IX. Natural Environment and Existing Land Use

ENVIRONMENTAL INVENTORY

Urban development patterns in Christiansburg are strongly influenced by the area's physical characteristics: topography, drainage, floodplains, sensitive soils, and the location of active agricultural and forested areas. While many of these features may inhibit development, they also help form and define the character of the man-made environment. Nurturing a harmonious relationship between urban and natural systems will help to ensure appropriate growth and minimize development problems over the long term.

Climate

The Town of Christiansburg enjoys a moderate climate with an average temperature of 51.5 degrees Fahrenheit (from November 1, 1952 to December 31, 2000), according to the Southeast Regional Climate Center (station 440766, Blacksburg 3 SE). The area had an average minimum temperature of 39.8 degrees Fahrenheit and an average maximum temperature of 63.1 degrees Fahrenheit. The area had an average annual precipitation of 40.43 inches and average snowfall of 23.1 inches (from November 1, 1952 to December 31, 2000).

The recorded highest temperature for the Town of Christiansburg is 99 degrees Fahrenheit in July of 1954 and August 1983. The recorded lowest temperature is –18 degrees Fahrenheit in January 1985.

Geology and Topography

Christiansburg lies in the Great Valley Subprovince of the Ridge and Valley Physiographic Province of the Appalachian Mountains. Its bedrock is primarily carbonates (limestone and dolostone) with lesser amounts of siltstone, shale and sandstone. Carbonate bedrock layers are characteristically uneven and produce landscapes typified by sinkholes, caves, and rock outcroppings. The uneven bedrock may, in some cases, pose complications for building site development, particularly excavation and foundation procedures.

Due to ancient stresses in the earth, the bedrock underlying the Christiansburg area has been greatly deformed. Major and minor faults are common in the area and rock beds typically are inclined at fairly steep angles. Historical records do not indicate seismic activity in the immediate vicinity of Christiansburg; however, approximately 25 miles to the north, an active seismic area is found in Giles County. Most earthquakes are minor, but

recent studies indicate a remote possibility of damaging earthquakes exists in the Giles County area.

Elevations in the Town of Christiansburg vary from approximately 1855 to 2380 feet above sea level. The topography is characterized by broad areas of relatively low slopes of up to 15%; steeper portions may be found along Crab Creek and in the limited regions along the northern, southern, and eastern corporate limits. Slopes surrounding the Town can be severe, exceeding 25%. In terms of future land development, slopes of 15-20% will not impede most small-scale residential, commercial or industrial construction. It is predominantly large-scale development requiring an expanse of level ground that is impacted.

Soils

The geology of an area and its soils are closely related; however, the soil characteristics are more important than the type of bedrock for construction purposes and are an important factor in determining future land use. The Soil Conservation Service (SCS) prepared a soil survey for Montgomery County in September 1985, which included data for the Town of Christiansburg. While a general survey of this type cannot replace detailed on-site soils investigations, this survey can significantly enhance the ability of the Town to make broad based planning and land use decisions.

There is general agreement that deep soils developed on gentle slopes with low erodibility and good drainage are considered most desirable for both urban and rural uses. Areas that are limited for development may experience one or more of the following conditions: steep slopes, high erodibility, shallow soils, poor drainage, and ponding. According to the SCS Soil Survey for Montgomery County, there are two major soils groups in Christiansburg: the Groseclose-Poplimento-Duffield unit and the Caneyville-Opequon-Rock Outcrop unit. Soils of the Groseclose-Poplimento-Duffield unit cover the majority of the Town and are deep, well drained, and gently sloping to steep soils with clayey subsoil. Sinkholes are common in these soil areas, and slopes may be steeper in these instances. Urban uses are limited by these soils due to their clayey subsoil, slow permeability, low strength, and high potential for shrink-swell activity. The potential for erosion of these soils is severe in steep areas.

Soils of the Caneyville-Opequon-Rock Outcrop unit are found primarily in the eastern central portion of the Town, near the Route 460 By-Pass. Areas where these soils and Rock Outcrop exist are generally highly dissected upland areas with deep, winding and V-shaped hollows. These areas may be subject to sinkholes and subsurface drainage. Soils of this group are moderately deep and shallow. They are generally well drained, with moderately steep to very steep slopes and a clayey subsoil. Urban uses on these soil and Rock Outcrop areas are limited by slope and rock outcrop as well as by a relatively shallow depth to bedrock and a high potential for erosion. In addition to restricting urban

construction, the soils of these units generally prohibit the use of septic systems. This is due primarily to slow percolation rates, shallow depth to bedrock, and steep slopes.

Because public sewer is available to most Christiansburg residents, however, septic system suitability alone does not generally deter development. The following soils and soil complexes may be found in the Town of Christiansburg; the suitability characteristics of each are fully evaluated in the SCS Soil Survey for Montgomery County: Berks-Lowell-Rayne, Caneyville-Opequon, Duffield-Ernest, Frederick and Vertrees Cherty Silt Loams, Frederick and Vertrees Silt Loams, Groseclose and Poplimento, Groseclose-Urban Land, Groseclose and Poplimento Cherty Soils, McGary and Purdy, Udorthents and Urban Land, and Weaver.

Hydrology

The Town of Christiansburg is drained primarily by Slate Branch and Crab Creek and its tributaries: Town Branch and Walnut Creek. A number of other creeks located mostly outside the Christiansburg limits drain smaller portions of the Town. These creeks include: Wilson Creek, Den Creek, Spring Branch, Falling Branch, Smith Creek and Elliot Creek. Crab Creek and Slate Branch are within the New River basin, which eventually drains to the Gulf of Mexico. The other drainageways are all within the Roanoke River Basin, which drains to the Atlantic Ocean.

Few surface water quality problems have been reported in the Town of Christiansburg. Current water quality in the streams appears to be good. Nutrient enrichment had been observed prior to the closing of the Crab Creek sewage treatment plant. Treated water flowing into Crab Creek from the Town's former sewage treatment plant generally had a lower concentration of nutrients than the Creek water. The present wastewater treatment plant discharges to the New River.

According to the Groundwater Map of Virginia, the Town of Christiansburg lies within the Carbonate Groundwater Area of the Valley and Ridge Province. Due to the prevalence of carbonate bedrock (limestone and dolostone), the presence of underground drainageways in Christiansburg is fairly widespread. Such paths are formed when slightly acidic groundwater dissolves the bedrock, forming breaks, fractures, and caves.

Groundwater pumping rates are generally up to 50 gallons per minute (gpm) and may approach 1000 gpm in some areas. Such rates are more than adequate for industrial and public use. In the bottom lands, pumping rates of 2000 gpm and higher have been experienced. Such high well yields are the product of the open nature of water circulation in the subsurface caves, which are rapidly recharged through sinkholes. A consequence of such a drainage system, however, is its high susceptibility to contamination from surface sources and the potential for rapid movement of polluted groundwater due to its relatively unimpeded flow through the underground cave system.

Floodplains

While the majority of Christiansburg lies in upland areas not generally subject to flooding, the Town does experience limited flooding from Crab Creek and its tributaries. Some of the most severe flooding has been the result of heavy rains associated with major weather fronts or local thunderstorms, as occurred in 1940, 1972, and 1978.

The Town's Floodplain Ordinance, adopted in 1980 and amended several times since, governs the use of land within the floodplain. Floodplains are defined as areas that have a one percent chance of being flooded in any given year. The floodplain limits are based upon Flood Insurance Studies prepared by the Federal Emergency Management Agency (FEMA) for Christiansburg and Montgomery County. In order to qualify for flood insurance, FEMA prohibits development within the floodway and strongly discourages development in the adjacent 100-year floodway fringe. The floodway consists of the stream channel and those portions of the floodplain that must be kept open in order to carry the 100-year flood without an increase in flood height of more than one foot.

Although development within the floodplain is discouraged, a number of properties within the floodplain limits along Crab Creek, Town Branch, and Walnut Branch were developed prior to FEMA floodplain regulation. Most of the flood-prone lots are in either commercial or industrial use. A number of these are located along Reading Road and Depot Street, particularly where the latter intersects with Roanoke, Cambria, and North Franklin Streets. Properties in residential use that are within the floodplain are located primarily on the south side of Montgomery Street.

Storm Drainage

Storm drainage within the Town of Christiansburg is accommodated in part by a publicly maintained closed conduit system as well as by paved and grassed ditches. Developers are required to install underground storm drains as well as curb and gutter or paved ditches where the potential for erosion is high. Public storm drainage improvements were made by construction of underground storm piping along Roanoke Street, between Roberts and Main Streets, which was completed in the early 1990's.

Localized storm drainage problems have been experienced along Route 460 near the Corning facility, the New River Valley Mall area, along College Street, along Ellett Road, near Silver Lake Road, and in the Hans Meadow area. The Town has acquired property for the installation of a storm water facility to alleviate the problems experienced in the Hans Meadow area.

After periods of concentrated precipitation (storm events of 50-100 year recurrence intervals), ponding and the eventual inundation of Route 460 have occurred. The severity

of this flooding has warranted temporary closure of the road on several occasions; this situation was corrected.

The Town is now required to do regional storm water planning as required by the Town's classification as an urbanized area. The Town anticipates requiring the Phase II Stormwater planning be implemented on a Town-wide basis, though only required to do so for the areas classified as urban.

Wetlands Areas

Land areas that are swampy, marshy, and frequently flooded were once thought to be undesirable. A better understanding of ecological systems, however, has led to an appreciation for the important role that these areas play in maintaining the supply and quality of our water resources environment. Two major legislative acts protect wetlands from alteration, destruction or potential misuse: the Clean Water Act (CWA) of 1972, as amended, and the Chesapeake Bay Preservation Act (CBPA) of 1989. Because the Chesapeake Bay Preservation Act applies only to those 17 counties and 29 cities and towns comprising "Tidewater Virginia" as defined in the Act, Christiansburg is not subject to any of its provisions. Section 404 of the Clean Water Act is, therefore, the primary tool governing wetland activities within the Town.

Federal Regulation

Jointly administered by the U.S. Army Corps of Engineers (COE) and the Environmental Protection Agency (EPA), Section 404 of the Clean Water Act establishes a permit program to regulate "discharges of dredged or fill material" into waters of the United States, including most wetlands (tidal and non-tidal). The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) have important advisory roles in the permit review process.

Because Section 404 is not a comprehensive mechanism for wetlands protection, a broad range of supplementary and complementary programs have been enacted at the federal, state, and local levels to further protect wetland resources. The Swampbuster provision of the federal Food Security Act of 1985 is one such statute. This legislation reverses federal policy that once encouraged agricultural draining of wetlands for conversion into farmland. Through this Act, the Soil Conservation Service (SCS) is able to participate in the wetlands determinations process.

Identification of Wetlands

There are four chief federal agencies that are involved in delineating and identifying jurisdictional wetlands: the U.S. Army Corps of Engineers, the Environmental Protection Agency, the Fish and Wildlife Service, and the Soil Conservation Service. While federal wetlands definitions differ somewhat among these agencies, they are conceptually the

same and include three basic elements: hydrophytic vegetation, hydric soils, and wetland hydrology.

Field survey methods must be employed to determine the presence of wetlands and development must then be undertaken in a manner consistent with the federal laws and in accordance with federal permitting procedures.

In an effort to reach consensus on the delineation and definition of jurisdictional wetlands, "The Federal Manual for Identifying and Delineating Jurisdictional Wetlands" was adopted by these agencies in 1989. Following some dispute, however, adoption of the manual was rescinded. Delineation criteria are again under review and a new federal manual is anticipated for the near future.

Conservation Areas

Of the 5,114 acres in the Town prior to annexation, 1,830 acres were undeveloped. Data indicates, however, that use of 482 acres, or 26%, of the available undeveloped land was precluded due to the potential for flooding or presence of slopes in excess of 20%. With the annexation of 3,525 acres of land in 1988, the Town of Christiansburg acquired over 1,900 additional acres of undeveloped land, much of it without physical restrictions to development.

This area has seen a large concentration of the Town's development in the time since annexation with much residential development occurring north and south of Peppers Ferry Road (Route 114). Commercial development occurred heavily in the N. Franklin Street corridor, particularly near the Peppers Ferry Road area. There are substantial undeveloped areas remaining in these areas, particularly in the areas north and south of Peppers Ferry Road (Route 114).

Floodplains, steep slopes of more than 15 percent, karst terrain and sinkholes, and wetlands are sensitive environmental features that may affect future development. Land in Christiansburg suitable for larger scale development is located predominantly in the vacant, agricultural, and wooded lands to the northwest, south, and east of the Town's center. A number of vacant parcels closer to the center of the Town are available for infill development. While steep slopes and floodplains may be undesirable for development, these areas present a number of opportunities for the Town. Through property acquisition and/or any number of preservation techniques, these recreational and scenic resources may be preserved for the enjoyment of citizens and visitors of the Town for years to come.

EXISTING LAND USE

Development within Christiansburg initially centered around the courthouse and other public buildings, forming a relatively compact business district along Main, Franklin, and Roanoke Streets in the present downtown. From there, development has emanated outward, following the major rail and motor vehicle transportation routes. Since its incorporation in 1833, the Town of Christiansburg has grown to twelve times its original land area. The Town has successfully annexed land three times (1966, 1975, and 1988) and experienced a merger with the former Town of Cambria in 1964. The latest annexation in 1988 involved four areas totaling 3,525 acres, bringing the total land area of Christiansburg to approximately 13.7 square miles.

The map on the following page depicts the current Zoning Map for the Town of Christiansburg. The table below illustrates the land area and percentages of each Zoning District as well as provides approximate land area and percentage developed and undeveloped. The 1993 Comprehensive Plan stated that 56.5% of all land was developed within the Town, which was a decrease from 1984's figure of 59.2%. This decrease in the percentage of developed land is due to the large amounts of undeveloped farm and forest lands within the areas annexed. Based on the tabulated data, the Town's developed land accounted for approximately 4,485.6 acres or 58.2% of the total land area in 2003.

Existing Zoning District Area, Percentage of Town's Total Area, Estimated Percentage and Area Developed, and Estimated Percentage and Area Undeveloped Town of Christiansburg (as of December 2, 2003)

Zoning	District	Area (acres)	Percent of Town's Total Area	Estimated Percent Developed	Estimated Area Developed (acres)	Estimated Percent Undeveloped	Estimated Area Undeveloped (acres)
A	Agricultural	2,225.1	28.9%	5.0%	111.3	95.0%	2,113.8
R-1A	Rural Residential	247.2	3.2%	90.0%	222.5	10.0%	24.7
R-1	Single-Family Residential	1,663.0	21.6%	80.0%	1,330.4	20.0%	332.6
R-2	Two-Family Residential	716.3	9.3%	90.0%	644.7	10.0%	71.6
R-3	Multi-Family Residential	706.5	9.2%	75.0%	529.9	25.0%	176.6
R-MS	Residential Manufactured Home Sub.	0.0	0.0%	- -	- -	- -	- -
B-1	Limited Business	36.9	0.5%	20.0%	7.4	80.0%	29.5
B-2	Central Business	65.7	0.9%	90.0%	59.1	10.0%	6.6
B-3	General Business	1,232.0	16.0%	85.0%	1,047.2	15.0%	184.8
I-1	Limited Industrial	57.3	0.7%	75.0%	43.0	25.0%	14.3
I-2	General Industrial	754.3	9.8%	65.0%	490.3	35.0%	264.0
Total of Residential Districts		**3,332.9**	**43.3%**	**81.8%**	**2,727.4**	**18.2%**	**605.6**
Total of Business Districts		**1,334.6**	**17.3%**	**83.4%**	**1,113.7**	**16.6%**	**220.9**
Total of Industrial Districts		**811.6**	**10.5%**	**65.7%**	**533.3**	**34.3%**	**278.3**
Total Area in all Zoning Districts		**7,704.2**	**100.0%**	**58.2%**	**4,485.6**	**41.8%**	**3,218.6**

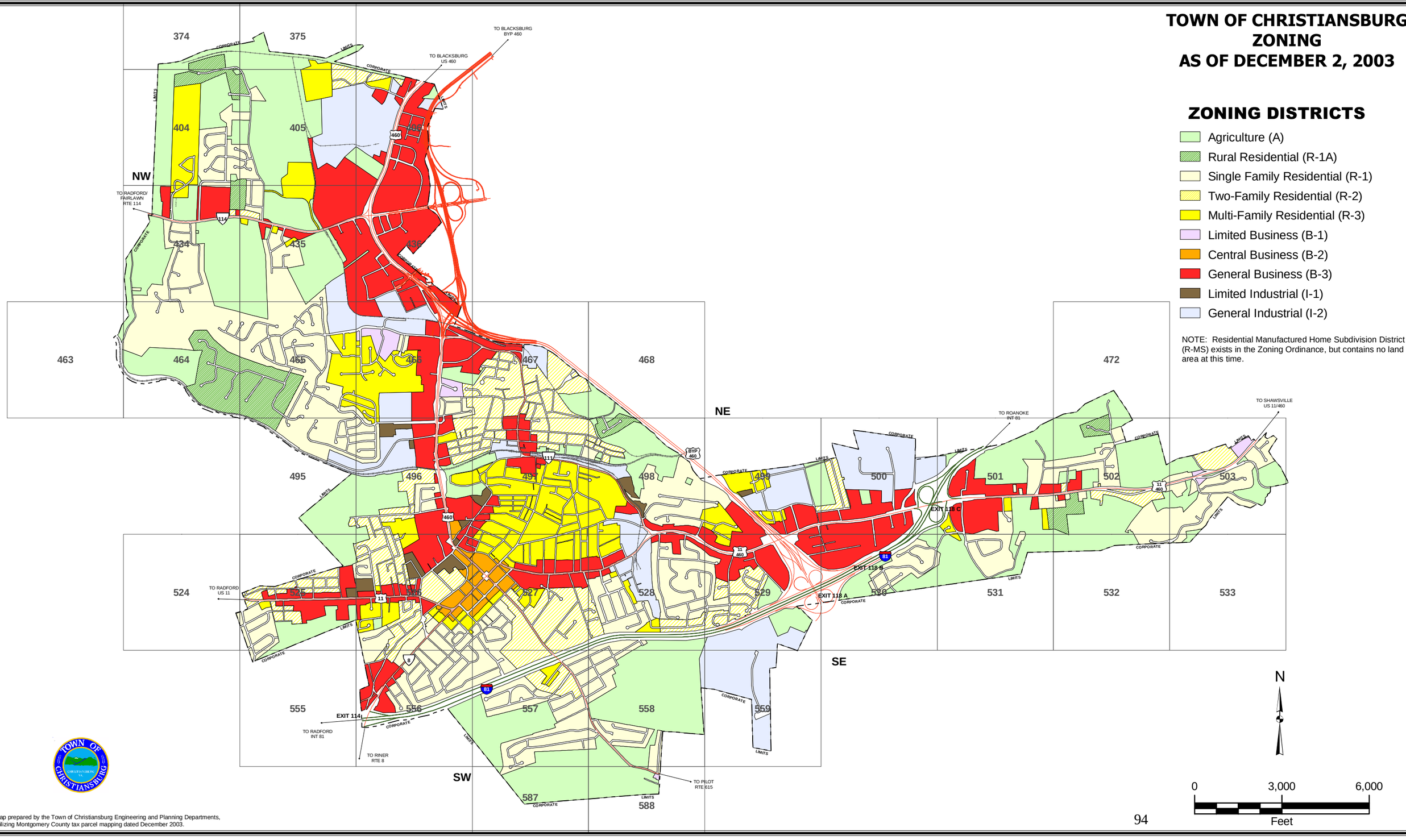
Note: The total area would exclude areas of street rights-of-way.
Source: Town of Christiansburg.

TOWN OF CHRISTIANSBURG
ZONING
AS OF DECEMBER 2, 2003

ZONING DISTRICTS

- Agriculture (A)
- Rural Residential (R-1A)
- Single Family Residential (R-1)
- Two-Family Residential (R-2)
- Multi-Family Residential (R-3)
- Limited Business (B-1)
- Central Business (B-2)
- General Business (B-3)
- Limited Industrial (I-1)
- General Industrial (I-2)

NOTE: Residential Manufactured Home Subdivision District (R-MS) exists in the Zoning Ordinance, but contains no land area at this time.



N

0 3,000 6,000
Feet

Map prepared by the Town of Christiansburg Engineering and Planning Departments, utilizing Montgomery County tax parcel mapping dated December 2003.

Residential

Residential uses account for the largest percentage of developed land. Currently 3,332.9 acres or 43.3% of the Town's area is zoned for Residential use. This figure indicates a fairly large increase over the pre-annexation level and residential construction has been steady through the past several years. The newest residential subdivisions are located on land that had previously been in agricultural and forestry use. The most recent residential development consists of new construction off S. Franklin Street and in the northwest annexation area north and south of Pepper's Ferry Road, NW (Virginia Route 114). With the provision of services following the 1988 annexation, residential development there surged in the following decade.

While the 1988 annexation did not involve any multi-family residential land, new projects have resulted in an increase in the amount of land dedicated to this use since 1984. The 1992 acreage of 70.1 was approximately 23% higher than the 1984 level of 50.1 acres. These numbers are small in comparison with the 2003 figures of 706.5 acres, or 9.2% of the Town's total land area. It should be kept in mind, however that the E. Main Street/Park Street area is a large contributor to the pre-annexation figures (which still has a large concentration of single-family homes) and the much of the post-annexation increase has been from Planned Housing Developments (which have been largely single-family residential).

Residential growth in Christiansburg will continue on both the north and south sides of Peppers' Ferry Road, NW (Virginia Route 114). Vacant land in this part of the Town is subject to the fewest environmental restrictions and public utilities are currently in place and capable of accommodating new development.

Commercial

Most commercial uses in Christiansburg are located along the major transportation routes such as Roanoke Street (Route 11/460), Franklin Street (Business Route 460), Radford Street (Route 11), and West Main Street. Prior to the 1988 annexation, 515 acres within the Town were devoted to commercial uses. The Town has experienced rapid growth in this sector, with commercial uses having more than doubled since then.

The largest concentration of retail/services in the Town is near the intersection of Pepper's Ferry Road and North Franklin Street. Much of this land was vacant prior to the opening of the New River Valley Mall in 1988 and the subsequent construction of the Market Place Shopping Center across North Franklin Street. Expansion of this commercial zone continued with recent construction of the Spradlin Farm Shopping Plaza. There continues to be a number of retail, service, and office establishments being constructed around Town. Montgomery County lands to the east and north of this area have been slated for additional commercial development per the County's Comprehensive Plan. This area has been termed the New River Valley's new "regional downtown."

Elsewhere within the Town limits, general commercial uses such as hotels, motels, restaurants and car dealerships are located near the I-81 interchange. Growth will continue eastward with completion of public sewer lines along Route 460/11, construction of which is currently in progress.

Continued expansion of commercial and light industrial uses can also be expected as a result of future road construction and heavier industrial development in Montgomery County. The Industrial Development Authority of Montgomery Count has constructed the 155-acre Falling Branch Corporate Park near the Falling Branch Elementary School and the County has designated this region as an Urban Expansion Area. Development of such a facility should solidify existing commercial/industrial uses in this area and present opportunities for new commercial/ professional services and industrial uses to locate within the Town's corporate limits. Transportation needs will be better served by the recent extension of the Route 460 Bypass to Blacksburg and the completion of another interchange at I-81.

Downtown Area

Christiansburg's downtown is bounded roughly by Roanoke and Radford Streets to the east and west, respectively, and Depot and First Streets to the north and south. Because Christiansburg is the County Seat, governmental offices dominate the downtown with the Town Municipal Building and the Montgomery County Courthouse serving as important focal points within the community. Professional offices, small commercial establishments, restaurants, and public/semi-public uses such as banks and churches are interspersed among the municipal uses.

Residential uses surround the central business district. Many of these homes date to the 1800's and were constructed in Colonial, Federal, Victorian, and post-Victorian architectural styles. In the mid-1980's, design guidelines were developed by the Christiansburg Old Town Foundation (a non-profit organization) and the Town of Christiansburg to visually unite the downtown region through the architecture of both new and renovated structures. Although this effort did not garner widespread collective support from the downtown merchants and property owners, many have initiated historic rehabilitation efforts and facade renovations in recent years on an individual basis.

Industrial

Prior to the 1988 annexation, 179 acres of land were devoted to industrial use. This figure had roughly doubled by 1993 to approximately 331 acres. The past decade saw slower increases in that figure, with approximately 533 acres in industrial use in 2003.

Industrial activity is primarily "light industry" such as small-scale warehousing, small-scale manufacturing, and machine works. Other industrial types of establishments include freight distribution and bulk warehousing. The occurrence of industrial activity is fairly scattered throughout the corporate limits. Topographical constraints have been a primary influence and the availability of large, flat tracts of land has dictated the location of such uses.

The largest of the Town's industrial areas are located in the Christiansburg Industrial Park, the Industrial Development Authority of Montgomery County's Falling Branch Corporate Park, and privately owned land near the northern corporate border (which is occupied primarily by Corning Glass). The Town and County industrial parks are comprised of largely light industrial uses and are located in the eastern part of Christiansburg, near the southern 460 Bypass interchange. The Christiansburg Industrial Park is immediately west of the I-81/Roanoke Street interchange.

The Via Industrial Park and Cambria Industrial Park are both north of downtown on the western side of North Franklin Street. Existing establishments include a public recycling center, light manufacturing and machine and electrical repair and supply facilities. Large tracts of undeveloped land are available for expansion.

East of the downtown area, a number of individual industrial uses are concentrated near the intersection of Roanoke and Depot Streets. Some of these establishments, such as the livestock market, can be considered more intrusive on adjacent residential areas than industrial uses elsewhere in Town. It is evident, though, that the ready availability of rail lines originally attracted these uses to this location. With close proximity to I-81, the demand for industrial development here may continue.

The topography and presence of floodplains as well as a lack of suitable undeveloped land, however, preclude industrial expansion. Existing vacant structures present the opportunities for new industry to locate here. With a large supply of vacant industrial land elsewhere, the Town should consider encouraging new industries to locate in other areas of the Town. Professional office/service/retail business could be encouraged to utilize vacant structures in the Depot Street/Roanoke Street region as a logical expansion of the downtown commercial district.

The Hubbell Drive/Electric Way/Bell Road industrial area is west of Christiansburg Industrial Park. Establishments include offices, warehousing, distributing, and manufacturing. Like the Via and Cambria Parks, there are opportunities for significant industrial expansion of large, suitable undeveloped parcels in both areas. Marshall Concrete Products, located on Yellow Sulfur Road at Block Lane (abutting the rail lines and the Town's northeastern boundary), is another heavy industrial use within the Town.

Public/Semi-Public Uses

Churches, schools, hospitals, landfills, and parks are examples of public/semi-public land uses. The amount of open land that is dedicated to parks and recreational uses has increased greatly the past decade. The Town has approximately 25 acres of public land in active parks, playgrounds, and playing fields, not including available school fields of approximately 17 acres. Approximately 17 acres between N. Franklin Street and Depot Street, NE has been scheduled by the Department of Parks and Recreation for construction of a new aquatic center. When the County's Park on County Drive (approximately 90 acres) and Coal Mining Heritage Park (approximately 29 acres) as well as the 5.5 acre Kiwanis Park are considered, there is in excess of 200 acres of land set aside for recreational uses within or immediately adjoining Christiansburg; and that figure does not include an additional 40 acres of land that had been the Wades Lane Landfill, which is awaiting final closure before future use is determined.

Many of the existing recreational facilities are located in and around the central business district. The Ridgewood Swim Club (private) and Town and County Park serve residents south of I-81. The Kiwanis fields between Reading Road and Arrowhead Trail (south off of Roanoke Street) serve the western part of town. The Mid-County Park, Montgomery County's largest recreational complex, is adjacent to the Town's northeastern border. The new Harkrader Sports Complex provides the western portion of the Town with recreational opportunities. As services are provided to the eastern part of Town and the demand for development increases, the Town should examine opportunities to reserve land for recreational development to serve these residents and encourage private recreational development with new construction that will occur.

Open Areas

One of the primary goals of the 1988 annexation of land by the Town was to obtain vacant land suitable for future growth. Prior to the 1988 annexation, there were 1,830 undeveloped acres, of which approximately 340 acres were part of Agricultural and Forestal Districts and, therefore, not readily available for development. The Town of Christiansburg currently has no Agricultural or Forestal District Conservation program, though Montgomery County maintains one.

As noted previously, there are approximately 3,234.9 acres of undeveloped land (41.9%) within the Town of Christiansburg. However, large-scale development is precluded from approximately 700 acres due to environmental restrictions, particularly floodplains and steep slopes.

Summary

Christiansburg's role as a regional growth center will continue to evolve and solidify in future years. The currently vacant lands in the northwest and southeast quadrants of town will take on increased importance for long-range growth as proposed road improvements are undertaken and adjacent commercial and industrial expansion occurs. Pressure for new residential growth will continue in the Peppers Ferry Road area and west of North Franklin Street. The North Franklin Street/Pepper's Ferry Road area will remain the primary center of commercial growth. The completion of the U.S. 460 Bypass in this area (see Chapter 7 “Transportation” of this plan) has created a logical zone for commercial expansion.

As businesses are attracted to the New River Valley Area through the efforts of area economic development organizations and Virginia Tech's Corporate Research Center programs, vacant lands in the Town's industrial parks will be developed. Various road improvements will also further new and infill commercial and professional services development, especially in the Falling Branch area as Montgomery County's commitment to development of an industrial park here is realized. Concentrating high-density growth within the Town limits will provide significant savings on utility extensions for potential development. The 1988 annexation agreement restricted the Town from future annexation until 2003 and restricts incorporation as an independent city until 2013. While the year 2013 is not within the Town's short-term planning range, long range planning should not lose sight of the potential opportunities for the future as development pressures in surrounding areas escalate.