter air. Plant material should consist of native vegetation, as native species typically require less maintenance than introduced species and they are adapted to local conditions.

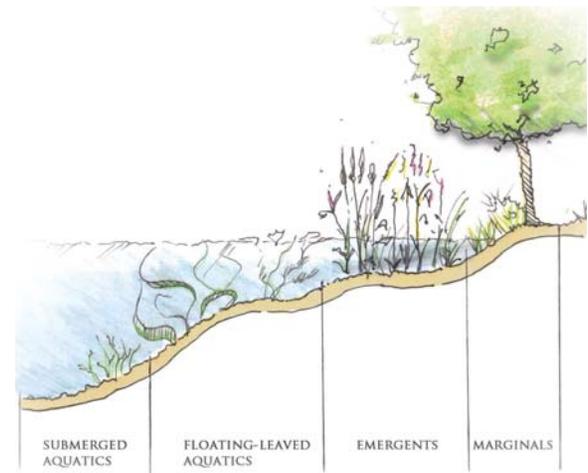
Parking Dimensions

Perpendicular parking spaces provide more available parking spaces compared to parking spaces at an angle such as 60 degrees. Parking lot dimensions for stalls are as follows:

- 90 degree parking stalls: 8’ wide, 18’ deep
- 60 degree parking stalls: 8’ wide, 19’-7” deep
- 45 degree parking stalls: 8’ wide, 18’-5” deep
- 30 degree parking stalls: 8’ wide, 15’-11” deep
- 0 degree parking stalls: 8’ wide, 22’ deep.

retention areas mimic natural systems and filter stormwater on site rather than diverting flow into the stormwater sewer system. Bio-retention areas can be used in a variety of situations and vary in size.

Small, shallow bio-retention areas are typically referred to as *raingardens* or *bioswales*. These applications can be used to absorb stormwater runoff from streets, sidewalks, parking lots, and buildings. Typically a raised drain inlet is located at the lowest point for major storm events. This



Retention Pond with Main Plant Groups
 Credit: adapted from *Rain Gardens*,
 Dunnett, N. and Clayton, A.



Raingardens Filter Water from Street
 Credit: www.cityofseattle.net

Stormwater

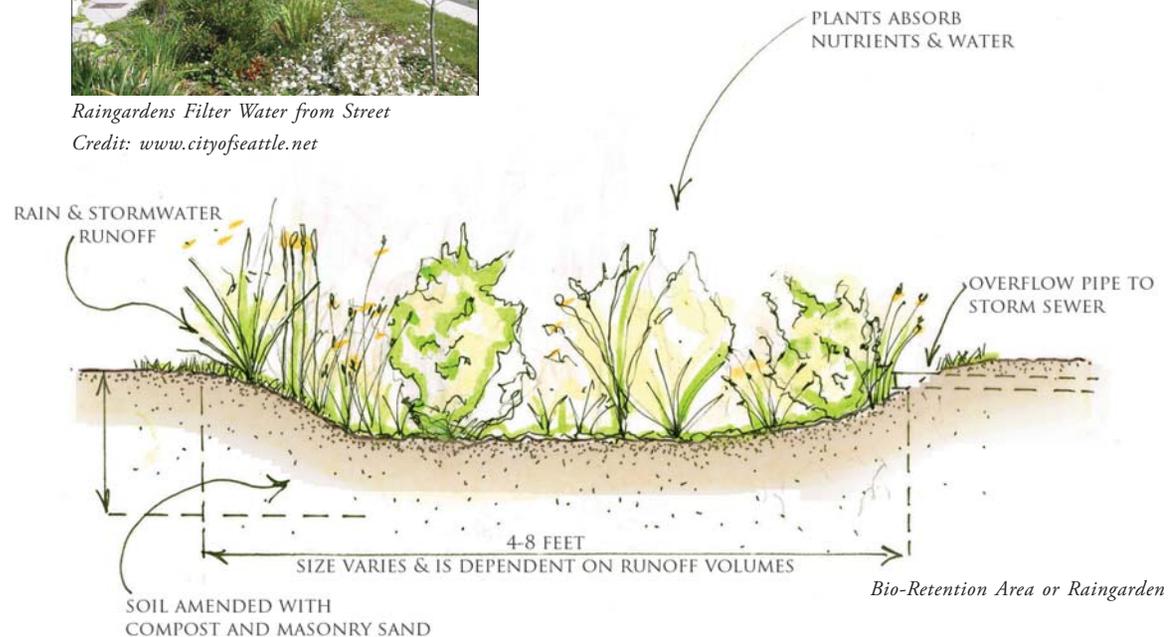
DESIGN GUIDELINES

- Where possible incorporate bio-retention areas (rain gardens, bioswales) into parking lots to mitigate stormwater run-off and increase vegetation.
- Use native vegetation that will withstand short periods of inundation and wet conditions in bio-retention areas.

PHYSICAL ELEMENTS

Bio-Retention Areas

Bio-retention areas are stormwater best management practices (BMPs) which use topographic slopes to control flow and volume of water and plant material to remove pollutants from the runoff. In contrast to traditional stormwater systems, bio-



Bio-Retention Area or Raingarden

Recommendations

drain inlet allows excess water to be directed to the nearest waterway. Raingardens and bioswales can be incorporated in small spaces which allow for greater flexibility and application than larger bio-retention ponds.

Filter strips absorb water from adjacent impervious surfaces such as parking lots. Filter strips break up the velocity and volume of flow. The size of the filter strips depend on the amount of water entering them. Unlike rain gardens, filter strips do not collect water; they filter and spread water (often into swales).

Retention ponds retain water and help to remove pollutants and heavy metals present in surface runoff. Retention ponds should have gentle slopes, not steep banks for vegetation and different depths. Water within the retention ponds will vary depending on stormwater and runoff flows. Different species and types of vegetation need to be included to maximize effectiveness.

Landscaping/Vegetation

DESIGN GUIDELINES

- Use native vegetation whenever possible to reduce maintenance and reflect the character of the Piedmont.
- Incorporate vegetation along roadways and in open spaces within the Town.
- Use planters or tree grates in urban areas where space may be limited such as along Main Street.
- Transform traditional parking lots into car parks by incorporating vegetation into islands and along the perimeter.
- Adopt and implement the Street Tree Plan.

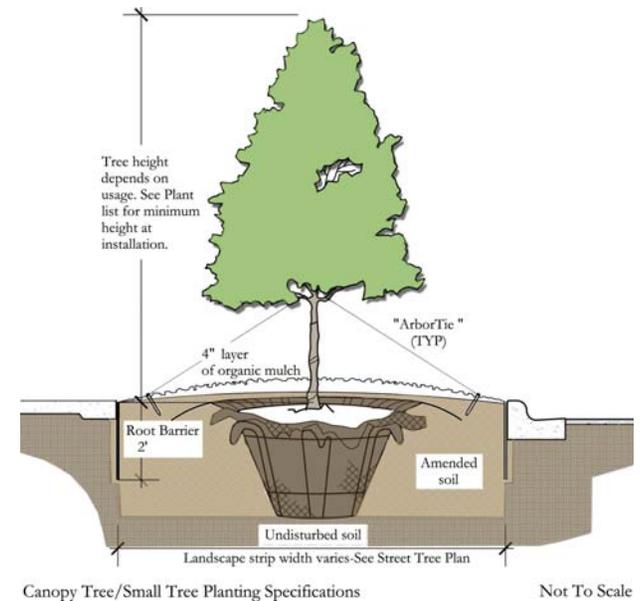
PHYSICAL ELEMENTS

Native Vegetation

Plant material should consist mostly of native vegetation. Native species typically require less maintenance than introduced species, as they are most adapted to local conditions. Native species which are disease resistant and drought tolerant are most desirable. They require less care and have a better chance of survivability. In all cases monocultures should be avoided and a commitment to plant diversity should be developed.

Native vegetation also reflects the specific region of a community and contributes to the overall character and identity of the place.

Vegetation can be used to screen utilities, parking lots, and other undesirable views.



Recommendations

Landscape Strips and Medians

Incorporating vegetation into landscape strips between sidewalks and the roadway and into medians within the roadway itself enhances the quality of the urban environment. Landscape strips provide an important separation between pedestrians and motorists and increases the overall comfort and safety of the pedestrian environment. By enhancing the streetscape, communities encourage people to interact with one another and to use this important public space.



Planters in the Urban Environment. Credit: Dan Burden

Road medians are another area where vegetation can improve the quality of the environment. Landscaped medians help provide a processional entrance into a community and communicate a hierarchy in the circulation system. Landscaped medians soften the large expanse of pavement, particularly across major thoroughfares and other multi-lane roadways. Landscaped medians also act

as a traffic calming technique in areas where there is high pedestrian traffic or near high use buildings such as schools or retail centers.

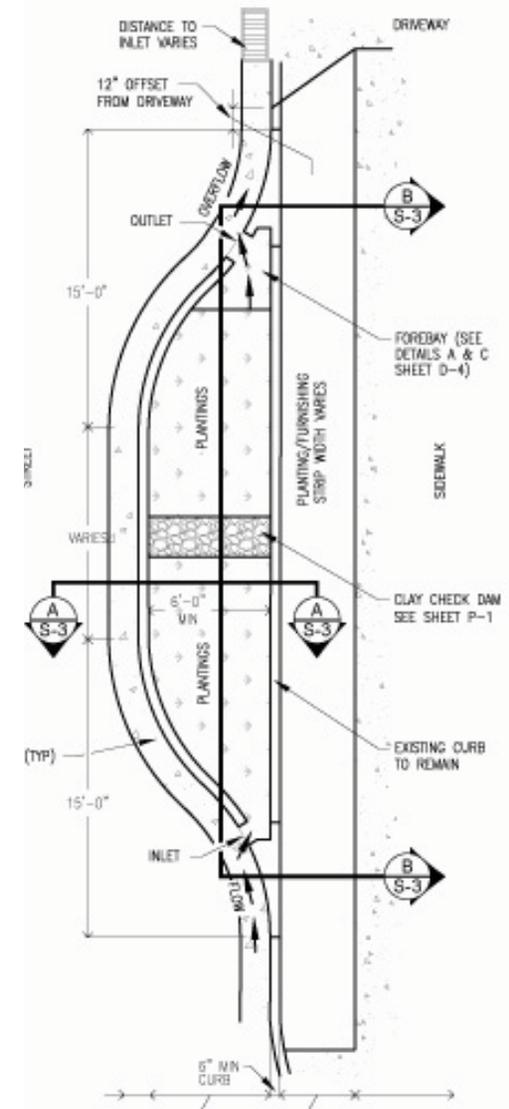
Planters

Planters can be used in areas where there is not available space for vegetation along the street or sidewalk. Planters are a successful way to incorporate plant material into the urban environment. Planters also allow communities to change them seasonally and they can be planted with smaller species to reduce cost and add variety.

When placing planters into the pedestrian environment it is necessary to ensure they do not obstruct the sidewalk. A minimum of five feet (5') is needed for clearance and to meet ADA regulations.



Planted Curb Extension Credit: www.urbangreenspace.org



Planted Curb Extension Credit: www.portlandonline.com

Recommendations

Stormwater Collection and Filtration Systems

Stormwater collection and filtration systems such as raingardens and bioswales, contribute the benefits of vegetation in the urban environment and the economic and ecological benefits of treating stormwater on-site. If designed carefully, these systems can not only treat stormwater effectively, but also contribute to the overall visual quality of a community through increased and diverse vegetation.

Raingardens and bioswales can be incorporated into planted medians, landscape strips and adjacent to parking areas.

Curb Extensions / Bulb-Outs

Planted curb extensions, also referred to as bulb-outs, filter stormwater runoff from streets and sidewalks. Planted curb extensions offer an alternative to traditional stormwater management techniques of piping water directly into underground sewers. These curb extensions not only help purify and infiltrate stormwater on-site, they also provide numerous other environmental and economic benefits.

Planted curb extensions also provide additional greenspace in the street environment. Curb extensions act as a traffic calming device, as they narrow the roadway. This causes motorists to reduce their speeds. Finally, planted curb extensions provide an opportunity for community members to witness stormwater flow and filtration.

Signage and Wayfinding

DESIGN GUIDELINES

- The Town of Yadkinville should adopt a signage system with consistent and descriptive graphics to identify pedestrian routes and Town attractions.
- Signage for attractions and destinations should include a map with distances provided in miles.
- Include destinations outside of the downtown area such as local wineries and farms that are open to the public.

PHYSICAL ELEMENTS

Directional Signage

Signage can be an effective tool to alert drivers to reduce speeds and allow pedestrians to exercise extra caution. It is important not to cause “clutter” when using a variety of signage or using too much. This can cause complacency and noncompliance with signs in general.

Signs, and the copied or printed text, should be large enough to be seen from a viewing distance and incorporate pedestrian signalization where necessary (wide intersections, etc.). It is imperative that all signs are properly located so they do not obstruct pedestrians and visibility triangles of motorists.

All signage for motorists must meet North Carolina Department of Transportation standards and comply with the standards set forth in the Manual of Uniform Traffic Control Devices or (MUTCD). Signs should be placed at appropriate intervals and be easily recognizable.



Interpretative Signage

Interpretative signage is an effective means of displaying information other than traffic rules and regulations. Visually consistent interpretative signage about the history of the municipality and the greater (larger) surrounding region can help guide visitors to important sites or to share interesting information.

Interpretative signage should consist of short sentences which contain familiar words that are easily understood. Each sign should be limited to one or two concepts; otherwise it becomes too complicated. Use interpretative signage to spark visitors' interest and encourage them to experience a particular place or engage in an activity.

Sign Placement

It is important to locate signs in prominent areas so they are easily viewed. However it is essential that they do not interfere with pedestrian and vehicular movement. For example, signs should not be placed within a sidewalk or reduce the clearance of a sidewalk to less than five (5) feet.



Site Amenities

DESIGN GUIDELINES

- The Town of Yadkinville should incorporate street furniture into the downtown environment.
- Pedestrian scale lighting should be incorporated into the downtown area.
- Ensure a clear zone width of at least 5' when locating street furniture and light fixtures so as not to obstruct pedestrian movement.



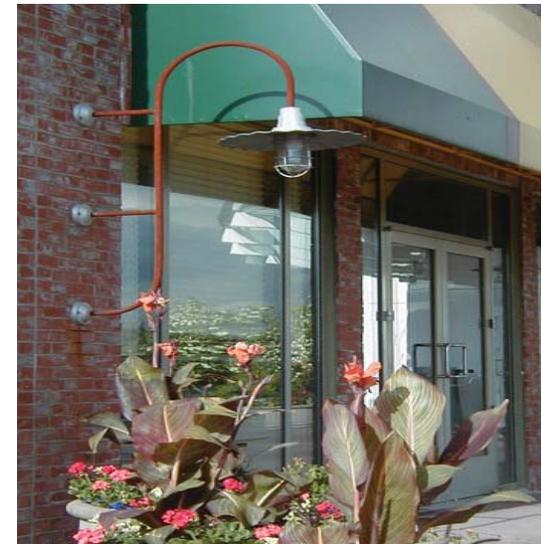
PHYSICAL ELEMENTS

Street Furniture

Public sidewalks not only serve pedestrian movement from one location to the next; they also function as social spaces where people gather, rest, talk, meet friends, stroll or simply watch people go by. Benches, water fountains, signage, shade trees, and street furniture provide places for pedestrians to sit, rest, people watch, and enjoy the public environment. These types of pedestrian amenities enhance the livability of a community and provide incentives for people to be active.

Street Furniture Placement

It is important that all furniture be carefully placed and not obstruct paths for pedestrians. Street furniture should not be placed at the top of curb



Recommendations

unless there are plantings or some other separation between the people using the furniture and the street. This increases the overall comfort of the pedestrian environment and will increase its use.

Bike racks encourage an alternative form of transportation and give bike riders a secure and pre-determined place to leave their bicycles. By enhancing the street environment with pedestrian amenities a city or town encourages and supports its use.

Pedestrian Lighting

Pedestrian scale lighting should be provided in commercial areas and any other locations where there is pedestrian activity at night. Street lights often illuminate travel lanes rather than the sidewalk surface where people are walking. Lighting located over the sidewalk or alongside it has the potential to enhance the visibility of pedestrians as well as the character of the area. Appropriate lighting at transit stops and waiting areas is also necessary in order to illuminate route information, provide visibility to drivers, and increase a pedestrian's sense of security.

Public Open Space

DESIGN GUIDELINES

- Incorporate mid-block crossings into long blocks in downtown Yadkinville.
- Develop and adopt an Open Space Master Plan which focuses on downtown.
- Incorporate plazas and small gathering spaces adjacent to commercial areas in downtown.



PHYSICAL ELEMENTS

Pocket Parks

Pocket parks are urban open space on a small scale. Their small size allows them to be incorporated into the urban fabric of a downtown and serve the needs of a variety of users. Pocket parks provide space for nature to be incorporated into the urban environment and areas for people to relax and meet friends. It is important to locate pocket parks in areas where the micro-climate is suitable and pleasant for users and in areas where they are visible from the street. They should be sited in areas of heavy pedestrian traffic such as a central business district so they are easily accessed.

Plazas

Public plazas are an important feature of any streetscape. They can host a variety of activities and users and it is important to design plazas so they are flexible to accommodate a variety of activities users. Outdoor furniture in the form of

seating, bicycle racks, tables, trash receptacles, water fountains, and lighting help to create a comfortable, functional, and pleasant place for users. Locate trash receptacles near seating areas and tables. Tables and seating areas should be distributed throughout the site in order to accommodate different seating arrangements as well as sun or shade options.



Recommendations

Incorporate vegetation into the design of a plaza. This can be done with a combination of street trees, canopy trees, and planters. Vegetation helps to define the space as well as cool it in the summer months. Deciduous trees are desirable as they allow sun to filter through in the winter, yet provide shade in the summer.

Pedestrian Passages

Pedestrian passages help provide connections between buildings, and blocks. Mid-block passages are helpful for pedestrians, particularly when blocks are irregular or long. Mid-block passages help pedestrians access their destinations quicker and provide space to incorporate vegetation and pedestrian amenities.

It is important to design pedestrian passages with ample lighting, signage indicating street connections, and accessible surface materials.