

DOWNTOWN CHAPEL HILL STREETSCAPE MASTER PLAN



**Prepared by the Departments of
Engineering, Planning and Public Works
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SUMMARY

The following plan provides design guidelines for streetscape improvements in Chapel Hill's Town Center. The downtown study area includes the following:

Franklin Street, Rosemary Street and the intersecting cross streets, from Hillsborough Street to the Carrboro town line.

This area is divided into six districts, based on existing architectural and spatial features, for purposes of specific recommendations.

The plan focuses on design and implementation, and includes the following major sections:

- **Design:** objectives; process; components; recommendations; and summary
- **Implementation:** strategies; and summary

Major findings and recommendations are noted.

DESIGN

Improvements to the downtown streetscape involve establishing design patterns for use in the six districts that enhance the pedestrian experience while maintaining the existing scale and character of these districts. While the patterns vary, general guidelines are established related to the following five design components:

- **Curb Extensions and Crosswalks:** extend curbs to better accommodate pedestrian needs and add and enhance crosswalks to improve safety
- **Sidewalks:** complete installation and make necessary repairs; use a combination of the Downtown's traditional materials of concrete and brick; include low brick planters in certain districts
- **Lighting and Utilities:** place utilities underground; replace existing light poles; include second tier of lighting in selected areas; utilize appropriate lighting types and levels
- **Site Furnishings:** group benches, bike racks and other amenities where feasible; select complementary furnishings; include various compatible designs for diversity
- **Planting:** maintain existing larger trees where possible; create shaded areas at pedestrian nodes; establish a pattern of small tree plantings in areas with limited space; and selectively landscape with annual plantings

IMPLEMENTATION

Improvements to the downtown area will be implemented either as joint projects with other public/private interests or as exclusively Town projects. Specific recommendations for action include the following:

- **Potential Joint Projects:** work with private developers for compatible public/private development within study area; work with Duke Power Company and other utilities for underground placement; implement lighting improvements; work with private property owners for landscaping improvements; work with Downtown Commission and others to implement specific improvements; and develop means for solicitation and use of private contributions, monetary or otherwise, for use in downtown improvements
- **Potential Town Projects:** implement demonstration projects within budgeted funding; construct curb extensions and crosswalk improvements subsequent to approval by NCDOT and determination of funding; implement design improvements to adjoining Town properties; and assess maintenance implications of improvements to insure adequate Town capacity for proper upkeep of study area

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OBJECTIVES AND ORGANIZATION

The intent of this plan is to provide design guidelines for streetscape improvements that will enhance Downtown Chapel Hill, both visually and functionally, while respecting its inherent character. Working within the Town's existing Development Ordinance, Thoroughfare Plan and Comprehensive Plan, this plan emphasizes improvements that can be realized on public rights-of-way and provides a framework to implement a coherent overall plan for physical changes within the study area.

We believe the Streetscape Master Plan is consistent with the Town's Comprehensive Plan Goals and Objectives, adopted June 12, 1989, which call for the revitalization and conservation of the Town Center. Specific adopted policies that are addressed in this plan include:

- Protect and expand pedestrian-oriented spaces in the Town Center;
- Protect the historic character of the Town Center, while encouraging compatible new construction;
- Provide and upgrade well designed public amenities, including parking lots, sidewalks, landscaping, open areas, tree canopy, street furniture, lighting, signage, and traffic signalization;
- Pursue removal of overhead wires in the Town Center; and
- Encourage public-private cooperative efforts to enhance the area.

The Master Plan is also intended to be consistent with the Town's Design Guidelines. While the Design Guidelines set forth Town-wide design criteria, the Streetscape Master Plan is intended to apply these criteria on a more detailed level to the public rights-of-way of the Town Center.

This plan is divided into the following sections:

- **Design Process:** an overview of the design process, including a brief site description and an explanation of the principles used to direct the design.
- **Design Components:** a description of the types of improvements that are proposed.
- **Design Recommendations:** a description of the different districts within the project area with recommendations for each district described relative to existing conditions and presented, where possible, with enough detail to be readily implementable.
- **Design Summary:** a summary highlighting the major improvements being recommended.

- **Implementation Strategies:** a discussion of the processes involved in implementing the proposed improvements.
- **Implementation Summary:** a list of proposed recommendations for action.

DESIGN PROCESS

Early in 1990, the Town of Chapel Hill and the Downtown Commission began working together to develop planning approaches to realize the downtown area's full potential. The need to improve pedestrian amenities was noted particularly, and the Town hired Cogswell Hausler Associates to develop a Master Plan for improvements that would facilitate pedestrian use of downtown Chapel Hill. As part of the design process, the Town hosted a two-day public workshop to involve townspeople in identifying the needs of the downtown area. From this information, the consultants began developing ideas to create a conceptual streetscape plan.

During the following two years, Town staff reviewed these ideas, prepared accurate base maps, and developed the present detailed plan intended to become part of the Town's Comprehensive Plan. Additional ideas and suggestions were received from several sources including a Landscape Design Studio from North Carolina State University; Mr. Wallace Kuralt, owner of the Intimate Bookshop; and Ed Stone and Associates, lighting consultants hired by the Town. Many of the Town's advisory boards and commissions have reviewed the plan and offered comments and suggestions, and the public provided input during a Town Council public hearing and daylong workshop.

SITE DESCRIPTION

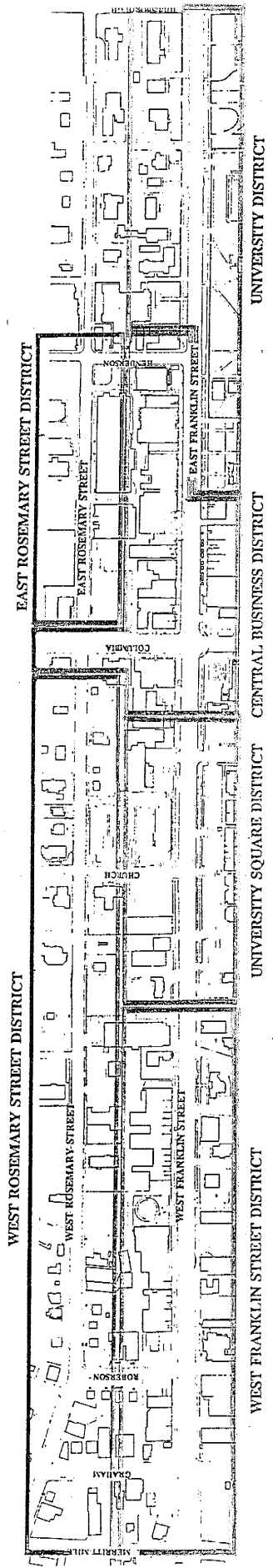
The image of downtown Chapel Hill that frequently comes to mind is the 100 block of East Franklin Street; for this study, and as an economic base, however, downtown extends beyond the 100 block of East Franklin Street to University Square and West Franklin Street, as well as both East and West Rosemary Streets. The one-mile study area was defined as Franklin and Rosemary Streets and the intersecting cross streets from Hillsborough Street, to the Town limits at Merritt Mill Road. Different districts have been defined within the study area according to physical and social characteristics unique to each, and guidelines and details developed on a district-by-district basis. The limits of the study area and the different districts are illustrated in Plan 1.

There are certain circumstances and influences which shape the nature of the downtown in general. The most significant site influence is the University of North Carolina campus, which lies adjacent to the downtown area to the southeast. Students moving to and from the campus make up a large fraction of the total pedestrian traffic on the street, and also constitute a distinctive market which has a determinative influence on the mix of retail establishments in the central business district.

The University's influence west of Church Street is moderated by the presence of adjoining residential neighborhoods and business establishments on West Franklin Street and West Rosemary Street reflect a more varied clientele. We believe the streetscape should be designed to serve this diverse constituency, with appropriate response to the requirements of the student group as well as to those of the general population.

Chapel Hill, unlike many towns its size, retains in its town center a pedestrian environment and a small town character. Adjacent historic residential areas, the presence of many mature street trees, the scale of most commercial buildings and a variety of awnings and other architectural details support the "village" character of the downtown. The Rosemary Street Parking Facility, designed to reflect the downtown's predominant mercantile architectural style and intended to diminish the need for additional large on-grade parking lots, is an example of the Town's commitment to maintaining this pedestrian scale character.

Physically, the downtown is a longitudinal complex with an east-west orientation along Franklin and Rosemary Streets. Within this linear downtown area, there are several districts, each unique according to use, building type and setback, and the way site amenities, such as sidewalks and other features, have evolved. The Streetscape Master Plan attempts to respond to the unique features of each district and to enhance its identity, by repeating existing elements or establishing new ones that complement existing features. Elements common to several districts, such as lighting or certain street furnishings, are then used to unify the streetscape design.



Plan 1. The Downtown Streetscape Master Plan Study Area and District Limits

DESIGN PRINCIPLES

As stated in our objectives, the intent of this plan is to provide design guidelines for streetscape improvements that will enhance downtown Chapel Hill, both visually and functionally, while respecting its inherent character. Three fundamental principles were identified to direct the design:

- **Maintain the varied human scale development pattern which characterizes downtown;**
- **Enhance the pedestrian experience by addressing sidewalk, crosswalk and other site amenity improvements; and**
- **Identify and preserve the distinguishing characteristics of the downtown's different districts within the framework of a coherent overall plan.**

We developed a set of guidelines for the design and placement of specific physical improvements within the study area which followed these main principles. These guidelines were then used to establish design patterns specific to each district within the study area. The patterns in all districts, however, are developed utilizing the following design components common to the entire study area:

- **Curb Extensions and Crosswalks**
- **Sidewalks**
- **Lighting and Utilities**
- **Site Furnishings**
- **Plantings**

These components will be explained, in general, then used to define specific improvements on a district-by-district basis.

DESIGN COMPONENTS

Curb Extensions and Crosswalks

An important element in improving the pedestrian experience downtown is the addition of more pedestrian space along the sidewalk. Due to space constraints within the existing right-of-way in many areas, this is most readily accomplished by reconfiguring the location of the curb, that is, expanding the sidewalk out into the parking lane in selected locations. If limited to changes outside of existing travel lanes, these curb alignment improvements can significantly enhance the streetscape without impeding existing vehicular traffic patterns. This approach has been used successfully in other communities and is recommended here because it can help provide the following results:

- **Safer pedestrian crossing:** By extending the curb the width of the parallel parking lane, the pedestrian has less distance to walk across the street. The raised curb area would make that location and the pedestrian more visible, signaling a slower speed.
- **The opportunity to consolidate site furnishings:** Curb extensions would be large enough to accommodate site furnishings such as groups of benches, trash receptacles, bicycle racks, telephones, and kiosks in high pedestrian traffic areas, allowing more room for walking along the existing sidewalk. They could also provide a setting for the display of public art.
- **Space for large trees and specialty plantings:** These areas would allow enough space to plant large trees and provide a highly visible opportunity to utilize specialty plantings.
- **Repetition of a pattern:** Repeating the crosswalk with curb extensions establishes a pattern to which pedestrian and vehicular traffic respond, and provides coherence to the streetscape design.

Diagram 1 shows one possible design option for curb extension and crosswalk improvements in front of 306 West Franklin Street. It illustrates the potential for developing pedestrian nodes with groups of amenities along the street that can result from curb alignment changes. A pedestrian "refuge island" midway across the street is also possible at this location.

Although it is not the case in the above example, extending the curb may eliminate a small number of parking spaces in some areas. In general though, balancing the benefits of increased pedestrian space with the acknowledged importance of nearby parking to downtown businesses could be accomplished by carefully considering the size and placement of these curb extensions. Locating curb extensions near public off-street parking lots and making adjustments to bus, fire and loading zones are some of the ways of minimizing the loss of parking spaces.

Along with curb extensions, improvements to crosswalks are also recommended. The use of a distinctive paving treatment for selected crosswalks is one option that should be considered, but maintenance and cost issues associated with pavement changes may limit the use of this option. Restriping major crosswalks in a cross-hatch pattern is another option to be considered, especially at mid-block locations where a more conspicuous crosswalk could increase pedestrian safety.

The need for additional crosswalks, especially one mid-block on West Franklin Street, was mentioned at several public presentations of the preliminary streetscape plan. Recent NCDOT studies have indicated that pedestrian volume on West Franklin Street does not warrant a signalized crosswalk at this time. Town staff recommends that a non-signalized crosswalk be considered for this area and once established new pedestrian volume studies should be undertaken. Other possible new pedestrian crosswalks at Church and Franklin Streets and mid-block on West Rosemary Street are identified in this document to be pursued as part of the final curb alignment plan.

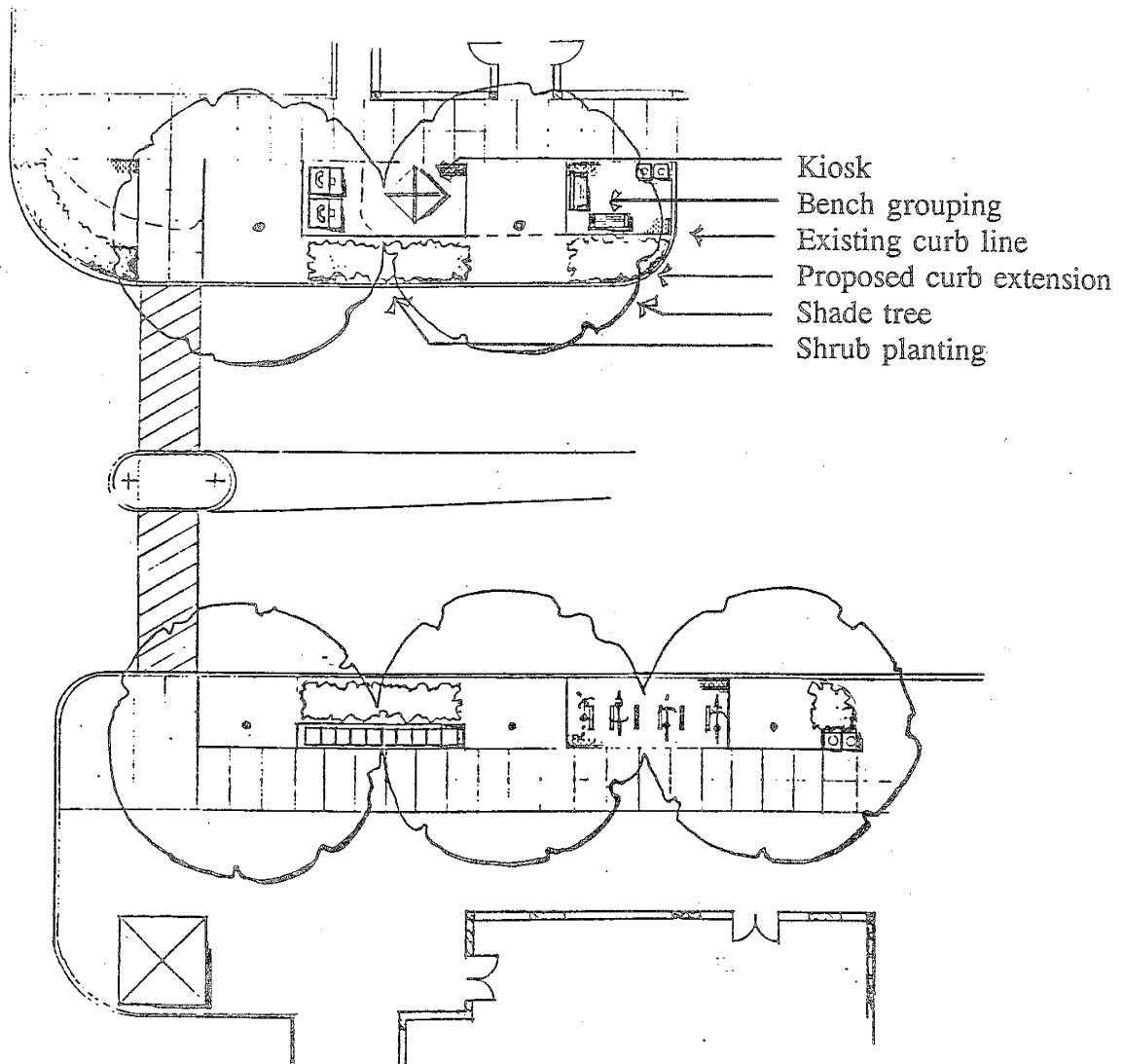


Diagram 1. Typical Curb Extension and Crosswalk

Sidewalks

The Downtown Workshop participants often mentioned rough and uneven sidewalks as hazardous. We propose to replace existing sidewalks in conjunction with other improvements. We recommend a number of sidewalk paving patterns, each combining the area's traditional materials of concrete and brick. Which specific pattern is used depends on the location of the sidewalk, whether it adjoins University, private or Town-owned property, and the volume of pedestrian traffic. In general, we recommend brick, laid on a pervious base in a continuous cross-bond pattern adjacent to planting areas, and concrete, due to its durability and smoother surface, in areas where pedestrian traffic is highest. The way the two materials interact and proposed sidewalk dimensions vary within the study area.

Another general guideline for sidewalks relates to areas behind curb cuts where they cross driveways and alleys. In these situations the paving pattern of the intersecting sidewalk should be continued across the automobile travel lane rather than being interrupted by asphalt. This would emphasize the pedestrian use of this space and could make these areas safer. For example, the sidewalk which crosses Porthole Alley at East Franklin Street should be a 10-ft. band of concrete.

Lighting and Utilities

Currently, lighting in the project area tends to illuminate the street for automobile rather than pedestrian traffic. This light can be lost at sidewalk level as it filters through trees or other obstructions. Individual businesses often provide some lighting around their buildings, but generally, pedestrian lighting is inconsistent along the streets and alleyways of the project area.

We concur with the recommendations of our lighting consultants, Edward D. Stone and Associates, that a two-tier lighting system be implemented in the sections of the study area with the highest pedestrian traffic. This system would retain and upgrade lighting levels currently available on the street, with a lower level of lighting directed downward at the sidewalk for pedestrians. This would involve new poles and fixtures wherever this system is implemented, and would include tall poles at streetlighting intervals and additional shorter poles, limited to pedestrian lighting, between them.

Diagram 2, provided by the lighting consultant, illustrates the essential character of the recommended tall pole and fixture of this two-tier system and shows a composite of the possible uses for this pole. These uses include an arm for overhead lighting for automobile traffic, an attachment for pedestrian lighting at a level suitable to illuminate the sidewalk, and flag pole and holiday decoration brackets. In addition, the selection shown indicates the need for any new lighting system to be compatible with mast-arm type traffic signalization. We recommend that the design of these poles and fixtures include only modest ornamentation and not reflect a particular time period, but be compatible with the diverse character of the area.

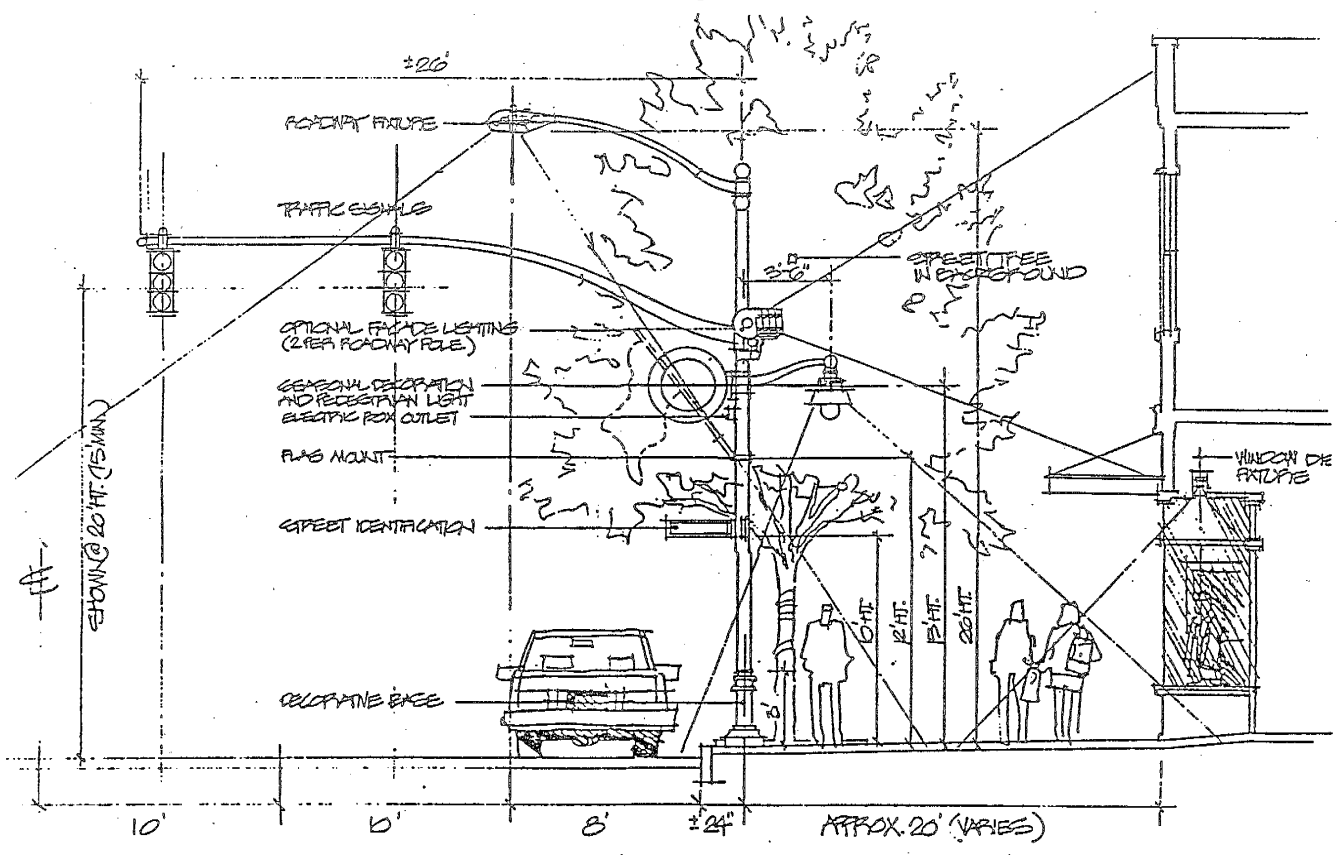


Diagram 2. Typical Light Pole and Fixtures

The actual lighting type specified for the individual fixtures will more than likely include both high pressure sodium and color enhanced mercury vapor. We recommend high pressure sodium cut-off luminaires for streetlighting due to their efficiency of operation and the appropriateness of their lighting pattern. We recommend color enhanced mercury vapor fixtures at the pedestrian level, for the improved color rendition they provide.

In addition to this two-tier lighting system, we recommend overall increases in lighting level and uniformity in some other parts of the study area in response to existing lighting deficiencies and other safety considerations. These improvements will typically include the use of unornamented tapered metal poles in a color compatible with the two-tier system. Similarly, the color of transformers and switching boxes associated with the lighting and traffic signal system throughout the study area should be compatible with other recommended improvements.

An important component of a comprehensive lighting improvement plan is placing electrical service underground in sections of the study area, such as West Rosemary Street, where wires are now overhead. Overhead wires require the use of large wooden poles along the street which would interfere with the installation of new poles in this area, as well as limit the scope of a street tree planting plan.

Site Furnishings

Site furnishings include benches, bicycle racks, trash and recycling receptacles, newspaper racks, traffic and information signage, and major site features, such as a Town clock or directory. Basic issues considered for these character-defining features include the design of the individual furnishings and the rationale for their placement. The recommended design of these furnishings, although specific to each type of amenity and its intended location, is based on some general guidelines discussed below, followed by the rationale suggested for their placement. The siting of particular furnishings is later discussed on a district-by-district basis.

As mentioned by numerous citizens during the public workshop, there is a demonstrated need for more seating areas within the public right-of-way. Similarly, there appears to be a consensus that additional bike racks and trash receptacles are also needed, as well as more light poles to support the previously mentioned pedestrian lighting system in some areas. Without a comprehensive streetscape furnishings plan, much of the study area would soon become cluttered. Acknowledging this possibility, the first general guideline for site furnishing design is to select furnishings that are not overly conspicuous, and which are compatible with a variety of other site features and adjacent architectural styles. This is especially true for features that will be used in many locations, such as bicycle racks.

The second fundamental site furnishing design guideline involves balancing the liveliness provided by variety in the choice of fixtures, with the desire to have a degree of aesthetic unity within the overall plan. Considering the inherent diversity in the study area, we recommend that for most furnishings a series of compatible and related designs be included rather than making all of a certain feature identical. For example, in the case of benches, the inclusion or removal of arm rests, the color of the frames, or the length of the slats could be varied within the study area while the basic design would remain the same.

The final basic site furnishing design guideline involves initial installation cost and maintenance. We recommend that site furnishings, especially those used in large numbers, be selected that can be produced by Town staff or are manufactured by more than one vendor. Ideally, this recommendation would not compromise the design of individual features, but rather would direct the specific selection process toward the most cost-effective options. Similarly, durable furnishings with replaceable parts should be favored over those that are not as readily maintained.

Overall, the selection of specific site furnishings will have a significant impact on the character of proposed downtown improvements. The location of the furnishings, however, is even more significant in defining the pedestrian experience and for that reason our emphasis here is on their suggested placement. As working drawings are prepared and reviewed, initially for demonstration projects and later for larger phases of construction, the selection of specific furnishings will receive added attention.

We identified a number of guidelines to assist in developing a coherent plan for the placement of furnishings. First is the need to develop patterns of placement that respond to anticipated user needs and also provide continuity within the streetscape. An example of this is the design of seating areas which typically include benches placed at right angles outside of the pedestrian travel area within a set distance from a trash receptacle. Diagram 3 illustrates one such typical seating area arrangement that could be reproduced with variations in different parts of the study area.

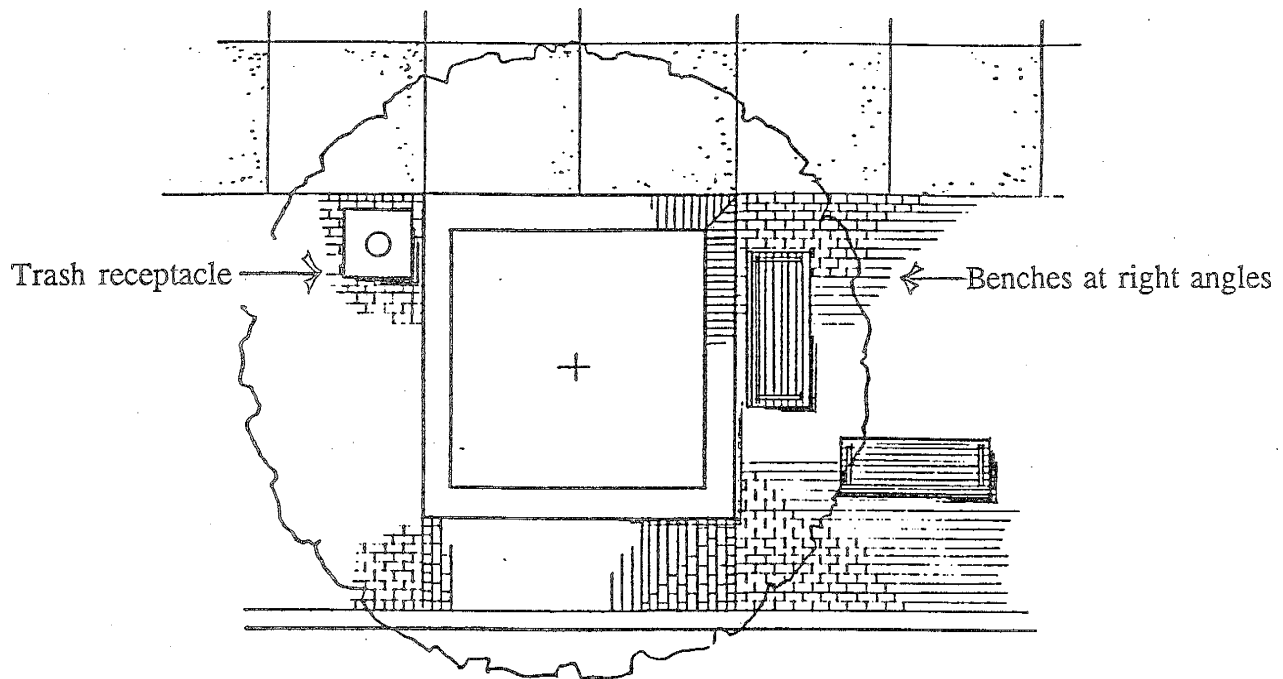


Diagram 3. Typical Bench Arrangement

The second placement guideline involves recognizing that certain site amenities, notably kiosks and newspaper racks, provide essential services but require careful placement if they are to enhance the streetscape. With features such as these, efforts should be made to provide for a functional level of visibility, while diminishing their overall visual impact.

Using these guidelines, we recommend the following placement patterns for specific site furnishings:

- **Benches** - Arrange in groups, at right angles to each other where space permits, at regular intervals. The length of these intervals should remain as consistent as possible within each district. Place all benches in well-lit locations but vary bench orientation to provide different views and sun exposures.

- **Trash Receptacles** - Integrate trash receptacles into groups of furnishings or adjacent to planters where possible. Locate trash receptacles near but not directly adjacent to benches. Place trash receptacles at all bus stops and major pedestrian crosswalks. Consider grouping trash receptacles for recyclables at major pedestrian nodes.
- **Bicycle racks** - Place at intervals similar to those recommended for benches and where ongoing bicycle use studies indicate specific needs. Orient bicycle parking perpendicular to the curb where space permits and parallel to the curb where it does not. Incorporate into curb alignment improvements but not directly adjacent to crosswalks. Locate between planters or bench groupings where possible to clearly separate bicycle parking from the primary pedestrian flow.
- **Kiosks** - Locate adjacent to major signalized crosswalks, on the side of the street which provides the most space for reading outside of primary pedestrian flow and the best opportunity for partial screening with plant materials. Where possible, associate kiosks with major groupings of site furnishings. Avoid placement directly in front of business entrances and windows, where possible.
- **Telephones** - Locate adjacent to signalized crosswalks in well-lit locations. In addition, place mid-block near theaters and other late night establishments.
- **Newspaper racks** - Allocate space with adequate pedestrian visibility but typically screened from the street. Place racks in areas clearly delineated from the primary pedestrian flow and in a U shaped arrangement where space permits.
- **Public Signage** - Wherever possible consolidate necessary public signage by the use of appropriately designed brackets on light poles. Where this is not feasible, locate sign posts so signs are clearly visible from the street but are screened from pedestrians as much as possible. A comprehensive public sign survey and plan should be prepared as part of the master plan working drawings to determine if some signs can be eliminated, consolidated or redesigned to provide a more uniform appearance.

The incorporation of a number of these recommended patterns can be seen in the typical curb extension and crosswalk plan shown in diagram 1. The applicability of these patterns varies from district to district, however, and will be described in more detail in the Design Recommendations section of this report.

A final general placement guideline for site furnishings deals with major site features, such as a Town clock or public art, or significant groups of smaller amenities. Typically associated with curb extensions or with public open space adjacent to the right-of-way, the careful design and placement of these substantial improvements can help define the different districts within the study area. In addition, these pedestrian nodes could help break down the inherent linearity of Franklin and Rosemary Streets, and provide a coherent system of downtown landmarks which helps orient people and reasserts a pattern of continuity within the streetscape.

Plantings

Developing a long-range planting plan for the study area involves a detailed analysis of existing conditions and a technical understanding of plant performance in less than ideal situations. The fundamentally urban environment for which these recommendations are intended includes significant limitations for the realization of any long-range plan. As with the other issues discussed, however, patterns can be identified and guidelines developed that address the basic concerns.

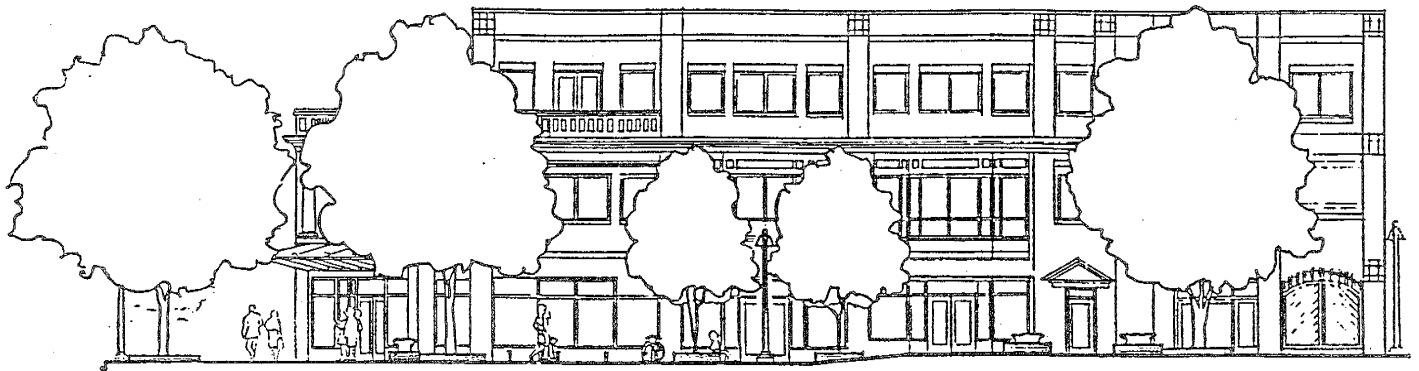
The recommendations for downtown plantings respond to the comments made by participants at the public workshop and are intended to be sensitive to the character of the Town as a whole. They can be categorized into the following three areas:

- the maintenance and enhancement of the street tree canopy,
- the inclusion of plantings that add color and interest, and
- the functional use of groundcovers and hedges to soften the "hard" elements of the landscape (buildings, sidewalks, paving, furnishings, etc.).

We recommend care of street trees as our first priority. Since much of the study area continues to be paved and built upon, the opportunities for good street tree performance decrease. In response to this, we believe it is critical that the streetscape plan include adequate areas with pervious surfaces that can support long-range growth of large trees. Realizing that there are other competing uses within the right-of-way, the allocation of large planting areas needs to be carefully considered. As a general recommendation, large street trees should be planted at selected locations along every block of Franklin Street with an emphasis on placement near intersections and where curb alignment improvements can provide some additional space. Along Rosemary Street and most of the cross streets, large tree planting should be encouraged behind the sidewalk since inadequate space exists within the rights-of-way. In these areas, the recommended placement underground of utility lines will be a necessary improvement if a well-formed canopy is to develop.

Where space is more limited, the use of smaller growing trees should be considered, in lieu of the current practice of planting shade trees in inadequately sized areas with resulting poor performance. We recommend the use of flowering types that add interest to the streetscape. A variety of tree species could be employed in this fashion, and could be used in groups, with individual trees located in response to adjoining architectural features and other site amenities. In addition to these flowering trees, limited use of other flowering plants, including shrubs and annuals, should be included within the right-of-way. The careful placement of these high maintenance plantings at the entrances to the downtown area and at selected crosswalks would provide a pattern to the streetscape to help unify the design.

Diagram 4 shows the plantings proposed for the new Top of the Hill project and is presented here to illustrate the recommended typical planting pattern. In this case, large trees (those expected to reach 35-40 ft. in height) are located in large, low brick planters, while small trees and annual flowers are located in smaller planters, some at seat height, framing building entrances.



Large trees near intersections
in low brick planters

Small trees
frame entrances

Annuals in seat
height planters

Diagram 4. Typical Planting Pattern

In addition to street trees and flowering plants, there is a need to address the condition of the existing turf. A number of solutions are possible, including active measures to improve the turf and the use of alternative groundcovers or shrubs in some areas. The use of hedges to delineate parts of the streetscape and to help screen newspaper racks and soften other features should also be used as a part of the overall planting plan. Whatever is planted in some of the more limited planting areas, there is a need to consider irrigation systems if consistent plant success is to be expected. This is especially true when considering the use of annual flowers and other specialty plantings.

In summary, this description of design components for the streetscape involves the development of a list of design guidelines that recognize and establish patterns that will be realized in a number of variations in different parts of the study area. Most of these guidelines deal with small scale issues that require considerable detail to fully evaluate.

DESIGN RECOMMENDATIONS

This part of the report includes 6 sections, each dealing with a distinct district of the study area as previously identified in Plan 1. Each section includes a brief analysis of existing conditions and an explanation of the related design recommendations. The analysis identifies the existing patterns which define each district and highlights specific problems within each district which need to be addressed.

UNIVERSITY DISTRICT

ANALYSIS

East Franklin Street, from Hillsborough to Henderson Streets, is dominated by University related buildings, most notably the Planetarium, the School of Social Work, and those around McCorkle Place, the main park-like quadrangle to the south of Franklin Street. A number of fraternity and sorority houses, one dormitory, an apartment building, and a church, complete this area.

The distinguishing characteristics of this district include the set back of large buildings allowing green areas on the street front, the 12-15 ft. wide planting strip adjacent to the curb which supports many of the downtown's largest trees, and the extensive use of brick for sidewalks. Part of the Franklin/Rosemary Street Historic District, this area is significant as well for its numerous stone walls, both dry stacked and set in mortar, which adjoin the sidewalks on both streets. Most notable is the one adjacent to McCorkle Place and continuing into the Central Business District which has been used as a seatwall by students and townspeople for generations.

Issues that need to be addressed in this district include the general lack of site furnishings and the condition of the planting strips below the large trees. There is also an opportunity for developing a memorable entrance to the University as well as the Central Business District.

DESIGN RECOMMENDATIONS

Curb Extensions and Crosswalks

One specific curb alignment change is recommended at the transition point between this district and the Central Business District on the south side of Franklin Street at the Henderson Street intersection. It is shown in diagram 5, and described here because the design details associated with this proposed improvement reflect patterns recommended for the University District. This curb extension would provide for special treatment of this important entrance both to the Central Business District as well as the University. The opportunity exists here for specialty plantings, such as colorful annual flowers, accompanied by seating areas, while only minimally affecting on-street parking. The existing drop-off mailbox, however, would need to be relocated.

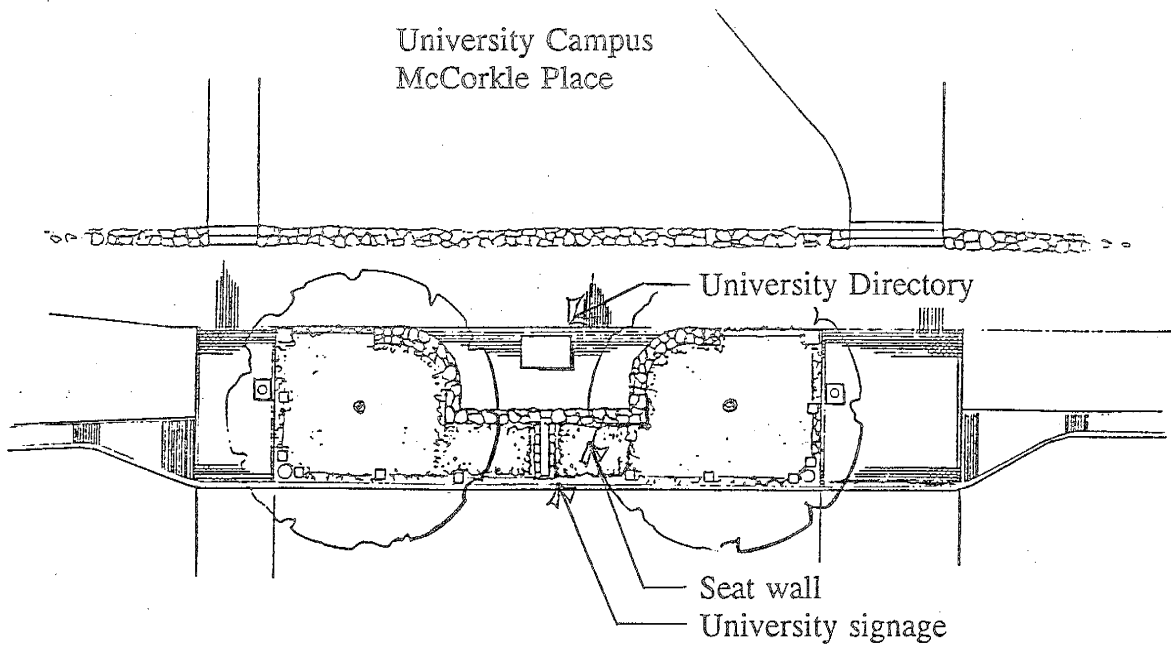


Diagram 5. University District
East Franklin Street Curb Extension Plan (South Side)

Sidewalks

We recommend that sidewalks in this district remain as brick laid in a cross bond pattern typically 8 ft. wide. In addition, a 3 ft. wide strip at the back of the curb should be paved with brick on the south side of East Franklin Street adjacent to on-street parking, and 5 ft. wide brick paved cross pieces should connect this brick strip to the sidewalk. These cross pieces should be located in a regular pattern, generally oriented so that they line up with parking meters which are the primary point source for their use.

Lighting and Utilities

Although there is a considerable amount of pedestrian traffic in this area, the two-tier lighting system recommended for the Town's business districts is not suggested for this area except in conjunction with the curb alignment changes at Henderson Street. Presently, there are a number of University owned pedestrian scale light fixtures just behind the right-of-way that provide some lighting for the sidewalk. We recommend that more of these fixtures, or compatible ones, be used at additional locations just behind the sidewalk. Unlike recommendations made for other districts, we propose the continued use of wooden poles to support streetlighting here because the location of these poles among established tree plantings at a distance from pedestrians suggests a less urban design detail.

Site Furnishings

In addition to the seat wall proposed for the curb extension area shown in Diagram 5, trash receptacles and a campus directory are recommended at that location, as well as grouping the historic markers together which are now dispersed among the trees. We also recommend bench groupings on brick pads at bus stops and additional trash receptacles adjacent to areas where major walkways intersect the Franklin Street sidewalk. We propose a grouping of site furnishings at the mid-block crosswalk near the Planetarium.

Plantings

Consistent with a plan commissioned by the University and proposed by Little and Little, ASLA, another recommended change in this area involves the planting of additional street trees and groundcovers, protected by chains connected to stone bollards. This planting pattern, already in place along Cameron Avenue, will help to clearly identify this district with the University. This pattern is illustrated in diagram 6.

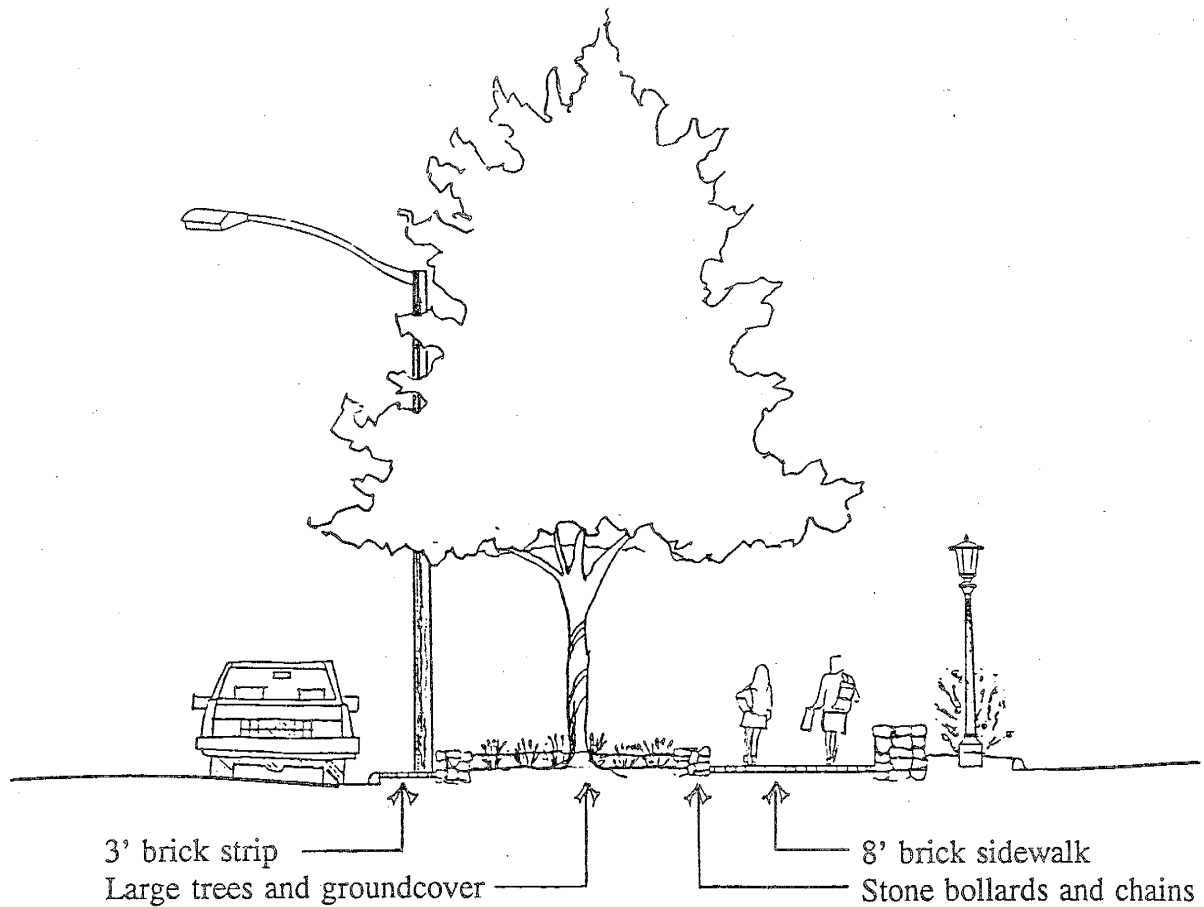


Diagram 6. University District
East Franklin Street Sidewalk Section (South Side)

CENTRAL BUSINESS DISTRICT

ANALYSIS

The Central Business District includes the 100 block of East Franklin and North Columbia Streets, and a portion of the 100 block of West Franklin Street. This district is characterized by red brick buildings, 2-3 stories high, with awnings on the street, exhibiting a variety of mercantile style architecture. The exception to this style is the Nationsbank Plaza built in the late 1960's, which is higher, tan brick, and extends back through the block to Rosemary Street. These buildings typically adjoin a combination of concrete and brick sidewalks in a straight line, providing a continuous facade, but with each storefront unique. This variety in architectural details and paving patterns, along with the overall complexity associated with the evolution of many different design details over time, helps distinguish this district from contiguous districts. The alleyways that enter Franklin Street from the north are also unique to this district and add to its small scale urban character.

The Columbia Street intersection with Franklin Street is considered the Town's center. At this intersection there are five lanes of automobile traffic including turn lanes where traffic from NC 86 (Columbia Street) and US Business 15-501 (Franklin Street) converge. Pedestrian traffic is very heavy at this intersection and it is generally perceived as intimidating to those crossing the street. Elsewhere in the district there are four lanes of traffic. Parallel parking lanes on both sides of East Franklin and the west side of North Columbia accommodate short-term parking for shoppers, as well as bus, fire, and loading zones. On Franklin Street these parking lanes provide an opportunity for curb extensions; however, the demands for this space, especially for busses and loading are considerable.

This district receives the downtown's highest level of pedestrian use and associated site furnishings are more concentrated here. A variety of bike racks, benches and signs are found throughout the district, some apparently randomly placed, and others located clearly in response to user needs. The overall pattern of placement lacks coherence, however, and considering the need for many site furnishings to provide for the level of use, tends to appear cluttered. This lack of coherence, along with the inconsistent and frequently poor condition of existing sidewalks and plantings, detracts from the district's otherwise notable charm and merits attention.

Considering the amount of space needed for primary pedestrian flow, several areas of the district, particularly along the north side of Franklin Street, are limited in their potential for increased pedestrian amenities between the existing curb and building facades. Maintaining a shade tree canopy over the sidewalk and street as older trees decline is particularly challenging, as adequate space for tree planting in the small space available is limited.

Existing streetlights are high pressure sodium fixtures, either on old fluted metal poles or on replacement wood poles. Many individual businesses light their storefronts, providing some light at the pedestrian level but lighting levels are very inconsistent.

DESIGN RECOMMENDATIONS

Curb Extensions and Crosswalks

This district includes one recommended location for curb extensions at the crosswalk between the Carolina Coffee Shop and Franklin Street Plaza. Located mid-block, this crosswalk is signalized, and the volume of University traffic moving to and from downtown makes this location particularly appropriate for adequately sized curb extensions.

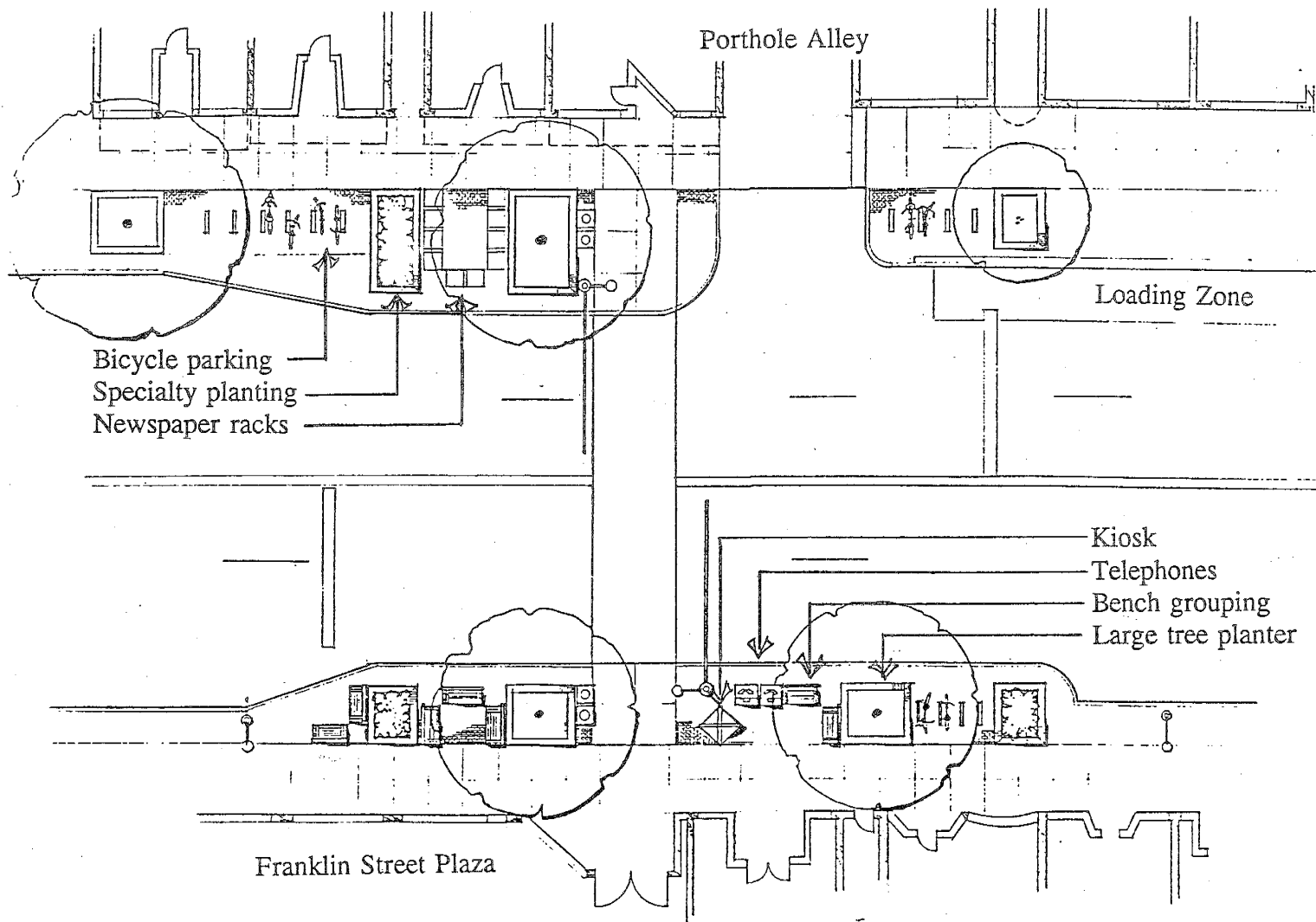


Diagram 7. Central Business District
East Franklin Street Curb Extension Plan

There are a number of workable options for the detailed design of these curb extensions and one is shown in Diagram 7. This diagram illustrates the recommended patterns for the placement of site amenities typical for curb extensions along this part of Franklin Street and could be repeated if larger or additional curb extensions were implemented.

The value of a curb extension in this area would include making space available for seating areas outside of the primary pedestrian flow and providing adequate space for shade tree growth where space does not currently exist on the north side side of the street. These changes are shown in diagram 8.

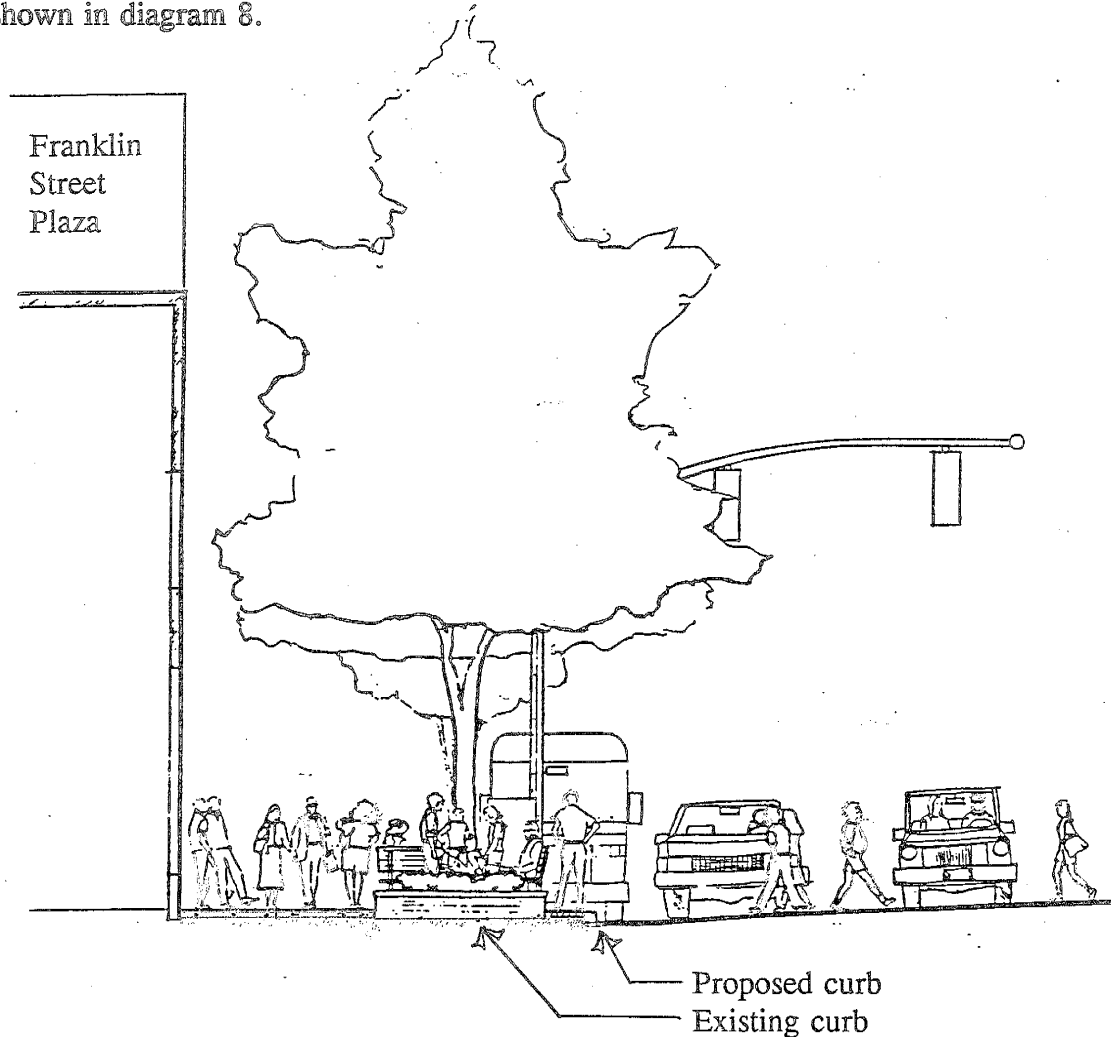


Diagram 8. Central Business District
East Franklin Street Curb Extension Section (North Side)

At the intersection of Columbia and Franklin Streets we propose a different approach. Although pedestrian traffic is heavy at this intersection of two 5-lane roads, the curve radii necessary for vehicular movement prevents a curb extension in this area. The most effective treatment here would probably be to resurface the crosswalks with a different material. Although this solution would likely result in some increase in maintenance, and would require negotiation with NCDOT, we propose investigating the option. This treatment would highlight this area which is the Town's center, and emphasize the significant pedestrian traffic at this dangerous intersection.

Sidewalks

We recommend a 10 ft. wide concrete walk adjacent to storefronts, typically scored in 5 ft. squares, with brick in any paved areas between the sidewalk and the street as the standard paving pattern in this district. This pattern, which is already in place in much of this district would be utilized wherever sections of sidewalks are repaired or replaced. Exceptions to the use of this pattern include the extension of the concrete surface to the curb at crosswalks, and limited adjustments made to preserve historically significant paving. Adjustments to the scoring pattern are also recommended in specific situations, such as adjacent to the 12 ft. wide Franklin Street Plaza crosswalk, where continuity with intersecting walks or architectural features is desirable.

Also, at the west end of the 100 block of East Franklin Street, the sidewalk includes long steps behind the curb that we recommend remain as concrete. There is no ideal solution to this awkward existing grade change, but we believe the use of concrete to make it more visible within the surrounding brick should be continued for safety reasons. In order to separate these steps from pedestrian traffic, we recommend the reworking of the existing planters into a coherent design on the south side of the street and a pattern of benches, bike racks, and regularly spaced small tree plantings on the north side.

Lighting and Utilities

We recommend the two-tier lighting system described in the Design Components section of this report throughout this district with tall poles spaced at approximately 160 ft. intervals on both sides of Columbia and Franklin Streets. Between these tall poles, shorter poles limited to pedestrian scale lighting would be spaced at about 80 ft. intervals to achieve a desirable lighting uniformity. Diagram 9 illustrates an example of this smaller scale pedestrian lighting. The style of the pedestrian fixtures in this district could be a variation of those elsewhere in the study area, and the illumination level could be slightly higher, reflecting the district's central downtown identity. Lighting for the alleyways in the district should also be provided with compatible fixtures and should be bright and uniform.

Site Furnishings

Site furnishings in the Central Business District will likely be the most numerous of any district. Considering the overall complexity of the streetscape here, we believe that it is particularly important that the recommended patterns for placement of site furnishings discussed in the Design Components section of this report be utilized in this district. In the Central Business District, where right-of-way space is limited and pedestrian traffic high, site furnishings serve not only as amenities but also direct pedestrian circulation and create spaces. For example, benches can be used effectively to protect plantings from compaction, and bike racks, carefully placed, can help define spaces where people will gather, outside of the movement on the sidewalk.

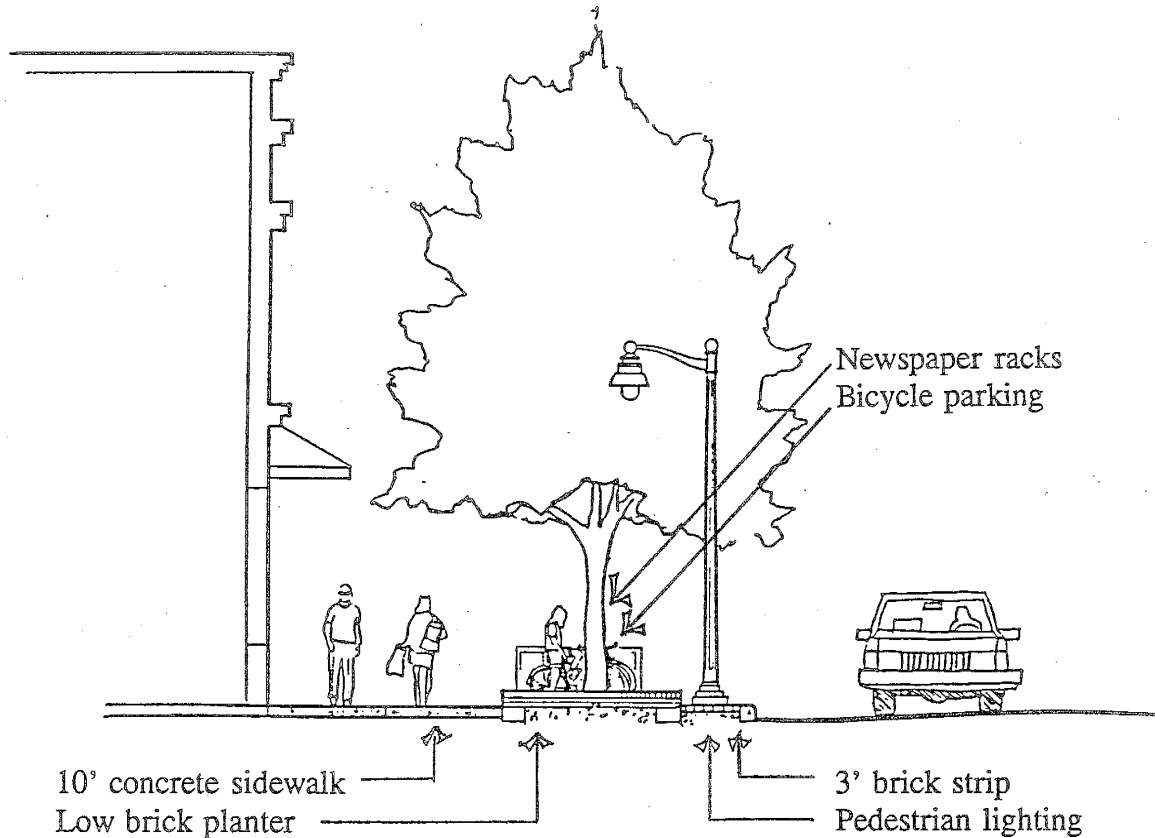


Diagram 9. Central Business District
East Franklin Street Sidewalk Section (South Side)

Specifically, in this area we recommend the inclusion of a substantial grouping of furnishings associated with the curb extensions previously discussed. This primary downtown pedestrian node would include a kiosk, telephones and a number of bench groupings. This node would be an essential feature to achieve better placement patterns and increased numbers of site furnishings in this district. In addition to this pedestrian node, the placement of smaller groupings of benches and bike racks should be included at regular intervals which are closer than in other districts. Where space is limited, for example on the west side of Columbia Street, these furnishings could be placed parallel to the street rather than in the recommended patterns, but should still be included.

The possibility of integrating a grouping of furnishings, or a significant single furnishing such as a Town directory at the intersection of Franklin and Columbia Streets in the corner of the existing church garden should also be studied. The redesign of the public parking lot at the intersection of Rosemary and Columbia Streets may also provide an opportunity for additional furnishings or the display of public art and is also recommended for consideration.

One additional specific recommendation involves highlighting the entrances to the alleyways that lead to Rosemary Street. The use of awnings or some other architectural detail at these entrances would serve to emphasize these important pedestrian ways, help orient people on the street, and add variety to the streetscape. Within the alleyways themselves, the opportunity for wall murals or other special treatments should also be considered. We recommend that wall murals at these locations as well as selected others downtown be strongly encouraged as a means of providing vitality to the streetscape.

Plantings

We recommend future plantings in the Central Business District which respond to the real limitations on plant success resulting from the constricted planting areas and other urban factors. At the same time, the need for some number of successful shade trees is important to maintaining the character of the area. As mentioned in the Design Components section, we recommend a mix of large and small planting areas to support trees of different sizes to provide the best long-term planting plan, while acknowledging the planting conditions and space available along the street. Trees located at crosswalks where their canopies provide shade for waiting pedestrians should be allocated the greatest amount of available space. Also, where curb extensions provide larger areas, we recommend utilizing the opportunity for planting large trees.

In the linear stretches between buildings adjacent to the right-of-way and along curb lines remaining in place, we recommend the use of a variety of smaller trees which would prosper in the relatively confined space. As a rule, this would include areas where less than a 5 ft. square is available. In these tight spaces, primarily on the north side of Franklin Street, we recommend the use of tree grates underneath the smaller trees. Although they require maintenance to be kept neat, they help prevent compaction around tree roots and enhance the urban character of these spaces.

On the south side of Franklin Street and elsewhere where space permits, low planters are recommended rather than tree grates, typically curb height and constructed of brick, and set back a uniform 3 ft. from the back of curb as shown in diagram 9. Planters should be placed to create a rhythm and balance to the streetscape, to define areas where site furnishings can be grouped, and to enhance adjacent architectural features, wherever possible. We recommend the limited use of higher planters at seat wall height in this district for small trees and specialty plantings.

UNIVERSITY SQUARE DISTRICT

ANALYSIS

The character of the street changes again as one moves through the 100 block of West Franklin Street past University Square and Church Street to Mallette Street. In this district of Franklin Street, buildings are fewer and moved back from the street and large on-grade parking lots are common. Buildings vary in age but are typically newer than those in the Central Business District and are not mercantile in style. The spatial character of this district is more open than in the rest of the study area and along with its lack of historically relevant architectural details appears suburban in comparison to adjoining districts.

Franklin Street has five lanes here and seems wider than elsewhere in the project area since this is the only district with no on-street parking. The planting strips along this part of Franklin Street are planted with a mix of mostly small to medium sized trees with turf between them. On the north side of the street they average 12 ft. in width and on the south side 6 ft., with few additional sidewalk crosspieces connecting with the curb and very few site furnishings.

There are no signalized crosswalks in this district, and due to the lower concentration of pedestrians associated with this area's dispersed auto-oriented development, the majority of pedestrian traffic is moving through the district rather than to its individual businesses. This lack of connection with the pedestrian scale environment of adjoining districts is the key issue that needs to be addressed in this district.

DESIGN RECOMMENDATIONS

Curb Extensions and Crosswalks

The additional width of Franklin Street from Church to Columbia Streets affords an opportunity for a significant curb extension in this area with no loss of on-street parking. We recommend extending the curb out along the south side of the street to balance the width of planting strips on both sides of the street and provide additional area for the establishment of large shade trees as shown in diagram 10. Combining this pattern with some new on-street parking and a signalized crosswalk at Church Street should also be considered.

At the west end of this district, the renovated 306 West Franklin building has a pedestrian oriented open area associated with it at the street. The crosswalk here could be enhanced by extending the curb on the opposite side of the street, in front of the existing bookstore, and signalizing it for pedestrians. This would necessitate closing a curb cut here, one of three presently used by this business. This option should be considered to make this intersection safer and allow more space for planting and site furnishings. This would create a pedestrian node and enhance this transition area between the University Square district and the West Franklin Street Business District. This curb extension pattern would also serve to repeat the pattern proposed on East Franklin Street, thereby providing rhythm and continuity to the overall plan.

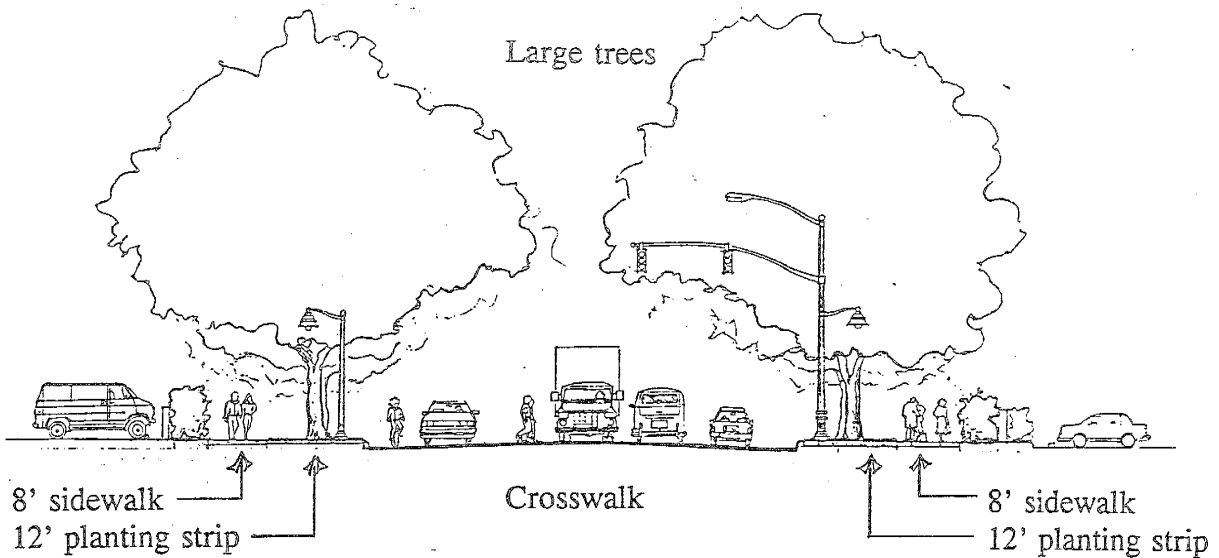


Diagram 10. University Square District
West Franklin Street Cross-section

A possible design option for this curb extension and crosswalk improvement is illustrated in Diagram 1 in the Design Components section of this report. As shown in that diagram, we suggest a small island in the middle of this crosswalk, similar to the one at the Henderson Street crosswalk, to achieve a safer pedestrian crossing.

Sidewalks

The sidewalks in this district are concrete and vary from 6-8 ft. in width. In the narrower sections, adjoining turf is often trampled which suggests that a wider dimension be adopted as the standard for this district. As other improvements are undertaken, areas not currently in conformance should be replaced with a standard 8 ft. width, typically scored in 4' squares. Entrance walks between the sidewalk and individual buildings as well as any paving elsewhere in the right-of-way should be brick, consistent with paving patterns for other Franklin Street districts.

Lighting and Utilities

Pedestrian lighting improvements recommended for this area would be similar to those recommended for the Central Business District, utilizing a two-tier lighting system with the same poles and pole spacing. The use of a similar but slightly different pedestrian fixture is an option that should provide an opportunity to emphasize the distinct character of this district. As with other site furnishings, we believe any change in detailing of the light fixture should be carefully considered to assure a level of compatibility that will not visually disrupt the streetscape as a whole.

Site Furnishings

Site furnishings in this area should include groupings at the proposed 306 West Franklin Street crosswalk and at the intersection with Church Street. The placement of individual furnishings would reflect the patterns discussed in the Design Components section, specifically the placement of benches at right angles, since there is room for this recommended arrangement in much of this district. Kiosks in partially screened locations should also be included, as well as telephones and distinct paved areas for newspaper racks to help integrate this district into the overall streetscape design.

Plantings

Recommended plantings in the University Square District respond to the proposed wider and less interrupted planting strip between the curb and the sidewalk. Because of this, there is an opportunity to plant a row of equally spaced shade trees in this district, that due to space restraints cannot be recommended elsewhere along Franklin Street. Currently, the majority of the trees in this planting strip are Bradford Pears, short-lived mid-size trees notable for their spring bloom and fall foliage. In order to achieve the desired canopy effect, we recommend that as these trees begin to show signs of decline, most likely in three to five years, that they be removed and replaced with large shade trees. The area in between trees in this planting strip would remain as turf, until it is shaded out, at which point replacement groundcovers would be installed. If this recommended replanting is undertaken, we believe that irrigation should be considered for these areas to enhance the performance of the turf as well as the trees.

In addition to shade trees, the planting of shrubs behind the sidewalk should be encouraged on private property. The possible use of landscape easements, like those described in the recommendations for the East Rosemary Street District should also be considered to enhance landscaping behind the sidewalk in this district where there is less sense of pedestrian scale.

WEST FRANKLIN STREET BUSINESS DISTRICT

ANALYSIS

In this area, extending from the bus station to Merritt Mill Road, buildings again typically adjoin the right-of-way. Businesses include restaurants, specialty stores, The Chapel Hill Newspaper, as well as automobile sales and service establishments and typically serve the community as a whole rather than being primarily student oriented. Architecture within the district varies considerably, with some buildings similar to those in the Central Business District, while others are less clearly mercantile in style. Overall, the district as a whole resembles the Central Business District in spatial character despite differences in details.

Among the district's distinguishing characteristics are plantings adjacent to the sidewalk (for example at the Courtyard), and the established canopy provided by a number of large willow oaks along the north side of the street. In addition, the essentially urban forms of this district, combined with a decrease in pedestrian traffic compared to districts farther east, provide this area with a certain unique small town character.

Existing lighting, much like in the Central Business District, is high pressure sodium lamps mostly on aging metal poles. The difference in this area is that more of these poles have been replaced with wooden ones, and there are fewer lighted storefronts to add light at the pedestrian level. The inconsistency in lighting levels in this area is one of the primary issues that needs to be addressed. The lack of signalized crosswalks, the poor condition of many sidewalks, and the overall absence of any groups of pedestrian amenities or landmarks to break up the linearity of this district also merit attention.

DESIGN RECOMMENDATIONS

Curb Extensions and Crosswalks

This district includes the longest stretch of Franklin Street with no signalized crosswalks. Investigations of pedestrian movement in this area have been undertaken by NCDOT and the Town's Engineering Department, and at the present time an inadequate concentration of pedestrian flow exists to warrant a signalized crosswalk. There are, however, several options which could be considered to enhance pedestrian safety in this area.

One option that is recommended is a non-signalized mid-block crosswalk. A location near the public parking lot adjacent to 411 West Franklin seems to be the most central and could be enhanced with curb extension improvements. As pedestrian use increases at this crosswalk, signalization would likely be warranted. Located a substantial distance from other traffic signals, an additional signal at this location would not necessarily have a significant negative impact on traffic flow. Another potential use for a mid-block curb extension and crosswalk in this area is to provide a terminus for a possible north-south connection to Rosemary Street, most likely through the garden that adjoins 440 West Franklin Street. The possibility for such a connection involves the use of open space currently owned by the University and should be studied.

Relocating the traffic signal from Graham Street to Roberson Street and providing a pedestrian signal there is another possibility. Accompanied by curb extensions, this change could provide an enhanced crosswalk and associated pedestrian amenities more central to the concentration of businesses within this district. As with the proposed crosswalk improvements across from the 306 West Franklin Street, a curb cut closure may be involved. Also, the limited right-of-way along Roberson Street would mean that the necessary turn lanes would constrict the sidewalk area. One advantage of this plan would be to increase the distance between this traffic signal and the signal at Merritt Mill Road, a change that could improve peak traffic flow.

Sidewalks

The existing sidewalks in this district are perhaps less consistent than anywhere within the study area, so there is a need to establish more than a single typical pattern to guide improvements. In front of the University offices at 440 West Franklin, for example, the sidewalk is brick and 10 ft. wide. Elsewhere, the sidewalk is concrete, and changes from 6 to 12 ft. wide in front of different stores or where there has been an attempt to avoid interfering with the roots of one of the district's numerous large trees. Although working around trees is in the best interest of the streetscape, and should be continued, an attempt should be made to standardize the width of the concrete walk wherever feasible. We recommend that a uniform width of 10 ft. be adopted for sidewalks constructed at the edge of the right-of-way adjacent to buildings and that all replacement sidewalks be made of concrete. Where sidewalks are constrained by planters adjacent to buildings, the edge of the walk nearest the curb would remain unchanged as long as a minimum of 6 ft. of walkway remains unimpeded. Because pedestrian activity is generally less in the West Franklin Street Business District than in the Central Business District, we recommend this option for varying the travel width while straightening the sidewalk edge.

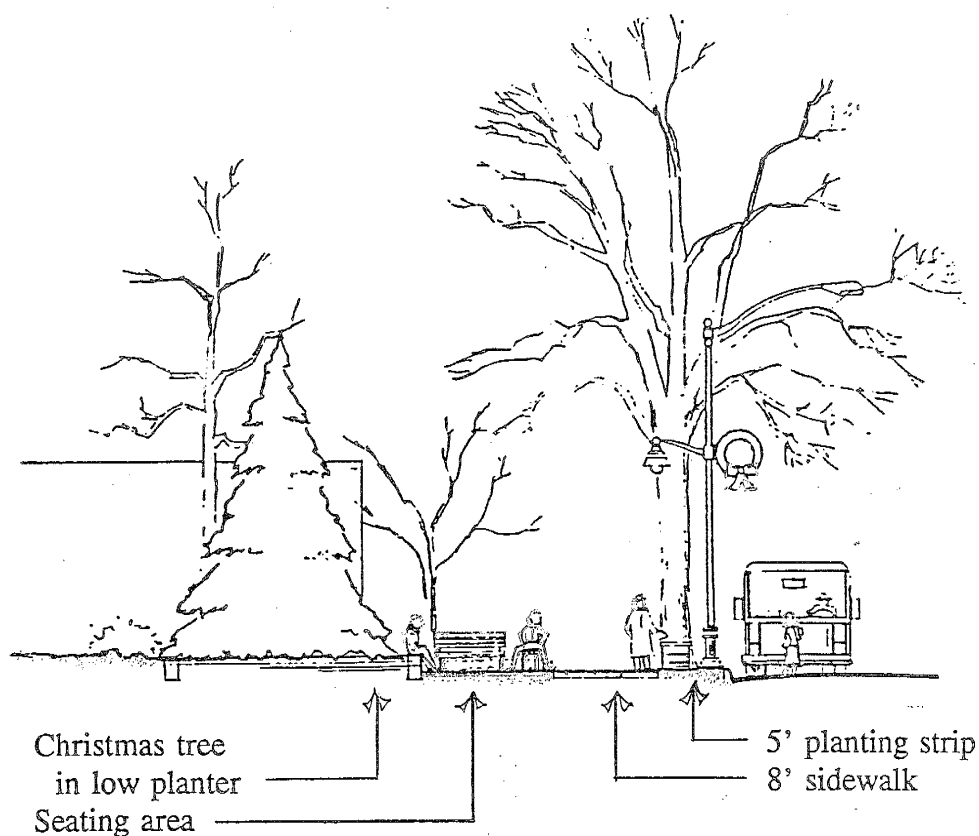


Diagram 11. West Franklin Street Business District
Parking Lot 3 Sidewalk Section

Lighting and Utilities

Recommended lighting improvements in this district are the same as those recommended for the University Square District in terms of pole type, pole spacing and illumination level and uniformity. Pedestrian level fixture type, however, would be the same in this business district as that recommended in the Central Business District, reflecting the primarily urban form of this end of Franklin Street.

Site Furnishings

As with the pedestrian lighting fixtures, the selection of benches and other site amenities would be consistent with the Central Business District, and although their numbers can be reduced somewhat in response to fewer user needs, typical furnishing arrangements would follow the same patterns. Groupings of amenities could also be included at crosswalk improvements as in other districts, to serve as pedestrian nodes and to create a functional and aesthetic rhythm to the streetscape.

We also recommend significant site features within this area to serve as "landmarks" for this district and help define its specific character. Notable among these site features is the recommended planting of a permanent Christmas tree in the small green space in front of Town parking lot 3 adjacent to 411 West Franklin Street along with other plantings and benches. One possible design option for this area is illustrated in diagram 11 on the preceding page.

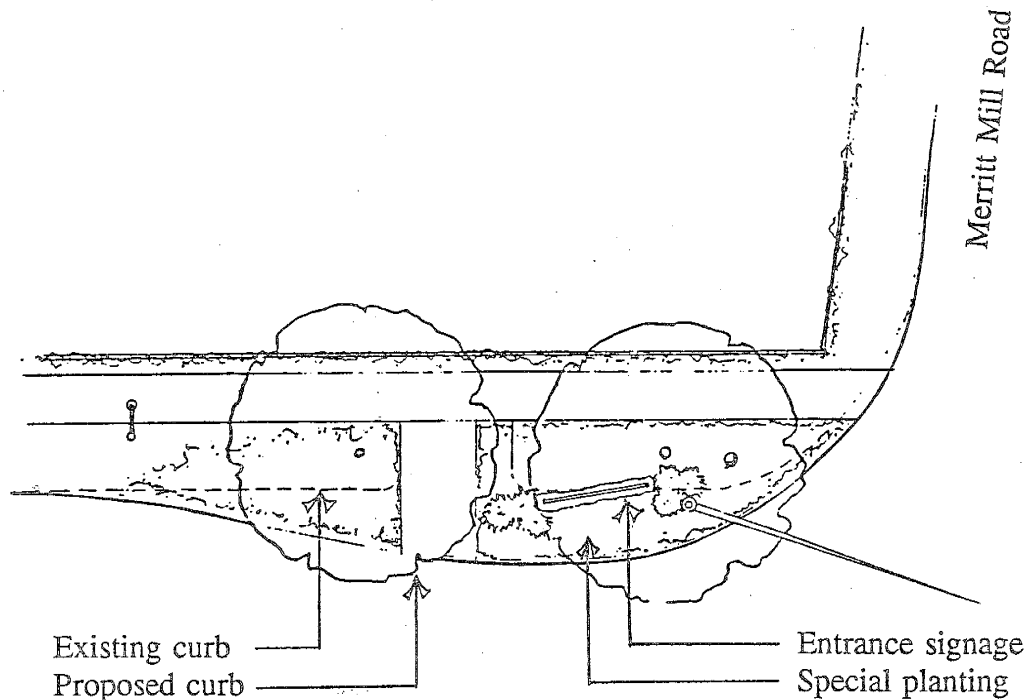


Diagram 12. West Franklin Street Business District
West Franklin Street Curb Extension Plan (South Side)

Another recommended site feature is an entrance sign and plantings at the far west end of the street. A possible design option for this curb extension is shown in diagram 12. This feature would be located on the south side of the street and involve only minor modifications to the curb alignment. It would serve to introduce the improvements in the study area as well as echo the eastern entrance improvements at Henderson Street, thereby unifying the streetscape design. Diagram 13 illustrates this improvement looking down Franklin Street from the Carrboro town line.

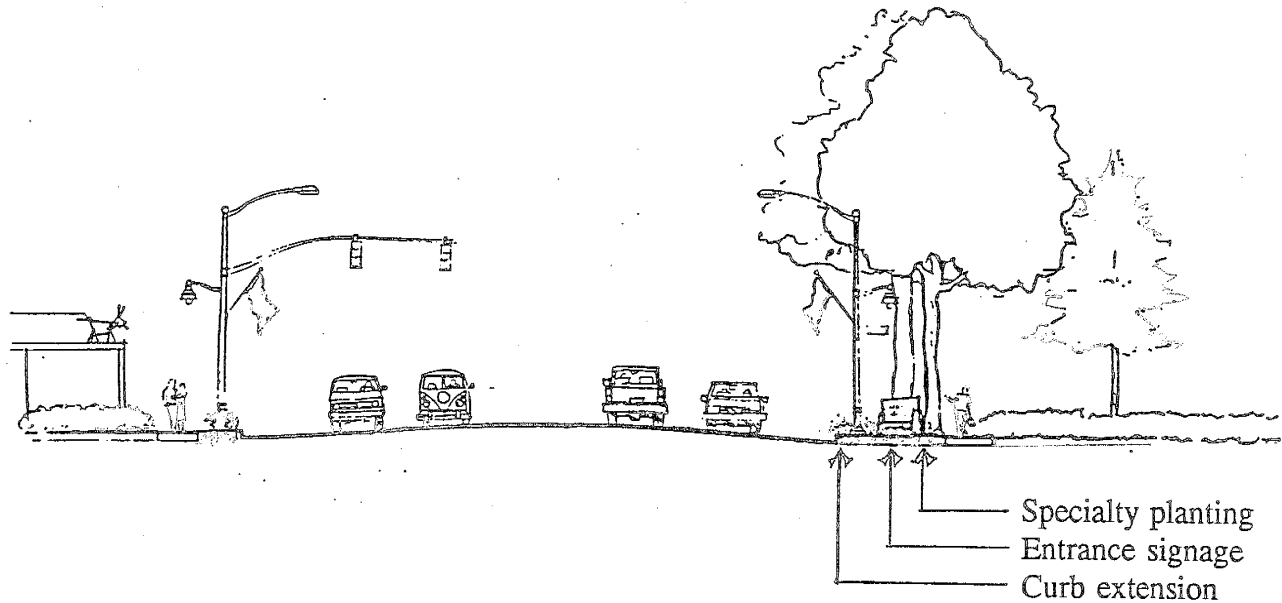


Diagram 13. West Franklin Street Business District
West Franklin Street Cross-section

Plantings

Plantings in this area could follow the recommended patterns for urban planting made in the Design Components section of this report, with large shade trees at intersections and crosswalks, and groups of smaller trees of varying types planted in the tighter right-of-way areas between buildings and the street. Unlike in the Central Business District, however, there are many existing large trees in these areas that are still in reasonably good health. In these cases, the existing trees should be maintained as long as possible before being replaced and where feasible they should be interplanted with additional trees in a unified pattern. When large trees go into decline, however, especially on the south side of the street where space is limited, we recommend that smaller species be used as replacements in keeping with the overall plan. If a mid-block crosswalk is implemented, a curb extension on its south side would assure that at least some room would be provided for long term shade tree plantings at this location and therefore a canopy over the street could develop from both sides.

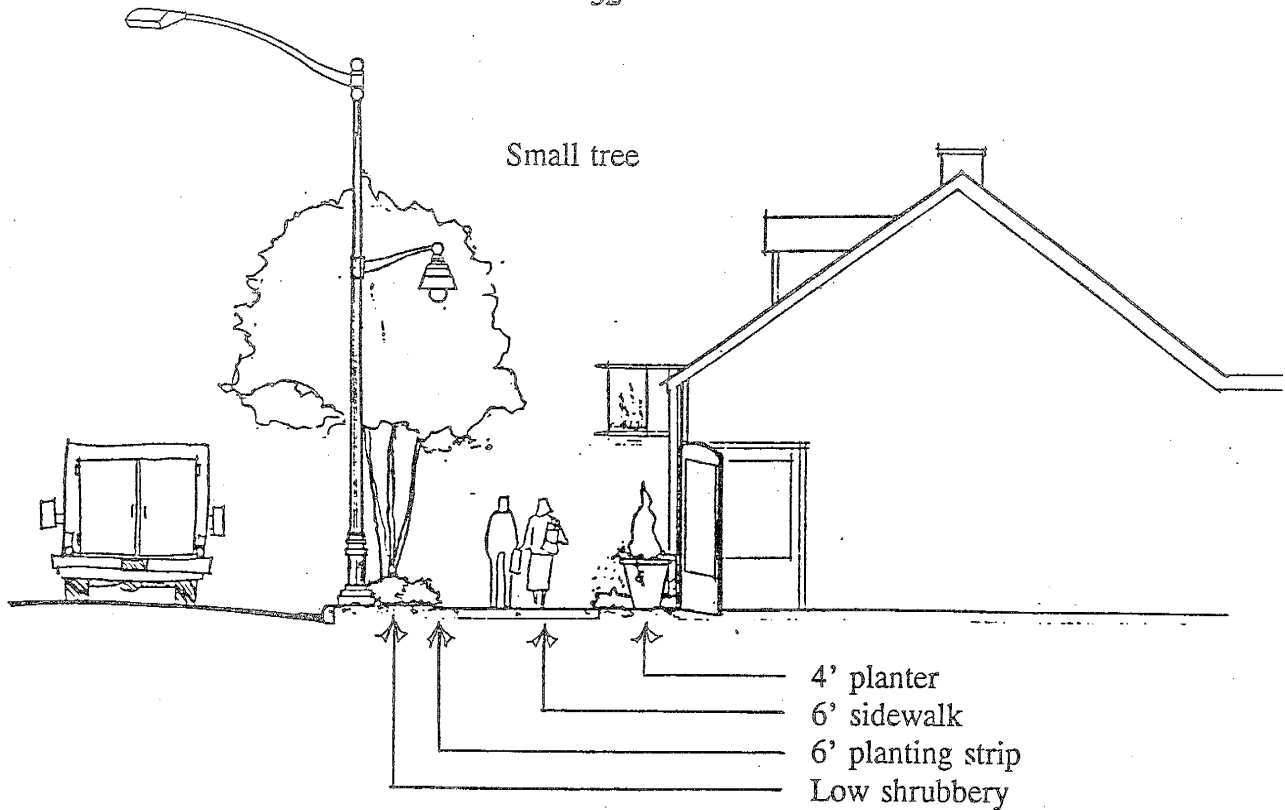


Diagram 14. West Franklin Street Business District
West Franklin Street Sidewalk Section (South Side)

Between trees in this district, existing conditions tend to limit the success of turf, due to pedestrian traffic from adjacent parking and the frequently dense shade. In areas where pedestrian traffic is not the primary problem, we recommend the use of groundcovers and shrubs. In other areas, we recommend the use of curb height brick planters where space permits to deter foot traffic and assist with plant maintenance. Where successful plant growth is particularly difficult, we recommend that brick be installed and the area utilized as a base for bicycle racks, bench groupings or other amenities.

As mentioned earlier, planters adjacent to buildings and projecting into the right-of-way are common in this district. This pattern, essentially unique to this district, should be continued and encouraged as long as an adequate minimum pedestrian travel width of 6 ft. can be maintained without altering the sidewalk edge. These planters could be used for shrubbery, or more preferably for annual flowers, with the effect of softening the urban form in this district and establishing a "village" character. In addition to these planters, the display of tubs with plant materials, although less common, is another pattern unique to this district. This pattern, illustrated in diagram 14, should also be encouraged, while maintaining the minimum six-foot travel width. Note also in the diagram the recommended use of low shrubbery between the sidewalk and the street.

EAST ROSEMARY STREET DISTRICT

ANALYSIS

This one block district along Rosemary Street from Henderson to Columbia Streets primarily serves a supporting function for the Central Business District and is dominated by off-street parking with several small restaurants and bars and two banks. There is one on-grade Town-owned parking lot and two parking decks. The Rosemary Street Parking Facility is more similar to buildings in the adjoining Central Business District in its architectural detail and is topped with a courtyard, easily accessible a few steps up from the east-west alley that runs through the block. The existing architecture in this district is variable. The scale of the dominant buildings, especially considering the narrow width of the roadway, provides a more urban spatial character than in other districts.

The most significant issue in terms of designing desired streetscape improvements is the lack of adequate public right-of-way. The incomplete sidewalks and the absence of site furnishings reflect this lack of space, and give this district its visual character.

DESIGN RECOMMENDATIONS

Curb Extensions and Crosswalks

Within this district, narrow rights-of-way limit the construction of sidewalks and prevent consideration of any substantive curb extensions. In this area there is no on-street parking and due to the high traffic flow we recommend that that all travel lanes remain open. Since the Town owns some of the adjoining property, however, improvements such as bench groupings associated with curb extensions in other districts may be possible behind the existing right-of-way.

Sidewalks

The typical width and location of the recommended sidewalk varies within this district due to space constraints and the character of the adjoining use. Diagram 15 shows one such pattern recommended in this district for sidewalk construction adjoining on-grade parking.

In this case the 5 ft. wide concrete sidewalk is located at the back of curb with a 5 ft. wide landscaped area behind it to help screen the parking and provide room for small tree plantings. Implementation of this pattern would require the purchase of additional right-of-way or the negotiation of landscape and pedestrian easements where private property is involved, a point that will be discussed in more detail in the Design Implementation section. Where more space is available, we recommend widening the sidewalk or providing a 3 ft. setback from the road to provide more distance between pedestrians and adjoining travel lanes.

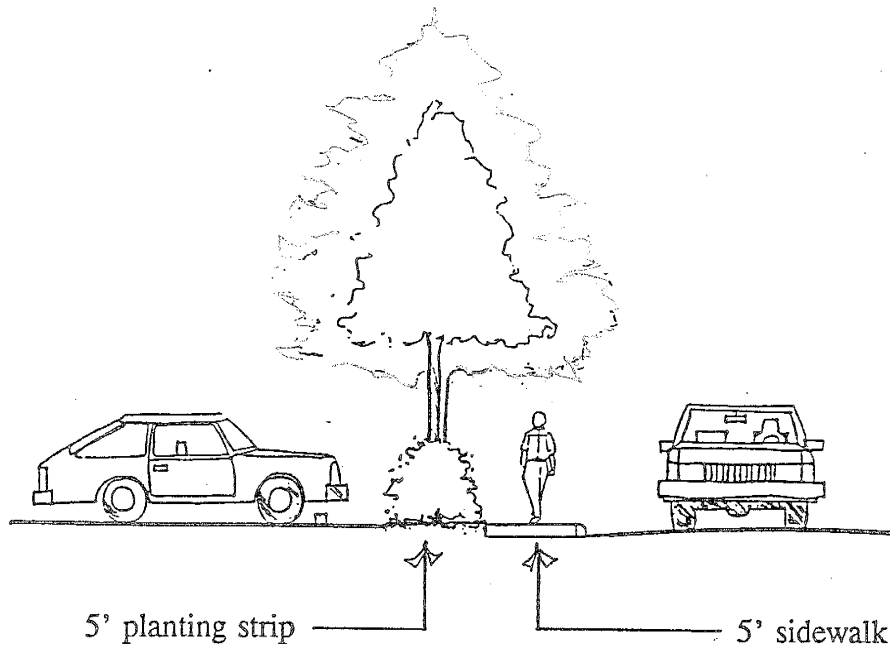


Diagram 15. East Rosemary Street District
East Rosemary Street Sidewalk Section (North Side)

Lighting and Utilities

Recommended lighting in this district includes two-tier automobile and pedestrian lighting utilizing the fixtures and illumination levels recommended for the University Square District. Along the sidewalks directly adjacent to the Rosemary Street Parking Facility, we recommend custom fixtures consistent with the facility's plaza landscaping. This free-standing pedestrian light fixture and the streetside plantings adjacent to the parking facility are shown in diagram 16.

Site Furnishings

There are limited opportunities for typical site furnishing patterns in this area due to the lack of available space. Some room for benches and trash receptacles may be available near the Columbia Street intersection if the recommended redesign of Town parking lot 2 as described in the Central Business District section is pursued. Similarly, at the corner of Rosemary Street and Henderson Street, some public open space exists behind the old Post Office that could be better integrated into the overall streetscape design.

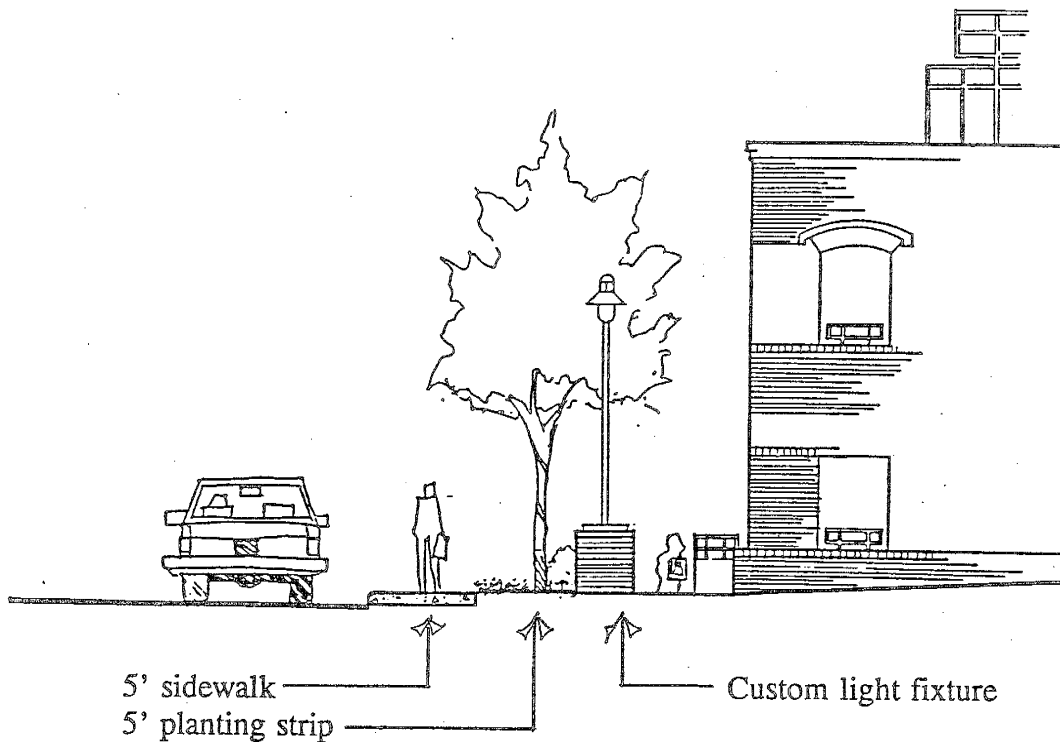


Diagram 16. East Rosemary Street District
East Rosemary Street Sidewalk Section (South Side)

Plantings

Because the right-of-way is very limited, adjoining property owners should be encouraged to install and maintain plantings like those shown in the above diagram. Joint ventures with property owners and the Town should be considered to enhance these highly visible areas. Most significant among these plantings would be the inclusion of trees where space exists to provide some canopy over the street.

WEST ROSEMARY STREET DISTRICT

ANALYSIS

This district includes the area from the InterFaith Council Homeless Shelter west along Rosemary Street to the Carrboro town line, and includes all of the adjoining cross streets that intersect with Franklin Street. It is the downtown's largest district and is made up of diverse businesses, on-grade parking lots and two large churches. It is distinguished from other districts by its interspersed residential and commercial building types, the former typically set back from the street while the latter abut narrow sidewalks. This diversity of spatial organization along the district's streets gives it a less uniform character than found elsewhere in the study area.

Rosemary Street is three lanes wide in this district with some turn lanes and limited parallel parking. Overhead utility lines on wooden poles line the south side of the street and visually dominate the streetscape, due to their own appearance and the effect they have on adjacent tree pruning practices. Trees, where they exist in this district, are typically set back in yards, and very little canopy exists to shade the street or sidewalks. Sidewalks are incomplete, especially along the south side of Rosemary, and grade changes directly behind the curb force pedestrians to walk in the travel lanes between some sections of sidewalk.

Lighting is somewhat inconsistent in this area, especially on the adjoining cross streets, and includes both high pressure sodium and mercury vapor streetlight fixtures. The issue of crime, particularly in the western part of the district, was a concern mentioned by participants in the public workshop and increased lighting has frequently been suggested as a means to improve this area.

DESIGN RECOMMENDATIONS

Curb Extensions and Crosswalks

Opportunities for a curb extension and crosswalk in this district are limited, due to the minimal width of most streets. One possible location for these improvements is in the middle of the 200 block of West Rosemary where on-street parking exists on the north side. Several options exist for an exact location, including an alignment with Nunn Alley and a location farther west behind 440 West Franklin. Whether the curb is actually extended into the parking lane on Rosemary Street or an improved crosswalk is created without a curb alignment change will affect the potential for a bicycle lane in this area and merits further study. Incorporating the crosswalk with a walkway from Rosemary to Franklin Streets is the recommended solution, but would require that right-of-way or pedestrian easements be obtained to assure that this connecting walkway could be adequately maintained.

An improved crosswalk in this area would function to break up this very long block, and along with other improvements, would provide a pedestrian node in the downtown's most automobile-oriented environment. A non-signalized crosswalk currently exists in this area, and whether this improved mid-block crosswalk should be signalized merits further study. As a Town-maintained, rather than a State-maintained road, the process of signalizing a crosswalk on Rosemary Street would not require NCDOT approval, and a variety of signalization options could be considered for use at this location.

Sidewalks

We believe that the completion of sidewalks on both sides of the cross streets as well as on Rosemary Street is probably the single most important streetscape improvement needed in this area. Adding sidewalks will improve pedestrian safety and would tie this district into the downtown as a whole, both functionally and aesthetically.

The specific design of the sidewalks in this district would vary according to existing conditions, but would typically fall into one of two patterns. The first pattern is similar to that recommended for the East Rosemary District shown in diagram 15, where a 5 ft. wide concrete walk is constructed at the back of the curb. This pattern could be combined with trees and low plantings behind the walk wherever possible, especially adjacent to parking lots.

In situations where grade changes would require retaining walls to be built behind the walk we recommend a 3 ft. wide separation between the walk and curb to avoid forcing pedestrians to walk between a wall and moving traffic. An example of this pattern is shown in diagram 17. Although somewhat difficult to maintain in good condition, this 3 ft. wide turf strip could also be included on most of the south side of Rosemary Street and elsewhere where this pattern is already established. Where on-street parking exists, however, turf maintenance is particularly difficult, and the 3 ft. strip should be bricked or the walk installed adjacent to the curb.

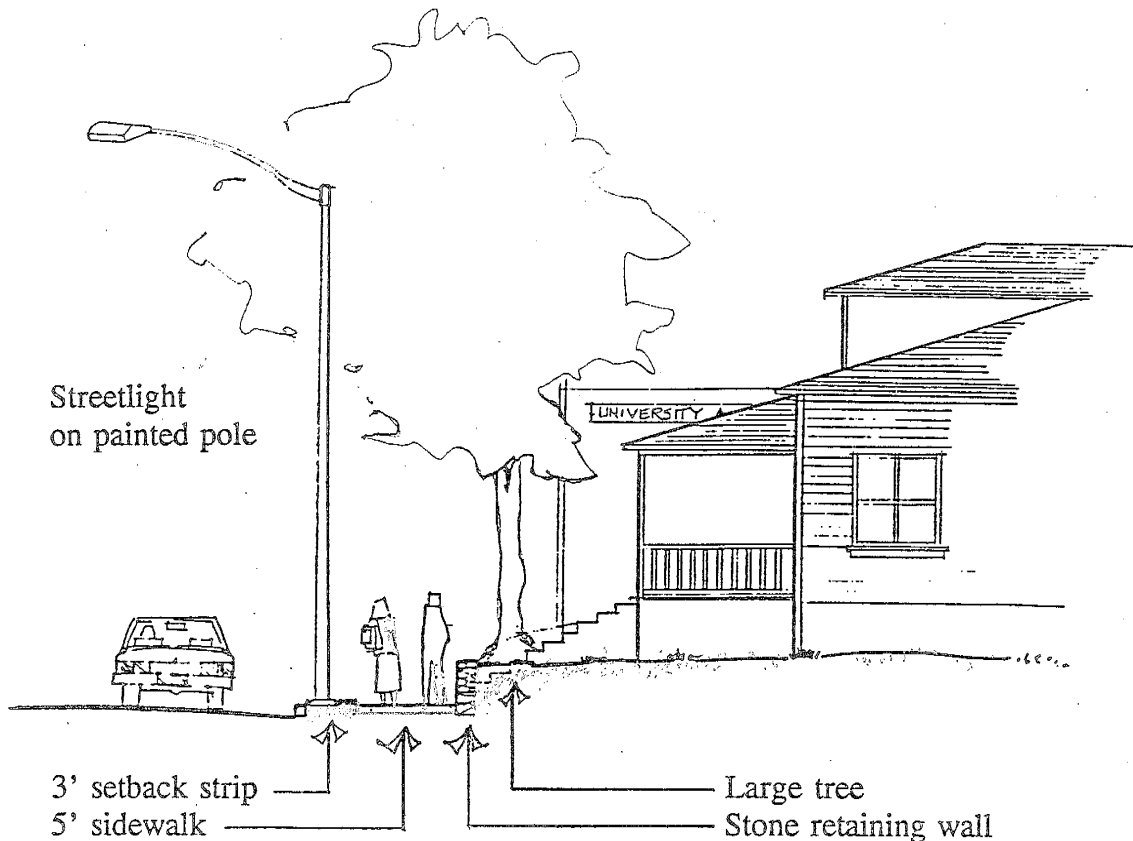


Diagram 17. West Rosemary Street District
West Rosemary Street Sidewalk Section (South Side)

Lighting and Utilities

Recommended lighting improvements in this district vary and respond to current pedestrian use patterns. In the 100 block of West Rosemary Street, from Columbia to Church Streets, we recommend a two-tier lighting system like that recommended for the 100 block of East Rosemary. This pattern could later be expanded into the 200 block as new development increases the urban context of the streetscape there. If the recommended improved crosswalk is realized on West Rosemary Street, this area could also include pedestrian scale lighting.

We recommend that in other areas of the district, the use of a single level of lighting, with high pressure sodium luminaires on newly installed poles. We recommend tapered metal poles painted to match the somewhat more ornamental poles recommended for use in the two-tier system, typically between the curb and sidewalk. On the cross-streets, we recommend the use of these same poles and fixtures, spaced to provide a more uniform lighting level than currently exists.

We further recommend the placement underground of all utility wires which are now overhead thereby eliminating the need for the existing wood poles. The removal of these poles and wires would not only be an immediate aesthetic improvement, but would allow for the development of shade trees to help define the scale and enhance the character of this district.

Street Furnishings

The recommended curb extension on West Rosemary Street provides this district's best opportunity for grouping site furnishings like those recommended elsewhere downtown. We recommend the installation of telephones, trash receptacles, benches, and a kiosk, using the placement patterns described in the Design Components section of this report. This grouping of site amenities would complement the improvements recommended for other locations downtown and help tie this district into the streetscape design as a whole.

The potential for substantial groupings of furnishings elsewhere in this district is limited to areas behind the current right-of-way. Adding a pedestrian node associated with one of the Town parking lots in the 100 block of West Rosemary Street is one possibility which could be studied, as is the possibility of a joint venture with one of the churches or other private landowners farther west. We recommend the placement of benches and trash receptacles at intersections and bus stops along the linear stretches between these possible groupings, wherever space permits.

Plantings

Placing utility lines underground provides an opportunity to develop a tree canopy over the district's streets and sidewalks. This improvement would require a coordinated effort on the part of public and private interests, utilizing trees on private property as well as on landscape easements or expanded right-of-way.

We also recommend the screening of on-grade parking lots through the use of narrow landscape easements and the planting of trees at the recommended improved crosswalk on West Rosemary Street. In other areas, where buildings are close to the street, property owners should be encouraged to include shrubs or other low plantings between their facades and the sidewalk, preferably in low planters which are compatible with the adjacent buildings. This pattern would be a variation of a West Franklin Street Business District planting pattern and is recommended to help unify the streetscape design.

In summary, we believe that the West Rosemary Street District has a great need for streetscape improvements when compared to the other districts within the study area, and that the improvements recommended here will require considerable effort. We further believe that because Rosemary Street is such an important and heavily used thoroughfare, the character it establishes is critical to the perception of the downtown as a whole.

DESIGN SUMMARY

The recommendations for improvements to the downtown streetscape involve establishing design patterns for use in the study area's different districts. Although these patterns vary between districts, general guidelines can be described that identify the main elements of these patterns, and are discussed here as a means of summarizing the design recommendations. The categories used in the Design Components and Design Recommendations sections of this report to organize the proposals are also used here.

Curb Extension and Crosswalks

- Extend the curb out to the edge of travel lanes to expand the space available for pedestrian amenities, shorten the distance between curbs at important crosswalks, and provide planters of adequate size to allow for the long-term growth of large shade trees.
- Locate curb extensions at several locations on both East and West Franklin Streets to serve as pedestrian activity nodes and provide rhythm and unity to the streetscape design.
- Include at least one improved crosswalk on West Rosemary Street to provide space for a major grouping of pedestrian amenities and help integrate this district into the overall streetscape design.

Sidewalks

- Replace all damaged sidewalks using one of the paving patterns selected for each district.
- In most districts utilize a paving pattern consisting of concrete in areas of primary pedestrian movement, and brick laid on a pervious base elsewhere.

Lighting and Utilities

- Place utility lines underground along Rosemary Street and the adjoining side streets to remove this visually dominant feature from the streetscape and provide room for the development of a shade tree canopy.
- Replace existing light poles with new poles of the type recommended for use in each of the different districts.
- Along Franklin Street and the 100 blocks of Rosemary, Columbia, Church and Henderson Streets, include a second tier of lighting directed at the sidewalk.
- Select lighting types (high pressure sodium or color enhanced mercury vapor) and lighting levels to efficiently satisfy all Federal lighting guidelines while respecting the village character of the downtown.

Site Furnishings

- Place benches, bike racks and other amenities in groupings wherever possible, located along the street in patterns that respond to user needs and provide continuity to the streetscape design.
- Select individual furnishings that complement existing features but do not visually dominate the streetscape.
- Where possible, for any given furnishing, include a number of compatible designs, to add diversity to the streetscape and provide individuality to the downtown's different districts without compromising the unity of the streetscape design.

Planting

- Maintain existing large trees wherever possible and provide for their replacement by allocating adequate space for successful shade tree growth at selected locations along the street.
- Where possible, include shade tree plantings near intersections and as a part of all curb extensions.
- In districts where space is restricted, for example along the north side of Franklin Street in the Central Business District, establish a pattern of small tree plantings.
- In the West Franklin Street Business District, include shrub plantings between the curb and the sidewalk and adjacent to buildings where space permits.
- Include annual plantings at selected locations to provide interest and to set up a pattern of color in the downtown area, especially at its entrances.

IMPLEMENTATION STRATEGIES

The design recommendations included in this report are organized into categories of physical improvements (i.e., curb extensions and crosswalks). In the implementation of improvements, however, these categories are less useful because, in the majority of cases, the implementation of an improvement in one category is related to improvements in others.

This section of the report is organized as follows:

- **Joint Projects**
- **Town Projects**

These categories address the distinction between projects that require coordination with others for their implementation and those which likely could be realized entirely with Town resources.

Potential Joint Projects

As an ongoing component of the Town's design review process, all new projects that impact the streetscape require Zoning Compliance Permits and therefore review by Town staff. Depending upon the nature of the project, one very useful means of accomplishing limited streetscape improvements would be to make approval of specific projects conditional on adjacent right-of-way improvements. In the case of the recently approved Top of the Hill project, for example, close cooperation between the project's designers and Town staff provided an opportunity for right-of-way improvements adjoining this important site to be designed so that they would be integrated into the streetscape plan.

In other cases, where new projects are not proposed, it may be useful for the Town to initiate joint projects with adjacent property owners. In these situations, the Town could provide design services for improvements and share in the costs of implementation. Developing a streamlined process for arranging and financing these types of joint projects could be one of the Town's implementation objectives.

Implementing the proposed lighting improvements would be an involved process and would include a substantial initial expense for installation costs related to placing underground service lines to each of the individual fixtures. This phase of the implementation process could be combined with sidewalk improvements and would therefore likely take a considerable amount of time. Once the service lines were in place, the fixtures could be provided by Duke Power through a lease agreement that would be funded through the Town's operating budget. Determining fixture options that Duke Power is willing to provide through such an agreement is an important part of the lighting plan. An increase in the Town's operating budget would be anticipated to cover the costs of leasing these additional non-standard fixtures.

The implementation of the recommended placement underground of utility lines along Rosemary Street and adjoining cross streets is the single largest joint project being proposed. In this project, the costs and responsibilities of implementation would have to be negotiated with the involved utility companies.

Completing the sidewalks and installing recommended plantings along Rosemary Street would require additional right-of-way and/or landscape easements. Acquisition of additional right-of-way could involve considerable expense. Alternatively, landscape easements could be pursued. The advantages to adjacent property owners of the landscape easement option include property value improvements associated with upgraded landscapes, buffering of their properties in some cases, and no loss in setback distance. The loss of setback distance that would result from right-of-way expansion rather than landscape easements would affect future development on some of these adjacent properties and perhaps future property values. Either option could require Town funding for the actual sidewalk construction and plant installation.

Another method for the Town to realize some of the recommended improvements would be to develop joint projects with the Downtown Commission and other interested groups. Specifically, group contributions of site furnishings, including a major donation of a Town clock or directory, are possible and could be studied. Establishing a buy-a-bench or a buy-a-brick program is an approach that has been successful in other municipalities for involving individual donors and could also be considered.

Potential Town Projects

We recommend implementing demonstration projects to evaluate aspects of the proposed streetscape design and also as a means of maintaining public interest and involvement in downtown improvements. We recommend that these projects be carefully selected to assure that they will be consistent with aspects of the master plan, such as curb extensions, that may not be fully resolved when the demonstration projects are implemented. The Town's Capital Improvements Program could be a source of funding for these relatively small scale projects.

In order for larger projects to be implemented future funding sources would need to be considered. This could include funding for the Town's contribution to the joint projects previously discussed, as well as for major sidewalk repair and replacement projects. The construction of the recommended curb extensions and crosswalks would also be a major project that could be done with Town resources.

Improvements to public properties adjoining the downtown's right-of-ways are a key component of the streetscape design. These improvements could be as simple as including a bench grouping behind the sidewalk at Town parking lot 3, or as complex and expensive as the complete redesign of Town parking lot 2 to include a pedestrian node and possibly improved service access to adjacent commercial buildings. The design details and recommendations for possible funding of these specific public improvements could be developed. We also recommend consideration of bringing all adjacent Town properties up to Town landscaping standards.

The maintenance implications of all of the design recommendations made in this report will be the responsibility of the Town. Once some improvements are made, for example the repair and replacement of existing sidewalks, the ongoing maintenance costs associated with at least some aspects of the streetscape may actually decrease. More typically, however, ongoing maintenance costs will increase as a result of proposed improvements even when they are carefully designed. Additional site furnishings will require additional maintenance, specialty plantings will require special attention, and general policing and trash collection will likely increase if streetscape improvements result in an intended increase in pedestrian use.

Before streetscape improvements are implemented, we recommend estimating the resources necessary to fully realize their potential. Although some support may be available from adjoining property owners in the maintenance of their frontage, or from interested groups like garden clubs for the maintenance of specialty plantings or other specific amenities, the burden of maintenance will be almost entirely the Town's.

IMPLEMENTATION SUMMARY

The realization of downtown improvements will involve both joint projects with other public and private interests as well as exclusively Town projects. The following list of specific action recommendations is proposed as a guide to some of these proposed projects, and is organized using the same categories described in the Implementation Strategies section of this report.

Potential Joint Projects

- Continue working with private developers of adjacent properties to assure compatibility of their proposed improvements with the streetscape design.
- Work with Duke Power and others to place utility lines underground.
- Implement recommended lighting improvements through a lease agreement with Duke Power.
- Work with adjacent property owners, especially along Rosemary Street, to implement landscape easement improvements.
- Work with the Downtown Commission and other interested groups to implement specific improvements.
- Develop a method of soliciting and acknowledging private contributions of building materials or site furnishings.

Potential Town Projects

- Implement pilot projects as funding is available.
- Construct curb extensions and crosswalk improvements.
- Implement recommended design improvements to adjoining Town properties.
- Assess the maintenance implications of all right-of-way improvements, both privately and publically funded.