Executive Summary

This study is responsive to two aspects of the long-term enhancement of north and south roadway transportation in the western section of the Town of Huntersville.

1.) Beatties Ford Road is the only roadway in the western part of the Town of Huntersville that presently provides continuous north and south transportation capacity. The community values it for its historic character and numerous cultural resources. Traffic volumes on Beatties Ford Road have steadily increased with suburban development growth. Its two lanes are picturesque but dangerous. This planning study was undertaken to balance traffic safety, road maintenance and restoration while preserving the historic and scenic character of the corridor.

2.) The Mecklenburg County Thoroughfare Plan identified a very general alignment of a major thoroughfare for the extension of Vance Road from its present end at Huntersville-Mt. Holly Road northbound to State Road 73. That alignment was mapped with minimal analysis of community and environmental factors. The Vance Road Extension Alignment Study a companion document to The Beatties Ford Road Protection/Enhancement Strategy was undertaken to define an alignment that is more responsive to current community and site conditions and acknowledges Beatties Ford Road role within the Town of Huntersville’s transportation network. The study was also responsive to the need to define an alignment before development growth within the study area prohibits right-of-way acquisition.

The northerly extension of Vance Road to NC 73 would provide additional system linkages and paralleling capacity to the north-south transportation network of the Town of Huntersville and potentially relieve traffic demand on Beatties Ford Road. Thus allowing Beatties Ford Road to play another role within the transportation system. We understand through this planning initiative that role to be one of a scenic byway traversing northern Mecklenburg’s rural landscape fabric.

Beatties Ford Road Protection and Enhancement

The recommended strategy for the protection and enhancement of Beatties Ford Road encompasses specific roadway enhancements, traffic calming, buffer elements and access management controls to improve safety and help preserve the historic character. These include:

- **Improvements to Roadways:** The current roadway is narrow and contains some abrupt changes in alignment. It is recommended that the basic roadbed be widened to include two 11-foot wide travel lanes with four-foot bike lanes and two-foot wide shoulders. See Appendix for typical cross section. Modifications in the alignment to eliminate poor curvature conditions are recommended north of McCoy Road, south of Gar Creek. The speed limit changes from 45 miles-per-hour (mph) to 35 mph in this location.

- **Roundabouts:** Roundabouts with an inside diameter of approximately 150 feet are recommended at the intersections of Gilead Road, Bud Henderson Road, Mcllwaine Road, Neck Road, Hambrite Road, McCoy Road, and relocated Sample Road. Roundabouts provide safe and reasonably high-capacity intersections; they calm the traffic stream and provide opportunity for the display of community art.

- **Mt. Hopewell Church Historic Zone:** Beatties Ford Road is bounded for approximately 600 feet by two stonewalls that help define the historic setting of the church and cemeteries. Sample Road, which provides access to Latta Plantation Environmental Preserve, also intersects with Beatties Ford in this stretch of roadway. It is recommended that the roadway be widened to accommodate two 11-foot travel lanes with 5-foot colored asphalt bike lanes and be defined by granite curbs. The roadway would be surfaced with stamped asphalt while the shoulder would be paved with cobblestone. Slot drains along each curb would handle storm water. The colors and textures of the curbing and pavements would be selected to complement the historic walls. See Appendix for typical cross section.
Relocate Sample Road: Both visibility and turning movement at the present intersection are highly constrained by the walls. It is recommended that this intersection be closed by diverting Sample Road northward approximately 800 feet west of Beatties Ford Road and then eastward along the power line that is located north of the historic zone. The new intersection would include a roundabout.

Buffers: As the rural and urban edge areas of North Mecklenburg County develops, Beatties Ford Road, originally designed for rural commerce traffic, has become overcrowded and unsafe. Currently residential developments along the corridor are providing a 100-foot undisturbed buffer. The recommended rural design model for Beatties Ford Road proposes to maintain this protective 100-foot buffer as a required foregound to development along both sides of the corridor. Buffers should accommodate multi-use trails with bike-pedestrian amenities.

Multi-Use Trails: Mecklenburg County Greenway System has over 185 miles of proposed and existing multi-use trails. Many of the greenway corridors link to surrounding towns within the County. Regional partnerships throughout the County are critical, as development pressures intensify with urbanization of the metropolitan region. The recommended enhancement strategy proposes the development of 10 feet minimum off road multi-use trails within 100 foot buffers adjacent Beatties Ford Road. The administration of multi-use trail development should be institutionalize as an integral part of the land development process through zoning, design guidelines and built-in bargaining methods in exchange for multi-use trail creation/linkage to Mecklenburg County Greenway System.

Access Management: Numerous access points on Beatties Ford Road disrupts through traffic, compromising capacity and safety. Closely spaced driveways produces overlapping conflicts for the
driver and endangers pedestrian safety. Minimize future access points on Beatties Ford Road. When property with frontage on Beatties Ford Road develops or redevelops, public access should be provided where possible in one of the following ways: 1) The property can receive access from a rear collector or public/private street, which intersects Beatties Ford Road; 2) Obtain permanent cross-access agreements from adjoining properties; 3) When a tract or group of contiguous tracts containing more than fifty acres is planned under a master plan. Direct access onto Beatties Ford Road may be considered as part of plan submittal.

- **Long Creek:** Puckett's Market and Long Creek Elementary School are historic reminders of a rural cross road community. Today they are appropriate anchors for the development of a small-scale hamlet center. It is recommended that the roadway accommodate two 10-foot wide travel lanes with 4-foot bike lanes. Five-foot pedestrian walkways should be separated from travel lanes with a 4-foot minimal planting strip and 500-foot section of granite curbing south of Craver Avenue. Maintain appropriate swale section with five-foot pedestrian walk behind existing trees fronting Long Creek Elementary School. See Appendix for typical cross section.
Beatties Ford Road Protection/Enhancement Strategy  
TOWN OF HUNTERSVILLE

Purpose

This summary report primarily deals with policy recommendations for enhancing and protecting the visual and historical quality of a six-mile section of Beatties Ford Road.

In April 2001 the Town of Huntersville in cooperation with the Mecklenburg Planning Organization entered into agreement with HDR Engineering to prepare The Beatties Ford Road Protection / Enhancement Strategic Plan.

The plan addresses the preservation and orderly development of north Mecklenburg County’s magnificent cultural resources; historic farmlands, rural outpost communities, churches, cemeteries, open space and low bottomlands. The plan suggest a protection and enhancement strategy for the rich heritage of the Beatties Ford Road Corridor and it’s surrounding cultural resources. Plan recommendations will be presented to the Town Board of Commissioners, the Vance Road Advisory Committee (VRAC) and the Town’s planning staff for refinement and inclusion in future works program.

Process

Assessment of existing conditions was the first step taken by the HDR Design Team. In order to provide a framework for visual assessment of the corridor the plan process is organized around the checklist or matrix approach to visual inventory. Landscape units for every two tenth mile interval were inventoried then combined into a matrix and rated for prominence of character. See Appendix. This process of landscape classification established the general visual environment of the corridor and it’s place in the regional landscape.

The limits of the visual environment were determined through viewshed mapping. A viewshed is the surface area visible from a given viewpoint or series of viewpoints. Viewshed mapping distinguished those views along the corridor in need of protection or enhancement.

Synthesis of existing conditions contributed to the formulation of key planning objectives and alternative protection / enhancement policies. The HDR Design Team presented analysis information and alternative protection / enhancement policies in a public workshop forum with residents, business and property owners and local staff on July 2, 2001. Information gathered from the workshop was formulated into an enhancement strategy and presented to the public on October 29, 2001. The final community meeting was held on August 1, 2002. The HDR Design Team transferred comments and recommendations and presented The Beatties Ford Road Protection/Enhancement Strategy Plan for community buy-in.

Location and Existing Conditions

The project study area covers a six-mile section of the Beatties Ford Road corridor to a depth of approximately 200 feet to each side of the road commencing at the intersection of Mt. Holly-Huntersville Road and terminating at the intersection of Highway 73. On both east and west, the corridor is bordered by medium to low residential neighborhood subdivisions, large acreage single-family homes, civic buildings (churches, schools), parks, woodlands and farmlands. Existing zoning along the corridor is primarily Rural with very small sections zoned, Neighborhood Residential-NR District, Highway Commercial-HC District, Campus Business-CB District, Neighborhood Center-NC District and General Residential-GR District. There are several cultural and historic resources on both sides of the corridor, which provides scenic views of the regional landscape. The corridor crosses the Long Creek, Gar Creek and McDowell Creek watersheds with the Upper Mountain Island Lake watershed bordering the northwestern terminus.

Based upon natural features, terrain and land use patterns, the corridor was divided into three sections. Each section has a distinct visual character providing a series of “outdoor rooms” within the regional landscape. A brief description of current conditions in each of the three sections follows.
Section I: Mt. Holly-Huntersville Road to Hambright Road

This section covers the Beatties Ford Road corridor north from Mt. Holly-Huntersville Road to Hambright Road. Latta Plantation Park and the 750-acre Latta Plantation Preserve border the corridor to the west. Predominantly woodlands, the section is home to a variety of cultural as well as natural resources. Historic Hopewell Presbyterian Church and its rubble stonewall demands attention to the east and west while Beatties Ford Memorial Gardens / Cemetery anchors the northern terminus. The section is home of the 1920’s rural settlement of Long Creek centered on the Long Creek Elementary School and the historic Long Creek Agricultural Education Building. Gar Creek traverses this section. It is said that church folks would wash their feet in Gar Creek before arriving at Hopewell Presbyterian Church. Today Gar Creek and its environs are preserved through the Mountain Island Lake Critical Area Watershed Protection.

The section characterizes the early history of northern Mecklenburg County with its abundant family plantations, historic farm sites, and rural settlements.

Section II: Hambright Road to Bud Henderson Road

The area of this section extends north from Hambrite Road to the intersection of Bud Henderson Road and Beatties Ford Road. This section lies within the Mountain Island Lake Critical Area Watershed. Code restrictions allow certain uses or development to occur through the application of land use requirements for control of non-point pollution.

The section exhibits a transitional character from rural agricultural to suburban residential. There are several inwardly oriented residential subdivisions east and west of the corridor. Most of the newer developments have provided for a 100-foot undisturbed buffer along the corridor. Tanners Creek, Latta Springs, Carrington Ridge, Barkley and Douglas Park combine to provide over 1500 housing sites. Douglas Park with its farmhouse architecture style nestled in native vegetation serves as a good example of the site sensitive suburban development needed on the corridor. Increased suburban development if not responsive to context of site conditions along the corridor will undoubtedly transform the rural character of Beatties Ford Road.

Two existing schools, Francis Bradley Middle School and Hopewell High School are present within the section with one future elementary school and community park proposed.

Section III: Bud Henderson Road to Highway 73

This final section starts at the intersection of Bud Henderson Road and Beatties Ford Road north to the juncture of Beatties Ford Road and Highway 73. The section possesses a native north Mecklenburg character. A rural crossroad community fabric and agricultural lands surrounds the section terminating at the General William Lee Davidson Memorial just north of Hicks Cross Roads. The section presides in the Mountain Island Lake Critical Area Watershed and the McDowell Creek drainage basin.

There are the beginnings of some highway commercial retail at the intersection of Highway 73 and Beatties Ford Road. Otherwise existing zoning in the section is designated under Open Space District.

The Gilead Associated Reformed Presbyterian Church, the oldest associated reformed Presbyterian congregation in the county dating back to the 1880’s resides in this section of the Beatties Ford Road corridor.
Visual Environment

Beatties Ford Road follows the route of an ancient Indian trading path. As the road traverses the rich bottomlands of the Catawba River it blankets the ridgeline of the McDowell Creek, Gar Creek, and Mountain Island Lake drainage basin. These same rich bottomlands were once fertile farmland to an agrarian society. Today these rural vestiges are being converted to suburban use at alarming rates. The general landscape setting of the study area is a series of flat to gently rolling pastures with broad smooth upland ridges and side slopes. Generally viewing opportunities are limited to the ridge edges and many of these are screened by dense vegetation on the side slopes. Some opportunities exist for distant views due to topography and road alignment. The character and quality of the view from Beatties Ford Road can best be described in terms of the landscapes the roadway traverses. Within the project study area three landscape character types are encountered; section 1- woodland plantation preservation, Mt. Holly-Huntersville Road to Hambrite Road; section 2- rural suburban, Hambrite Road to Bud Henderson; section 3- cross road hamlets, Bud Henderson Road to NC 73.

The corridor has existed for numerous years as a rural roadway. The woodland plantation preservation character of section one exhibits this attribute. Striking views of Hopewell Presbyterian Church is obtained on gentle roadway curves giving peeps of the not so distant past. Numerous historic farm sites line the corridor with direct access. The visual character of these sites is highly diverse. Hardwoods and native vegetation remain along the roadside, fence lines, stonewalls and cemeteries.

The corridor intersects two of the Town of Huntersville’s suburbanizing thoroughfares, Bud Henderson Road and Mcllwaine Road. The quality of the views is somewhat low in section two due to roadside grading, sporadic vegetation and sign clutter as new residential subdivisions intrude into the scenic quality of the corridor. One of the last remaining active farms is located in section 3, crossroads hamlet. The quality of views of the Hubberd Farm is moderately high with its white board fencing around open pastures with grazing cows.

Regional Landscape Setting

The visual resources of the Beatties Ford Road Corridor are grounded in a larger regional pattern. Located in the piedmont region, "Foot of the Mountain," the rolling hills of the piedmont make up the central physiographic section of North Carolina.

The piedmont region is much celebrated for its gently rolling, pastoral, agricultural landscape. It is the image of towns, villages, rural settlements, and farm complexes placed in the rural landscape that is memorable.

As northern Mecklenburg County grows and suburban development extends into undeveloped green fields, it is possible to grow smarter and continue the memorable image of the Beatties Ford Road Corridor.
Visual Resources

The visual experience of a landscape is based upon its visual resources. Existing resources of the Beatties Ford Road Corridor's visual environment were analyzed using the matrix approach. Landscape units for every two – tenth mile were inventoried then combined into a matrix and rated numerically. See Appendix. Four visual character descriptors; depth of view, continuity / harmony, scenic / cultural and tree cover enclosure were rated on a scale of one to five with one being the highest score. The approach suggests three distinct visual sections as previously outlined. Key views that represent the range of resources within the three sections are included in the Appendix.

Visual Impacts

- Due to traffic capacity and growing safety issues, the Town of Huntersville and the Metropolitan Planning Organization are considering how to upgrade the Beatties Ford Road Corridor. Three alternatives are considered in this assessment of probable visual impacts. 1) No action; 2) Upgrading the roadway entirely within the existing right-of-way; and 3) upgrading the highway within an expanded right-of-way.

- From Mount Holly Huntersville to Highway 73, Beatties Ford Road consists of one paved travel lane in each direction with unpaved shoulders. The widths of the travel lanes are ten feet and the shoulder width with ditch section varies between eight and ten feet for a total roadway width of approximately 40 +/- feet. Exhibit One and Two illustrates typical profiles and sections of the existing road.

- The existing road lane capacity is adequate for current vehicle volumes except at intersections. There are six at grade intersections with other major roads within the project limits. There are numerous private access points; many of these have substandard geometry. There are also numerous utility poles and heavy transmission lines along the corridor. These deficiencies degrade the level of service and safety of the road, and can be expected to continue with increased spiraling development growth.

Option 1.) The "no action" alternative would not directly alter any visual resources, although the quality of views would decrease with the potential adverse environmental and transportation effects.

Option 2.) Upgrading within the existing alignment would increase the pavement width, increasing the scale of the roadway. Existing roadside vegetation would have to be removed. This would adversely affect the quality of views from the road. Grading would be required, thus altering drainage patterns and the rural side ditch nature of the roadway. Somewhat offsetting these adverse effects would be the relocation of existing utility lines that encroach on the present visual quality of the roadway.

Option 3.) Upgrading with an expanded right-of-way would make it possible to preserve valued visual resources by adjustments to the alignment. Parkway landscaping and woodland preservation buffers could be implemented. Additional right-of-way acquisition would also allow construction of a landscape median, which could reduce the visual scale of the widened roadway. The adoption of design policy standards within a corridor overlay zone could be employed to preserve the essential character of the cultural landscape.

Option three, upgrading within an expanded right-of-way would allow successful mitigation of adverse environmental and transportation effects. This action is the preferred alternative.
Exhibit One

Beatties Ford Road Profile (STA. 21+16.33 to STA. 147+23.15)

Beatties Ford Road Profile (STA. 147+23.15 to STA. 268+26.19)

Beatties Ford Road Profile (STA. 268+26.19 to STA. 373+01.64)
Exhibit Two
Enhancement and Protection Policy Recommendations

One of the major problems associated with suburban development practices in rural and suburban edge communities is the design of the supporting transportation network. Many of the roadway transportation standards in place today were generated in an effort to accommodate the automobile. Other design features such as trip purpose, land use, pedestrian amenities and multi-modal systems were ignored. The result was relentless indiscriminate development that ignored significant natural, physical and cultural resources and does little to ameliorate hour-long commutes in bumper-to-bumper traffic or the degradation of air and water quality standards.

This section of the report recommends a number of alternative roads and street design models that are based on roads traditionally found throughout the villages and cross road hamlets of rural North Carolina. The models set the standard for upgrading Beatties Ford Road to address increased traffic volumes while maintaining the cultural traditions of the corridor. Although, more load capacity is part of the solution it is not the only solution. Adding road capacity does not eliminate congestion. The proposed models recommend the integration of transportation and land use planning as a fundamental planning principle. Over time this one fundamental principle can alter travel patterns leading to a reduction of vehicle miles traveled. The opportunity to shift traffic off Beatties Ford Road produces favorable conditions for preserving its’ historic character. The extension of Vance Road will provide paralleling roadway capacity thus reducing the traffic demand on Beatties Ford Road.

Buffer/Setback Standards

As the rural and urban edge areas of north Mecklenburg County develops, Beatties Ford Road, originally designed for rural commerce traffic, has become overcrowded and unsafe. The recommended design model proposes as a foreground to development a protective buffer, setback of 100-feet along both sides of the roadway. The roadway width is increased to 22-feet and shoulder and drainage ditches are widened and improved. In keeping with the rural historical precedent existing woodlands and understory plantings are preserved in between the fenceline and road. Greenway trails and bikeways are proposed within the 100-foot setback.
Taking Action

1. Control development through zoning, design guidelines and built in incentives (density bonuses, cluster development) in exchange for open space buffers.

2. Provide 100-foot minimum open space buffers along both sides of corridor. Buffers to accommodate bikeways and pedestrian amenities. Buffer area to apply towards open space requirements of developments requiring open space.

3. Connect greenway trails through buffers to primary trail corridors and destinations as recommended in Mecklenburg County Greenway Master Plan.

4. Institutionalize trail creation as integral part of land development process.

5. Establish / identify “scenic” by-way designation process.

6. Consider National Register Historic Linear District Designation.
Abutting Land Use and Site Design Standards

The practice of land use planning and site design along rural roadways should reinforce the functions of the transportation network and enhance the existing visual and aesthetic qualities of the district. The congested, dangerous and often sprawling development created by inappropriate land use policies has been well documented throughout Mecklenburg County.

The Town of Huntersville strategic plan and zoning code supports low-density residential development within the vast majority of the Beatties Ford Road Corridor. The Rural District encourages the development of rural compounds and crossroads communities that set aside significant natural vistas and landscape features for permanent preservation. Density of development is regulated on a sliding scale approach, allowing the net density to rise with increased open space preservation.

- The Beatties Ford Road Corridor is largely devoted to residential uses with little or no neighborhood service retail within a walkable distance. With continued residential growth there will be an increase of commercial development interest. The recommended cross section for Beatties Ford Road supports the Rural zoning district and its associated development typologies with the addition of a scenic overlay zone that primarily establishes site design standards for land uses abutting the Beatties Ford Road Corridor.
Taking Action

1. Develop landscape plan for Beatties Ford Road. Plan should be compatible with existing woodland enclosure. Provide definition of corridor edge through use of indigenous plant material. Include evergreen trees, grasses, wildflowers and shrubs to form dense layering, naturalistic pattern.

2. Establish Scenic Overlay Zoning District to regulate and establish site design standards.

3. Require a wooded 100-foot buffer between new residential development and Beatties Ford Road.

4. Require utilities to be underground where they interfere with existing or potential tree canopies.

5. Require a 100-foot setback from Beatties Ford right of way for any new building permit.

6. Discourage clear cutting of wooded sites. Require existing tree survey and tree protection zone requirements. Tree protection zone is equal to 100-foot buffer from Beatties Ford Road right of way and a 25-foot building setback from buffer.

7. Prohibit roadside strip commercial development. Contain commercial development within Hamlet centers.

8. Continue open space requirements for residential development within corridor study area with part of the required open space forming a greenway buffer adjacent to Beatties Ford Road.

9. Consider making environmental assessment analysis a part of the permitting and approval process. (Water and Air quality)

10. Require buildings to face Beatties Ford Road were lots are visible from the road.

Public Access Management and Location Standards

When property with frontage on Beatties Ford Road develops or redevelops, public access should be provided where possible in one of the following ways: 1) The property can receive access from a rear collector or public/private street, which intersects Beatties Ford Road; 2) Obtain permanent cross-access agreements from adjoining properties; 3) When a tract or group of contiguous tracts containing more than fifty acres is planned under a master plan. Direct access onto Beatties Ford Road may be considered as part of plan submittal.

Taking Action

1. Perpendicular access should be limited where feasible to 800 feet intervals. Developments using common driveways are encouraged.

2. Planted Medians are recommended at public street intersections and residential subdivision entrances to ensure smooth traffic flow.

3. Encourage unified access points.

4. Allow direct access points to Beatties Ford Road where large tracts will be developed under a unified plan and where such locations are deemed safe and appropriate from a traffic design point.

5. Explore future provision of transit facilities in the area as bus and rail service is expanded.

6. Prohibit left turns at peak hours.

7. Make residential subdivision entry roads curvilinear to minimize visual breaks.
Access Way Configuration and Landscape Management

A continuous network of streets and pathways is an important element of support for the enhancement/protection of the Beatties Ford Road corridor. The use of culdesac and dead end streets decreases pedestrian convenience. A well-connected network of roadways, pedestrian paths, bikeways and greenways provide the pedestrian with multi-modal choices to reach destinations.

Taking Action

1. Create a network of collector streets and public access ways parallel to the corridor with cross street intersections with proposed Vance Road Extension. Introduce signalized full movement intersection at Mt. Holly-Huntersville Road and proposed Vance Road Extension.

2. Place greater emphasis on pedestrian and bicycle pathways between and within residential subdivisions and access to retail, institutions, tourist sites and recreation destinations.

3. Provide safe and adequate facilities for the increased traffic flow on Beatties Ford Road, including T-intersections, neckdowns, raised crosswalks, speed tables and refuge islands.

4. Avoid traffic signals within interior length of corridor. Explore the use of roundabouts and restricted left-turn movements.

5. Separate sidewalks from road shoulder. Provide multi-purpose recreation path within 100-foot buffer on both sides of Beatties Ford Road.

Roadway Safety Improvements

Beatties Ford Road has several design deficiencies that produce unsafe travel conditions. The road is built on an old rural trading path alignment. Vertical and horizontal alignments at present do not meet current standards. Narrow pavement, lack of adequate shoulders, ditches lines, inadequate sightlines and right-of-way and excessive motor speeds equate to the necessity of additional right-of-way acquisition for roadway upgrades.

The proposed model recommends site design patterns in association with alignment upgrades that support future transportation policy and improves traffic movement, safety and efficiency along the corridor and its serving area.

Taking Action

1. Base final roadway cross-sections on anticipated traffic volumes and not on street classification.

2. Upgrade Beatties Ford Road Corridor to meet appropriate street standards for accommodation of anticipated vehicular, pedestrian and bicycle needs.

3. Require a traffic impact study from developer of any project. Use traffic study and estimated number of vehicles to begin formulating predictions and recommendations for handling increased traffic.

4. Use traffic calming measures such as roundabouts, medians, speed tables and gateway thresholds to control traffic flow.


7. Adopt Adequate Public Facilities ordinance as a growth management tool. Ordinance to include: road right-of-way acquisition and donations, major collector road improvements and utility extensions.
Intersection Design Standards

The main objective of intersection design is the reduction of potential conflicts between motor vehicles, buses, bicycles and pedestrians while facilitating mobility through the intersection. The intersection design should reinforce the natural transitional paths and operating characteristics of users.

Taking Actions

1. Create higher street network and more interconnections throughout corridor serving area.
2. Avoid over reliance on signalized intersections.
3. Consider 4 – way stops and roundabouts on Beatties Ford Road when traffic volumes are high enough to warrant traffic signals but not enough to require their use.
4. Provide “T” intersections and gateway threshold intersections on Beatties Ford Road to produce strong terminating vistas.
5. Incorporate flared sidewalks and smaller corner radii into intersection design.

Speed Control

The best form of speed control is through the use of roadway geometric. Design parameters include roadway width, centerline radii of curves, sight distances and intersection turning radii. Beatties Ford Road should be improved and upgraded to meet appropriate NCDOT standards for accommodation of vehicular, pedestrian and bicycle needs. The Rural Historic Precedent cross section sets the standard for upgrading the corridor while preserving its historical character.

Taking Action

1. Use traffic dispersion techniques to control traffic volumes. (Parallel roads, cross street connections, block length.)
2. Design speed control within recommended geometric of proposed Beatties Ford Road upgrades.
3. Prevent high speeds through the use of narrower intersections with smaller radii. The minimum radius curb return should be 30 feet.
4. Employ the use of “T” intersections where feasible to provide traffic calming and traffic safety effects.
5. Preserve woodland roadway edge to form continuous canopy / enclosure. (Tree lined streets are 10-15 mph slower than non-tree lined streets.)
6. Provide well-defined street crossings and shoulder separated pedestrian walkways.
7. Employ traffic calming techniques such as roundabouts, medians, speed tables and gateway thresholds were feasible.
8. Enforce speed limit with regulatory signs and special patrol units.
Beatties Ford Road Protection/Enhancement Strategy
TOWN OF HUNTERSVILLE

Pedestrian Open Space Systems

Too often developers and builders overlook internal open space and its spatial relationship with the corridor. The natural voids and spaces between the corridor and the internal open space requirements of the Rural District play a vital role in defining the form of the residential subdivisions. Providing open space within and around existing and proposed residential subdivisions is essential to improving the quality of life. Well-designed open space networks become even more important as the residential density along the corridor increases.

Taking Action

1. Use open space to preserve and connect important sensitive ecological areas such as wetlands and marshes, creeks and streams, steep and easily eroded slopes and woodlands.

2. Enhance sense of corridor through the use of peripheral open space linkages to residential subdivisions.

3. Prevent the intrusion of sprawl by establishing clear development boundaries with peripheral open space networks and agricultural land buffers.

4. Provide linear green networks for pedestrians and cyclists along Beatties Ford Road within 100-foot buffer.

5. Create green infrastructure of multi-use trails within 100-foot buffer to County’s greenway system.

6. Connect green infrastructure to adjacent residential subdivisions, parks, nature preserves, schools, businesses and shopping.

Sign Standards

Signs exist in a shared environment that competes for attention of viewers. A sign is influenced by its location in relation to and with the roadway, buildings, landscape and its proximity to other signs. Signs have the ability to characterize the Beatties Ford Road cultural past. Signage should be considered an integral design element of the corridor. For visual harmony signs should be complimentary to the visual resource of the corridor.

Taking Action

1. Retain and restore existing signage which reinforces the historical / cultural themes of the corridor.

2. Place signs, sign supports and sign structures to integrate with the scale, color and articulation of the cultural landscape and architecture while honoring the intent of the sign chapter of the zoning code.

3. Encourage sign material to reflect the historical themes of rural north Mecklenburg county (stone, treated timbers, rock forms, wood). Provide electrical elements such as junction boxes and transformers at rear of signs.

4. Encourage external lighting with approved landscape plan. Lighting should be shield with no spillover

5. Require low profile signs with maximum height of 5 feet. Sign face to be maximum 16 square feet

6. Locate subdivision signs out of required sight distance and sight triangles.
7. Limit color of signs to three base colors. Naturalistic earth tones are encouraged (greens, grays, browns). Three complimentary or contrasting colors for each base color should be selected.

8. Standardize public sign location Place sign far enough away from roadway to prevent damage from vehicles. Signs should be placed so that they are not visual obstacles.

9. Develop sign standards to distinguish corridor signs from the ordinary utilitarian appearance of public signs. Develop a pleasing silhouette for standard signs that soften sign profile.
APPENDIX

- Viewshed Evaluation
- Field Photos
- Typical Cross-Section
- Workshop Comments
- Publications