

North Carolina Department of Cultural Resources

State Historic Preservation Office Peter B. Sandbeck, Administrator

Michael F. Easley, Governor Lisbeth C. Evans, Secretary Jeffrey J. Crow, Deputy Secretary

Office of Archives and History Division of Historical Resources David Brook, Director

September 10, 2007

Craig Young, PE Baker Engineering NY, Inc 8000 Regency Parkway Suite 200 Cary, NC 27518

Phase II Architectural Survey for the S-Line for SE High Speed Rail Corridor, Multi County, RE: FR 06-1954 ER 03-1507

Dear Mr. Young:

Thank you for your August 13, 2007, letter transmitting the above referenced report by Mattson, Alexander & Associates. We have reviewed the report and provide the following comments.

The report is an excellent summary of the 19th century development of railroads in the region, especially the Raleigh & Gaston Railroad. For purposes of Section 106 of the National Historic Preservation, we concur that the nearly sixty-mile long Raleigh & Gaston rail corridor between Raleigh and Norlina, North Carolina is eligible for listing in the National Register of Historic Places under Criterion A for transportation. As one of the state's first two railroads and as a core element in what grew to be one of the major rail lines in the southeastern United States, the historical importance of the Raleigh & Gaston railroad is undisputed and still reflected in its corridor between Raleigh and Norlina.

The intact railroad alignment and grade and the remaining rail-related features between Raleigh and Norlina are considered contributing elements to the significance and integrity of the rail corridor. The boundaries as described on pages 22-23 and outlined in Figure 9 appear appropriate to the resource.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If possible, we would appreciate receiving an additional copy of the Phase II report in digital format on a CD for our files.

If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-733-4763. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Perer Sandbeck

David Foster, NC Rail Division Mattson, Alexander & Associates

SUPPLEMENT

PHASE II ARCHITECTURAL RESOURCES SURVEY REPORT

SOUTHEAST HIGH SPEED RAIL CORRIDOR NORTH CAROLINA

STATE PROJECT NUMBER 9.9083002 (P-3819)

Prepared for:

Baker Engineering, Inc. 8000 Regency Parkway Suite 200 Cary, North Carolina 27511

Prepared by:

Mattson, Alexander and Associates, Inc. 2228 Winter Street Charlotte, North Carolina 28205 (704) 358-9841 (704) 376-0985

3 August 2007

MATTSON, ALEXANDER AND ASSOCIATES, INC.	3 August 2007
Frances P. Alexander, M.A.	Date
Richard L. Mattson, Ph.D.	Date
N.C.D.O.T.	Date

PROJECT DESCRIPTION

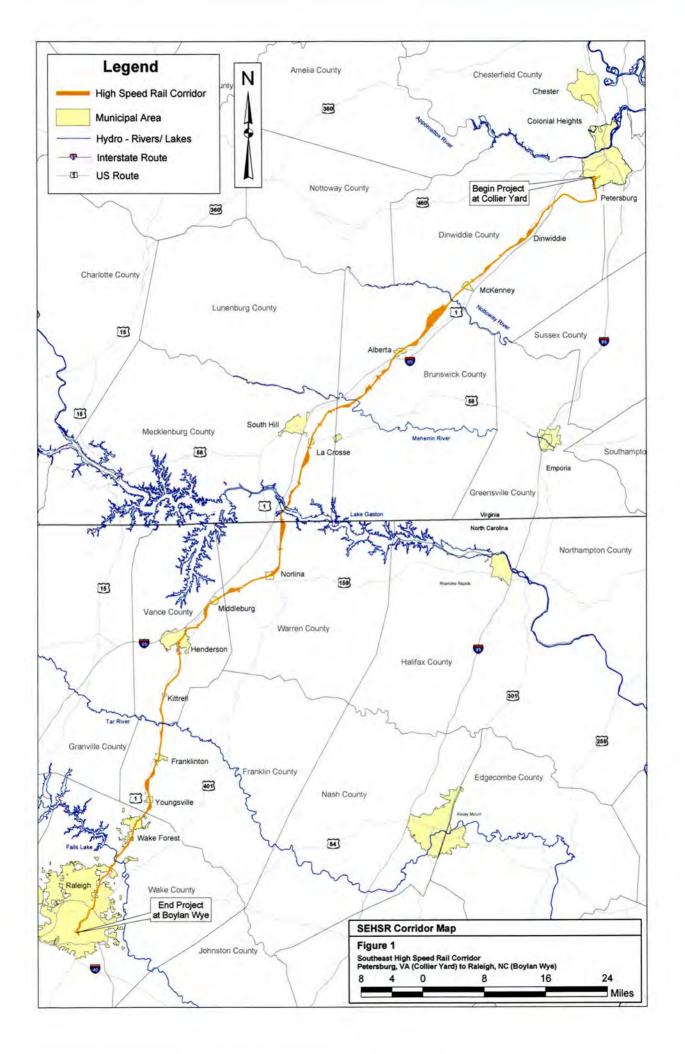
The current Phase II (intensive level) investigation is a supplement to the North Carolina Department of Transportation, Rail Division project entitled, Southeast High Speed Rail (S.E.H.S.R.) Corridor from Petersburg, Virginia (Collier Yard), to Raleigh, North Carolina (Boylan Wye). The State Project Number is 9.9083002, and the T.I.P. Number is P-3819. The 138-mile segment between Petersburg and Raleigh is part of a larger plan to extend high speed passenger rail service from the Northeast Corridor (Boston to Washington, D.C.) southward from Washington, D. C. to Charlotte, North Carolina. Future high speed rail connections to South Carolina, Georgia, Alabama, and Florida are planned. The project location is depicted in Figure 1.

The purpose of this Phase II architectural survey is to investigate the railroad corridor itself as an historic resource. The study focuses on portions of two historically separate rail lines that form segments of the proposed high speed rail corridor. One of these rail lines is the former Raleigh and Gaston Railroad (1840) which extended a total of eighty-eight (88) miles to link Raleigh, North Carolina, to the Town of Gaston near the falls of the Roanoke River. The high speed rail corridor encompasses a fifty-five (55) mile stretch of the Raleigh and Gaston, between Raleigh and Norlina, North Carolina, and it is this section of the former line that is being evaluated for National Register eligibility. The remaining thirty-three (33) mile section of the Raleigh and Gaston lies outside the area of potential effects (A.P.E.) for this project and is not part of this investigation. The second line under evaluation is a small segment of the historic Petersburg Railroad (1832), which was built as a fifty-nine (59) mile route between Petersburg, Virginia, and Blakely, North Carolina, on the north bank of the Roanoke River across from the rail center of Weldon, North Carolina. Only two miles of the former Petersburg Railroad, near its northern terminus in Petersburg, lie within the proposed project corridor, and this section is being evaluated for eligibility.

The northern segment of the Southeast High Speed Rail Corridor between Norlina, North Carolina, and the Petersburg Railroad was determined ineligible for the National Register during the Phase I investigation and is therefore not evaluated in this Phase II supplemental report (Virginia Department of Historic Resources Letter, 16 October 2006). The seventy mile section that has been found ineligible was opened in 1900 as part of the Richmond, Petersburg, and Carolina Railroad (R.P. & C.) and was consolidated into the Seaboard Air Line (S.A.L.) system that same year. Service on the S.A.L. between Raleigh and Petersburg ended in 1986, and the tracks from Norlina north to Petersburg were removed by 1987.

Both the Petersburg and the Raleigh and Gaston railroads underwent several acquisitions. The Petersburg Railroad was merged into the Richmond and Petersburg Railroad in 1898 to create a new company, the Atlantic Coast Line Railroad (A.C.L.) of Virginia. The Raleigh and Gaston was consolidated into the Seaboard Air Line system in 1900. In 1967, the Atlantic Coast Line and the Seaboard Air Line, longtime rivals, joined to create the Seaboard Coast Line Railroad (S.C.L.). Both systems are now part of the vast CSX transportation system, headquartered in Jacksonville, Florida.

Phase I and Phase II architectural resource surveys have already been conducted for all properties fifty years of age or greater located within the area of potential effects for the proposed Southeast High Speed Rail Corridor between Raleigh, North Carolina, and Petersburg, Virginia. Mattson, Alexander and Associates, Inc. (M.A.A.) of Charlotte, North Carolina, conducted the entire Phase



I study and the Phase II investigation for the project area between Raleigh and the North Carolina/Virginia line (just north of Norlina). Louis Berger Group, Inc. completed the Phase II architectural investigations for the segment in the Virginia (from the Virginia state line northward to Petersburg). The results of these investigations are thus found in two separate reports (Mattson, Alexander and Associates, Inc. 2005; Louis Berger Group, Inc. 2005).

METHODOLOGY

This Phase II (intensive level) architectural survey was undertaken pursuant to the Department of Transportation Act of 1966, the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation's, *Protection of Historic Properties* (36 C.F.R. 800). Specifically, the Phase II investigation followed the requirements set forth in the guidelines for architectural surveys established by the North Carolina Department of Transportation (October 2003). The methodology consisted of historical research into the development of the Raleigh and Gaston and Petersburg railroads and field work along these two routes within the High Speed Rail Corridor area of potential effects.

During the research phase, the records of the North Carolina State Archives in Raleigh, the Wilson Library at the University of North Carolina, Chapel Hill, and the Virginia State Library and Archives were searched for historic maps, histories, and annual reports of the railroad companies. A number of individuals also assisted the principal investigators in their research. Michael Southern, North Carolina Division of Archives and History, Marc Hamel, North Carolina Department of Transportation, Caleb Smith, North Carolina Department of Transportation, Larry Goolsby, Atlantic Coast Line and Seaboard Air Line Railroads Historical Society, and Allen Paul and James Harris, P.E., North Carolina Department of Transportation Rail Division all provided valuable assistance on the subject of North Carolina and Virginia railroads. Mr. Harris, Engineering Manager at the Rail Division, accompanied the principal investigators on a one-day field trip of the project area between Raleigh and Norlina. In Virginia, Christopher Calkins, Chief of Interpretation, Petersburg National Battlefield, National Park Service, provided information on the Petersburg Railroad within the Weldon Railroad Battlefield. In addition, a number of published railroad histories proved especially useful: Richard E. Prince's Atlantic Coast Line Railroad: Steam Locomotives, Ships, and History (1966) and Seaboard Air Line Railway (2000); William E. Griffin Jr.'s All Lines North of Raleigh: A History of the Seaboard Air Line Railway's Virginia Division (1991), and Seaboard: The Route of Courteous Service (1999); and Robert Wayne Johnson's Through the Heart of the South. The Seaboard Air Line Railroad Story (1995).

Field work was conducted between October 2006 and March 2007, and 100 percent of the project area was examined. During the field investigation, the overall route was examined for surviving historic resources directly associated with the construction and operation of the rail lines such as stations and platforms, grades (including ballast), markers (whistle posts, mile posts, yard limit signs), rails and ties, water tanks, mail cranes, bridges/culverts, and railroad-owned stock pens and ramps. Resources associated with the original two railroads, as well as the consolidated Seaboard Air Line and Seaboard Coast Line railroads, were examined for their potential historical significance.

HISTORICAL BACKGROUND ESSAY

Introduction

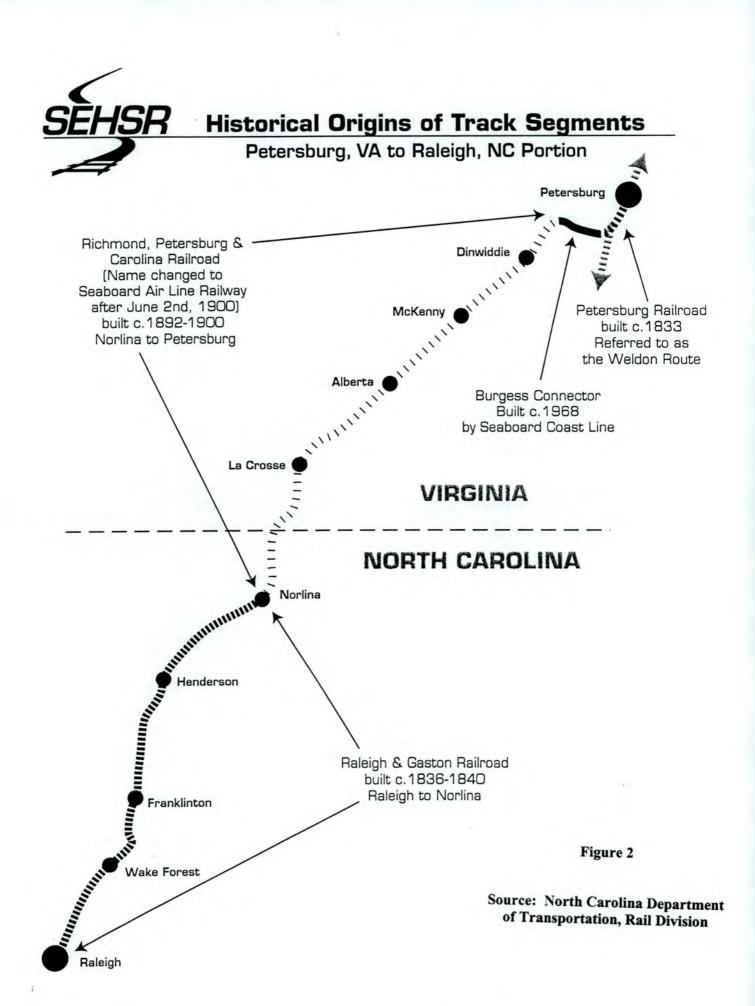
The proposed Southeast High Speed Railroad Corridor between Petersburg, Virginia, and Raleigh, North Carolina, follows a route that encompasses sections of three separate railroads. Most of the route incorporates segments of two historic lines: the 1840 Raleigh and Gaston Railroad and the 1900 Richmond, Petersburg and Carolina Railroad (Figure 2). In 1900, both of these railroads became part of Seaboard Air Line (S.A.L.) system that extended from Virginia southward through North Carolina, South Carolina, Georgia, and Florida. A much smaller two-mile stretch of the project corridor includes a section of the 1832 Petersburg Railroad which linked Petersburg to Weldon, North Carolina on the Roanoke River. The Atlantic Coast Line (A.C.L.) absorbed the Petersburg line in 1898. In 1967, the Seaboard Air Line and the Atlantic Coast Line combined to form the Seaboard Coast Line Railroad. The Seaboard Coast Line owned assets exceeding one billion dollars and controlled over 9,000 miles of track throughout the Southeast. In 1986, the S.C.L. was integrated into the Chessie System Railroads to create CSX Transportation.

Antebellum Period

By the 1830s, the new steam-powered railroads were capturing the national imagination, and numerous routes throughout the United States were being planned. This first wave of national railroad construction included the first lines built in North Carolina, the Wilmington and Weldon Railroad and the Raleigh and Gaston Railroad, both of which were chartered in the mid-1830s and completed in 1840. Several lines in Virginia were also founded during this initial period of construction, including the Petersburg Railroad and the Portsmouth and Roanoke, each of which began in 1832 (Prince 2000: 5; Bishir and Southern 1996: 15).

Nationwide rail construction proceeded by fits and starts initially, but by the mid-1840s, the country was in the midst of a railroad construction boom. Technological improvements in grading, tunneling, and bridge construction spurred rail construction, and steam locomotives, passenger coaches, and various types of freight cars became standardized, achieving the basic forms they would retain until the twentieth century. Trains not only quickly took over passenger traffic as well as light-weight and high value freight traffic from the canals and turnpikes, but were also competing as carriers of textiles, cotton, coal, and other bulky commodities. In the agricultural South and West, the railroads often provided the first reliable transportation for cotton and grain and took many interior areas of the regions from subsistence to cash-crop economies. Throughout the United States, over 6,000 miles of track were built in the 1840s, bringing total mileage to 9,000 by 1850 (Chandler 1977: 82-83).

This boom in construction continued in the 1850s when the national rail network tripled in size with the addition of 21,000 miles of track. On the eve of the Civil War, the overland transportation network east of the Mississippi River had achieved its essential form with the American rail system roughly divided among the three regions of the country. The Northeast had roughly 10,000 track miles in New England and the Mid-Atlantic states, the Midwest had an 11,000-mile network, and 9,000 railroad miles were found in the ten states of the South. At the same time, the first trunk lines (the Erie, the Baltimore and Ohio, the Pennsylvania, and the New York Central) were all completed between the eastern seaboard and Chicago. In the South, over 7,000 miles of track were added in the 1850s. By the Civil War, Virginia, the largest and most populous Southern state, had the most extensive rail system among the Southern states with 1,771 miles of track (and sixteen railroads). North Carolina increased its track miles by 258 percent,



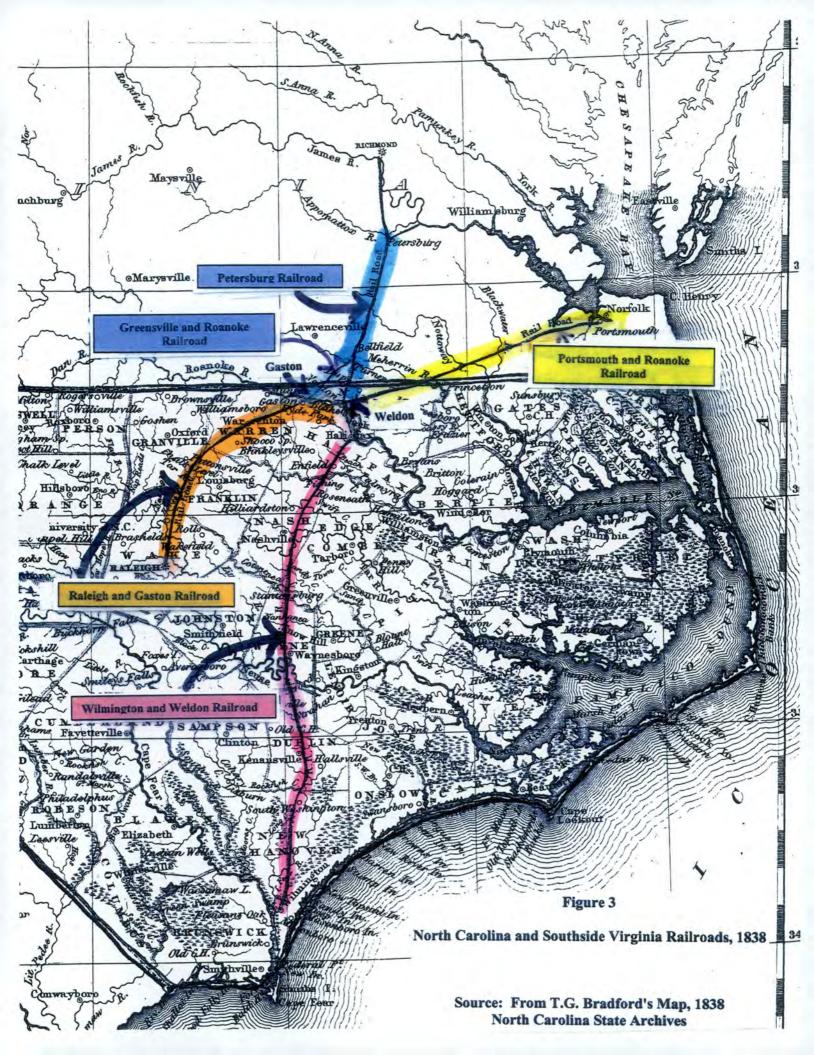
bringing the statewide system from 248 miles in 1850 to 641 by 1860, (Chandler 1977: 82-83; Stover 1961: 7-11; Stover 1955: 4-5; Meinig 1993: 323-325; Klein 1968: 294; Prince 2000: 5).

In Southside Virginia, railroads fostered competition between the river ports of Richmond and Petersburg and the Tidewater seaports of Portsmouth and Norfolk for the lucrative commodities of the Roanoke River Valley (Figure 3). Before the rail era, backcountry farmers of Virginia and North Carolina sent their products down the Dan and Staunton rivers to the Roanoke River which emptied into the Albemarle Sound near Edenton. From the sound, ships continued up the Pasquotank River and through the Dismal Swamp into Norfolk or Portsmouth. The rapids at the falls of the Roanoke were a particularly treacherous point along the route, and Weldon, North Carolina, located at the fall line, became a busy transfer point for shipments traveling downriver. Business leaders quickly realized that railroads with connections to Weldon could easily siphon off this profitable traffic from the circuitous, expensive, and time-consuming river route, and several competing rail lines appeared in the 1830s to capture this traffic. Those with commercial interests in the river towns backed rail service into Petersburg or Richmond while the leaders of Norfolk and Portsmouth erected railroads that would keep the commodities of the Virginia interior flowing to their docks (Prince 2000: 5-10; Trelease 1991: 13).

The Petersburg Railroad was completed in 1833 to divert Roanoke River traffic away from Portsmouth and Norfolk to the riverside wharves of Petersburg and Richmond. In typical fashion, the tracks of the Petersburg Railroad were originally laid with strap iron on wooden stringers. Such construction was expensive to maintain, and by the 1850s fifty-pound iron U-rails and soon T-rails replaced the original track. The railroad prospered quickly, and in 1833, a civil engineer promoting the new Petersburg line boasted that "the value of property, within five miles of the road, has increased already more than the road has cost" (quoted in Ward 1986: 85; Prince 1995: 6).

Linking Petersburg on the navigable Appomattox River with Weldon, the Petersburg line competed with the rival Portsmouth and Roanoke Railroad (1837) for the lucrative trade of the Virginia and North Carolina backcountry. Adding to the competition, the Petersburg Railroad also built a branch line, the twenty-one-mile Greensville and Roanoke Railroad from present-day Emporia, Virginia, south to Gaston, several miles west of Weldon. In 1840, the Greensville and Roanoke connected with the newly opened Raleigh and Gaston Railroad. The Greensville and Roanoke gave the Raleigh and Gaston an alternative to the Portsmouth and Roanoke for north-bound traffic. Competition quickly sent the Portsmouth and Roanoke Railroad into bankruptcy in 1843, but in 1846, the Town of Portsmouth purchased the line and renamed it the Seaboard and Roanoke. Three years later, a group of Philadelphia investors, who also held controlling stock in the Richmond, Fredericksburg, and Potomac as well as the Petersburg railroads, acquired control of the Seaboard and Roanoke Railroad. Thus, by 1850, two of Virginia's rival north-south lines had been brought under common control (Prince 1995: 6; Bishir and Southern 1996: 15; Griffin, Seaboard 1999: 5-6).

South of the Petersburg Railroad in North Carolina, both the Raleigh and Gaston Railroad and the Wilmington and Weldon were chartered in the mid-1830s and completed in 1840. These two lines were built to address the geographical isolation that had long plagued North Carolina's economic and cultural progress. Each railroad benefited a different region. The Wilmington and Weldon served the plantation economies of the Coastal Plain by providing a link between Wilmington, the only major seaport in the state, and Weldon on the Roanoke. Extending for 161 miles, the Wilmington and Weldon was, upon completion, the longest railroad in the world.



The Raleigh and Gaston Railroad cut through the northeastern Piedmont Plateau to join the state capital with Gaston on the Roanoke River, just west of Weldon. In 1853, the line was extended twelve miles to the east from South Gaston to the bridge at Weldon. (The route of the Raleigh and Gaston through South Gaston was abandoned in 1898 when two miles of track were relocated away from the riverbank.) At Weldon, tracks had been laid to connect the two rival Virginia railroads, the Seaboard and Roanoke Railroad and the Petersburg Railroad, with the Wilmington and Weldon. By extending its route to Weldon, the Raleigh and Gaston gained a clear 176-mile route from Raleigh to the ocean ports of Portsmouth and Norfolk. From these seaports, products from the North Carolina Piedmont and Coastal Plain could be shipped directly to Baltimore, New York, and far-flung European markets. Furthermore, by linking the four railroads at the Roanoke River, the cities of Raleigh, Wilmington, Petersburg, and Portsmouth all became termini along the first interstate railroad on the Southern seaboard (Prince 2000: 10-12; Trelease 1991: 13-14) (Figure 4).

As the first railroads in the state, the Wilmington and Weldon and the Raleigh and Gaston thus set in motion a new era of economic and cultural development in North Carolina, ending the economic torpor that had long plagued the state. The Raleigh and Gaston had particular import because the line was the first reliable and rapid transportation between the North Carolina interior and major seaports. Especially in the state's northeastern Piedmont, rail travel permanently altered patterns of growth and sparked the production of tobacco and cotton as cash crops. The railroads dramatically reduced the cost of shipping crops to market. As a writer for the *Raleigh Register* noted in 1849, "...a hogshead of tobacco had cost twenty dollars to ship 100 miles whereas the cost of shipping over the Raleigh and Gaston was just six dollars". The writer further noted that the cost of transporting cotton, lime, salt, and other commodities by rail had been cut in half (Trelease 1991: 19).

The line between Raleigh and the Roanoke gave rise to a string of towns and depot villages. Farmers and town dwellers alike built houses facing the railroad while railroad towns vied for new factories. In Franklin County, Franklinton became one of the state's first railroad towns. In Vance County, Middleburg (so named because of its location half way between Gaston and Raleigh), Kittrell, and Henderson rose up along the line. Henderson, in particular, developed into a thriving shipping point and processing center for cotton, tobacco, and lumber. By 1860, tobacco factories and warehouses lined the railroad tracks, and it was reported that more tobacco was transported from Henderson than from any other town in North Carolina. In Warren County, the Raleigh and Gaston bypassed Warrenton where much of the elite opposed the disruptions that a railroad would bring to their already wealthy community. Instead, the line created or boosted villages to the north including Manson, Ridgeway, Macon, Vaughn, Littleton, and Warren Plains (three miles west of Warrenton). Near Raleigh, the railroad built depots at Millbrook, Huntsville (later Neuse), and Forestville. The village of Wake Forest, founded in 1834 around Wake Forest College, would eventually receive a station in 1874, boosting its growth in the late nineteenth century (Willard 1982: 42, 47, 55; Bishir and Southern 2003: 144-145; Griffin 1991; McFarland 2001: 232-233; Bumbalough 1998: 7-8)

Construction on the Raleigh and Gaston began near the Roanoke River in 1836 and reached the state capital eighty-three miles away in 1840. In 1837, a new 1,000-foot-long bridge carried the track over the Roanoke River to Gaston, sited on the north river bank several miles upstream from present-day Gaston. As part of the construction, four major bridges were built between Henderson and Raleigh: the 846-foot long Tar River Bridge; Cedar Creek Bridge (528 feet), the Neuse River Bridge (325 feet), and Crabtree Creek Bridge (313 feet). The 1840 *Annual Report* of

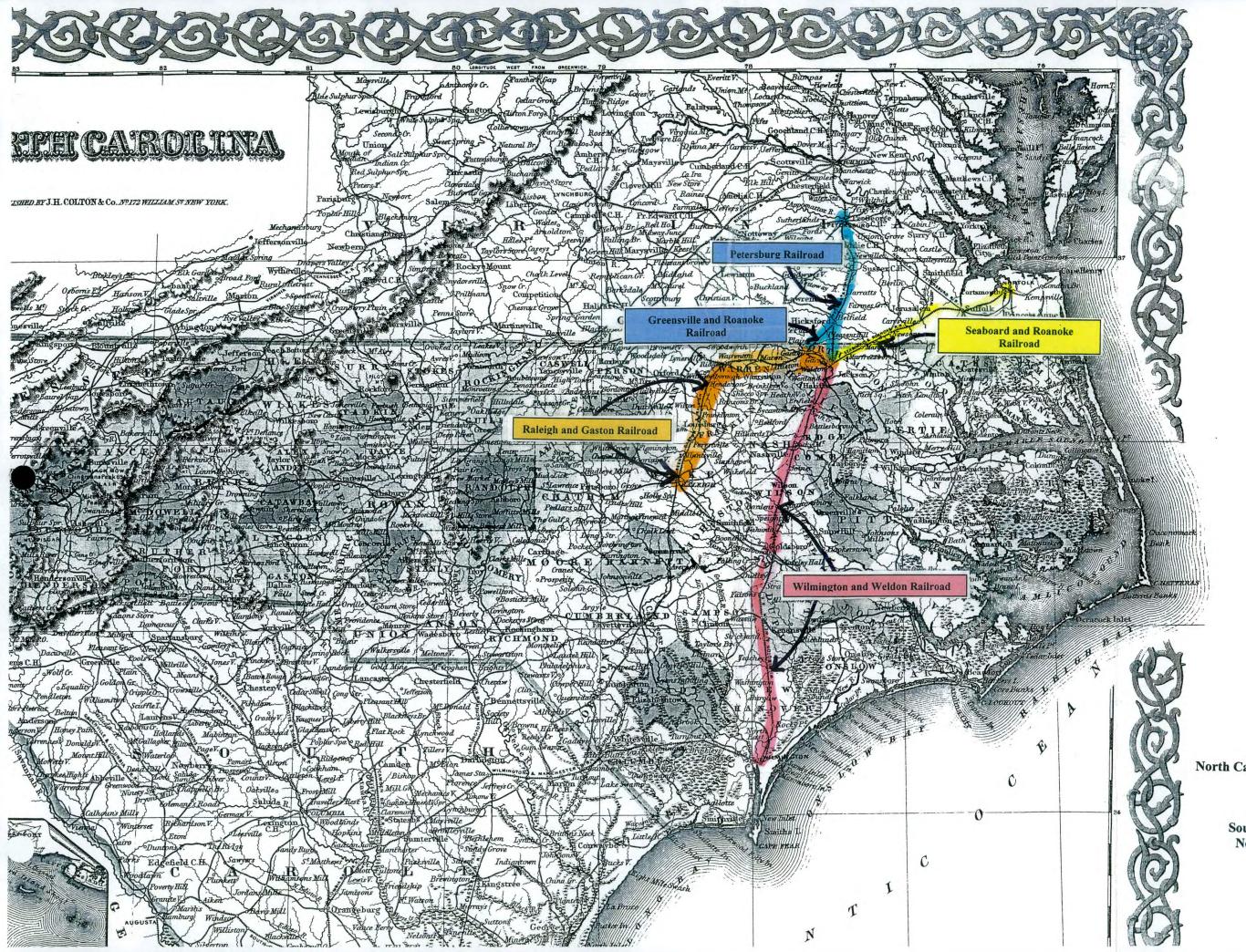


Figure 4

North Carolina and Virginia Railroads, 1856

Source: J.H. Colton's Map, 1856 North Carolina State Archives the railroad company noted that there were eight depots completed along the line excluding the large station at Raleigh where the railroad's repair shops were also located. The railroad's gauge of four feet, eight-and-one-half inches became the standard for all lines in North Carolina and matched the gauge of the Wilmington and Weldon and the connecting Petersburg Railroad. (This track size eventually became the American standard for all railroads.) Completed in 1840, the original line had been lightly constructed with strap-iron rails laid on a relatively shallow layer of ballast. Although other details about the original construction are not known, the typical antebellum railroad in the South used ballast of available materials (e.g., sand, gravel, crushed stone, wood), culverts roughly every five miles, and water tanks for the steam locomotives roughly every fifteen miles, depending on the terrain (Prince 2000: 10-11; Griffin, Seaboard 1999: 6-7; Harris).

From the beginning, the Raleigh and Gaston Railroad experienced financial woes. Operations suffered from the cost of construction (which had not been of particularly high quality), the absence of any large commercial center to generate freight traffic, and the lack of connections south of Raleigh. By 1845, the railroad was bankrupt, and in 1851, the State of North Carolina purchased the line. Under state control, improvements in management and ambitious repair campaigns made the Raleigh and Gaston line one of the best run railroads in the South. The railroad was returned to private ownership between 1851 and 1852 although the state retained majority stock ownership. In 1852, an improvement drive included the replacement of the original strap-iron rails with iron T-rails. These rails were later replaced in the 1870s with even heavier iron rails (Gilbert 1982: 20-21; Prince 2000: 10-11; Trelease 1991: 13).

In addition to improvements to the line, the operations of the Raleigh and Gaston were also enhanced by the opening of the east-west North Carolina Railroad in the 1850s which gave the road direct ties to Goldsboro, Greensboro, Salisbury, and Charlotte. In 1854, the Raleigh and Gaston terminus in Raleigh was extended one mile to connect with the North Carolina Railroad. By the Civil War, both the Raleigh and Gaston and the Petersburg roads advertised themselves to railroad travelers as, "the best, most expeditious and most comfortable route from Charlotte to the Northern Cities" (Trelease 1991: 250).

Civil War

The American Civil War was the first war in which railroads played a key role. In both the North and South, trains carried tremendous wartime loads, and each side targeted the railroads of the enemy. Because the theaters of battle were primarily in Dixie, Southern rail lines suffered by far the greater damage. The Petersburg Railroad (also variously known as the Weldon Railroad or the Petersburg and Weldon) was vital in transporting troops and supplies, and its well-guarded tracks and bridges remained free from attack until 1864. During the eleven-month Siege of Petersburg in 1864 and 1865, the Petersburg line carried Confederate troops northward from areas up and down the coasts of the Carolinas to defend Petersburg and nearby Richmond. Because of numerous Union attacks on the line, Stony Creek Station effectively became the northern terminus of the railroad by the summer of 1864. With the Battle of Weldon Railroad (Globe Tavern) (August 18-21, 1864), Union troops succeeded in permanently cutting Petersburg's rail connections with the reinforcements from the Carolinas. Confederates were compelled to disembark cars at Stony Creek and proceed thirty miles by wagon up Boydton Plank Road to Petersburg. A final blow to the line occurred in December 1864 when Federal raids destroyed the Nottoway River bridge and some nineteen miles of track southward through Jarretts to Belfield on the Meherrin River. Consequently, the railroad ceased operating north of the river until the line was reconstructed after the war (Trelease 1991: 6-7; Stover 1999: 28-31; Trudeau 1991: 160-174).

With the fall of Richmond in 1865, Confederate troops burned the Raleigh and Gaston Railroad bridges at Weldon and Gaston and at Cedar Creek, south of Franklinton. The Union army rebuilt the Cedar Creek Bridge, and in 1867 a new span was completed at Weldon. However, the long bridge over the Roanoke at Gaston was never reconstructed (Prince 2000: 11-12; Griffin, Seaboard 1999: 7).

Reconstruction Era to 1900

At the end of the Civil War, railroad companies in North Carolina and throughout the South began rebuilding lines that had been damaged, destroyed, or neglected during the conflict (**Figure 5**). By the early 1870s, construction of new rail lines resumed, and by 1875, the South encompassed 13,322 miles of the total 74,614 miles of railroad in the U.S., led regionally by Georgia with its 2,264 miles of rail and followed by Alabama (1,732 miles), Virginia, (1,638 miles), Tennessee (1,630 miles), North Carolina (1,356 miles), South Carolina (1,335 miles), Kentucky (1,326 miles), Mississippi (1,018 miles), Louisiana (539 miles), and Florida (416 miles) (Stover 1955: 60-61).

Rail construction nationwide reached its zenith in the 1880s when 75,000 miles of track were laid across the country. Railroad mileage in the South doubled during the decade. By 1890, the South boasted 30,644 miles of rail, and nine of every ten Southerners lived in a county served by trains. Georgia continued to lead in the construction of new lines and to have the most extensive system in the region with a total mileage of 4,593 in 1890. In North Carolina, track totals jumped from 1,500 in 1880 to 3,656 miles in 1890. In Virginia, however, few new lines were added during the decade. The commonwealth, which had had an adequate network before the Civil War and no general aid program for railroads after the conflict, had little impetus or capital for new construction (Stover 1955: 190-191; Klein 1968: 306-307; Ayers 1992: 9; Chandler 1977: 171).

With the regional network largely completed by 1890, Southern railroad companies began to consolidate. Greater trade with northern cities and higher levels of long-distance through traffic demanded greater efficiency and cooperation. Furthermore, periods of explosive growth in rail construction were routinely followed by times of financial collapse or retrenchment. Railroad companies that survived what were often grandiose and highly leveraged building campaigns were not uncommonly forced into mergers to bolster capitalization and to create more profitable lines (Ayers 1992: 12-13; Vance 1995: 109-110; Stover 1955: 190-191).

North Carolina railroads also began merging or were acquired by larger companies as a means of gaining lucrative connections. In 1871, the Raleigh and Gaston gained control of the Raleigh and Augusta Air-Line Railroad (originally the Chatham Railroad) with the ultimate goal of connecting Raleigh with the strategic railhead of Augusta, Georgia, situated on the Savannah River. At the time of the purchase, the Raleigh and Augusta had been in the process of constructing a ninety-eight mile rail line between Raleigh and Hamlet, North Carolina, and in 1877, this segment was completed. The new line to Hamlet also gave the Raleigh and Gaston an important internal connection to the Carolina Central Railway, a 267-mile route that ran from Wilmington, North Carolina, via Hamlet, to Charlotte and Rutherfordton, North Carolina (Johnson 1995: 19).

Facing financial difficulties in the 1870s, both the Raleigh and Gaston and the Raleigh and Augusta Air-Line were taken over by the more financially sound Seaboard and Roanoke. In addition to its agreements with the Carolina Central, the Seaboard and Roanoke also entered into arrangements with the Atlanta and Charlotte Air Line to connect with the Carolina Central at



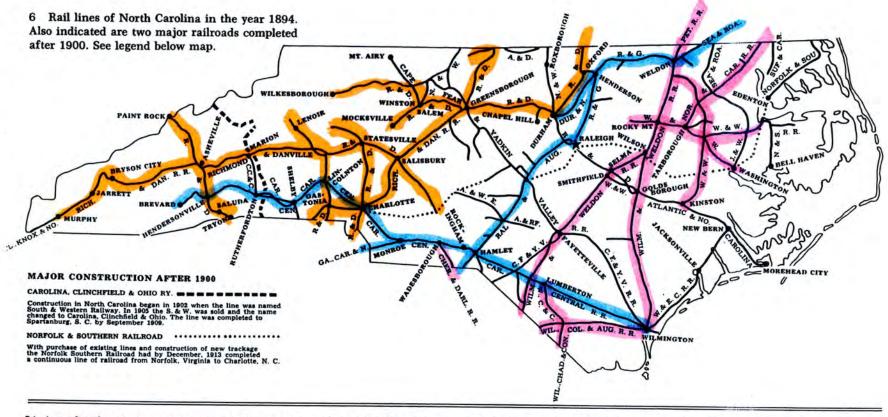
Charlotte. Thus with its steamship component, the Seaboard and Roanoke emerged by 1878 with a rail-water route between Atlanta and New York (Prince 2000: 21-22).

With unprecedented outlays of capital, the flurry of railroad construction and consolidation, as well as the sketchy debt financing that underwrote much of it, made rail companies highly vulnerable to financial failure. Indeed, the Depression of 1893 quickly resulted in the most massive bankruptcies in American history. Between 1894 and 1898, foreclosure sales sent over 40,000 of the total 75,000 U.S. track miles (a total capitalization of over \$2.5 billion) into receivership. Of the 128 major rail companies that went into receivership, thirty-three, or more than a quarter, with a total of 13,000 miles, were Southern railroads. Only the most powerful investment bankers, among whom J.P. Morgan was foremost, had the resources to undertake a massive restructuring of the national rail system. The Interstate Commerce Commission reported that between July 1899 and December 1900 more than 25,000 miles of track (one-eighth of the total track miles in the U.S.) had been brought under control of other lines. In addition, a few new, but comparatively small, lines appeared during this period including the Seaboard Air Line, but the vast majority of mileage was added to established, core lines. By the end of the rail merger movement around 1900, thirty-two railroads operated close to eighty percent of the nation's rail mileage. Subsequently, construction was largely confined to filling in existing systems or providing connections to the seaboards (Chandler 1977: 165, 172, 175; Stover 1955: 257).

Despite the effects of the Depression of 1893, 5,455 miles of track were laid throughout the South during the 1890s, giving the region a 34,718 mile system of rail transport by 1899. Virginia, with its 3,721 mile system, and North Carolina, with 3,656 miles of rail line, ranked third and fourth, respectively, in size among the Southern states. The national consolidation movement of the 1890s left the Southern rail system in the hands of a few companies whose antecedents could be found in roughly ten antebellum railroads. Nearly all these lines followed either the northeast-southwest or northwest-southeast alignment that came to define through traffic in the region. The earliest of these antebellum companies was the Wilmington and Weldon, which had been one of the most profitable of the region's railroads before 1893 (Klein 1867 1967: 367; Klein 1968: 291-292; Stover 1955: 256-257).

In North Carolina, the consolidation movement resulted in three predominant lines, the Southern Railway, the Atlantic Coast Line, and the Seaboard Air Line (Figure 6). Dominating the Piedmont region was the powerful Southern Railway, formed by in 1894 by Wall Street financier, J.P. Morgan. Incorporating the Atlanta and Charlotte Air Line and the Richmond and Danville, the Southern became a key north-south route through the North Carolina and Virginia Piedmont between New Orleans and New York. The Atlantic Coast Line acquired more than 100 railroads that stretched along the Atlantic coast from Virginia to Florida, and westward into Georgia and Alabama. While the 1833 Petersburg Railroad was the oldest railroad in the system, the 1840 Wilmington and Weldon Railroad was the most influential. The Wilmington and Weldon had continued its construction program into the 1890s, creating a dense web of rail service throughout eastern North Carolina. The Wilmington and Weldon became the holding company for the Atlantic Coast Line, which established its new headquarters and vast railroad shop yards in Wilmington (Chandler 1977: 165; Vance 1995: 109-110; Bishir and Southern 2003: 46-48).

As with the Southern and the Atlantic Coast Line, the Seaboard Air Line Railway was created through a series of mergers and acquisitions. The Seaboard Air Line inherited its name from two predecessor companies, the Seaboard and Roanoke Railroad and the Raleigh and Augusta Air-Line. Under the initial leadership of Richmond banker and entrepreneur, John Skelton Williams,



Listing of railroads operating in North Carolina as published by The State Board of Agriculture in 1896. The railroads listed under each of the three major systems represented lines that were either owned or leased by the system or else had a cooperative arrangement with the system.

ATLANTIC COAST LINE SYSTEM

ALBEMARLE & RALEIGH CHERAW & DARLINGTON PETERSBURG WILMINGTON, COLUMBIA & AUGUSTA WILMINGTON, CHADBURN & CONWAY WILMINGTON & WELDON NORFOLK & CAROLINA

SEABOARD AIR-LINE SYSTEM

PALMETTO CAROLINA CENTRAL DURHAM & NORTHERN GEORGIA. CAROLINA & NORTHERN LOUISBURG MUREPEESPORG MURFREESBORO **PITTSBORO** RALEIGH & GASTON RALEIGH & AUGUSTA ROANOKE & TAR RIVER SEABOARD & ROANOKE

SOUTHERN RAILWAY SYSTEM

The Southern Railway System was the immediate successor to The Richmond & Danville R.R. System. The name change took place in 1894.

ATLANTA & CHARLOTTE AIR-LINE ATLANTIC, TENNESSEE & OHIO ASHEVILLE & SPARTANBURG CHARLOTTE, COLUMBIA & AUGUSTA DANVILLE AND WESTERN H. PT.. R.. ASHBORO & SOUTHERN NORTH CAROLINA NORTH CAROLINA MIDLAND NORTH WESTERN NORTH CAROLINA NORTHWESTERN NORTH CAROLINA OXFORD AND CLARKSVILLE OXFORD AND HENDERSON PIEDMONT STATE UNIVERSITY STATESVILLE & WESTERN WESTERN NORTH CAROLINA YADKIN

MISCELLANEOUS

ABERDEEN & ROCK-FISH ABERDEEN & WEST END SUFFOLK & CAROLINA SUFFOLK LUMBER COMPANY ATLANTA, KNOXVILLE & NORTHERN WARRENTON WILMINGTON, NEWBERN & NORFOLK WILMINGTON RAILWAY BRIDGE CO. WILMINGTON SEA COAST WINTON ATLANTIC & NORTH CAROLINA ATLANTIC & DANVILLE CAPE FEAR & YADKIN VALLEY CARTHAGE CASTHAGE
CASHIE & CHOWAN
WELLINGTON & POWELLSVILLE
OHIO RIVER & CHARLESTON
DANVILLE, MOCKSVILLE & SOUTHWESTERN
EAST TENNESSEE & WESTERN NORTH CAROLINA EGYPT
GLENDON & GULF MFG. & MIN. CO.
NORTHAMPTON & HERTFORD
HOFFMAN & TROY
JAMESVILLE & WASHINGTON
CHESTER & LENOIR
MARIETTA & NORTH GEORGIA
NORFOLK & SOUTHERN*
NEW HANOVER TRANSIT CO.
NORFOLK & WESTERN < ROANOKE & SOUTHERN DIVISION
LYNCHBURG & DURHAM DIVISION

MOORE COUNTY RALEIGH & WESTERN

and later S. Davies Warfield and Leigh Powell, the consolidated Seaboard Air Line would ultimately draw together over 140 separate railroad corporations into a system that exceeded 4,000 miles extending throughout six southeastern states (Johnson 1995: 9-22; Griffin 1999: 9-12).

While the Raleigh and Gaston route was the oldest of the railroads absorbed by the Seaboard Air Line, the segment between Petersburg and Norlina was not completed until April 1900. This line was the southern leg of the Richmond, Petersburg, and Carolina Railroad which became part of the Seaboard Air Line system during the completion of the route in 1900. The R.P. & C. had been under construction since the 1890s to connect Richmond to the junction point of Norlina, North Carolina, and the Raleigh and Gaston line to Portsmouth. This north-south route actually resulted from an 1877 breach of contract between John M. Robinson, president of the Seaboard and Roanoke, and the controlling interests in the Richmond and Danville. The two had agreed to observe each other's territorial interests with the Richmond and Danville agreeing to operate no rail or steamboat service into Norfolk or Portsmouth and the Seaboard assenting to operate no rail service into Richmond. With the organization of the Southern Railway, the Southern began steamboat service between Norfolk and Baltimore in competition with the Seaboard's longstanding water service between the two ports. The Seaboard retaliated by building the new Richmond, Petersburg and Carolina rail line northward through Petersburg into Richmond. By 1898, the line was finished twenty miles south from Petersburg to DeWitt, Virginia, and by 1900, when the name was changed to the Seaboard Air Line Railway, an additional fifty-five miles was completed south to Norlina. In the spring of 1900, bridges had been constructed over the Appomattox and James rivers and tracks laid into Richmond with connections north along the Richmond, Fredericksburg and Potomac tracks (Johnson 1995: 20-22; Griffin 1999: 10; Prince 2000: 27).

By the early 1900s, Seaboard Air Line tracks formed a network of rail connections throughout the Southeast. The S.A.L. extended deep into Florida for the shipping of timber, phosphate minerals, fruits, and vegetables. The S.A.L. also reached into the Alabama iron ore and coal fields. In Virginia, the Carolinas, and throughout the region, Seaboard Air Line trains transported passengers, hauled timber and fresh produce to ports, carried coal to factories, and delivered finished goods to hundreds of cities, towns, and hamlets (Griffin 1999: 11-13; 160-179).

Rail Construction in the Twentieth Century

All the corporate consolidations and reorganizations of the 1890s created a dense, but closely controlled network of track across the country. The financiers who were largely responsible for these large rail systems eliminated as legal entities the constituent companies by consolidating them into single, centralized administrative units. By 1906, nearly two-thirds of all rail miles in the U.S. were owned by seven financial groups. In contrast to the frenzied boom-bust cycles of the nineteenth century, the railroads of the twentieth century were vast, highly regulated systems that underwent few territorial changes or additions until after World War II when technological obsolescence in the transport of passengers and some forms of freight forced further reorganization (Chandler 1977: 469).

In keeping with national trends, little new rail mileage was added in North Carolina or Virginia in the twentieth century except for the construction of the Norfolk Southern Railway (later absorbed into the Southern system) which provided an alternative route between Charlotte and Raleigh. In addition, a few short lines were built into the timbering regions of eastern and western North Carolina and into mining and tourist areas of the mountain counties (Gilbert 1982: 9, 22; Bishir et al. 1999: 34-35).

Despite the absence of new railroads, existing lines continued to ensure the vitality of towns along their routes. Large scale timbering operations and commercial agriculture as well as small town commerce came to characterize eastern North Carolina and Southside Virginia during the period. Along the Seaboard Air Line between Raleigh and Petersburg, the North Carolina towns that had emerged along the Raleigh and Gaston remained vibrant while the new Virginia rail towns of La Crosse, Alberta, McKenney, DeWitt, and Dinwiddie appeared north of Norlina. Norlina quickly eclipsed Ridgeway as Warren County's main entrepot. From this junction, trains out of Raleigh were directed either northward to Richmond or eastward to the coastal ports of Portsmouth and Norfolk. The S.A.L. constructed an expansive depot at Norlina to accommodate the especially high volume of traffic, a 50,000-gallon water station that straddled both main line tracks, and an eighty-five-foot turntable (Griffin 1991: 66-69; Bumbalough 1998: 63-64; Stover 1961: 135; Griffin 1991: 54, 56).

Although the S.A.L. undertook little new construction within the project corridor, improvements to maintain the lines as well as increase efficiency were ongoing. The railroad built trackside livestock pens and ramps in a number of towns including Youngsville in Franklin County, North Carolina, and continually replaced the workaday structures--signs denoting towns, crossings, and vard limits; water tanks; mail cranes; whistle posts; mileposts; and various storage sheds--that formed the rail infrastructure. In 1901, the railroad purchased a granite quarry at Greystone, north of Henderson, North Carolina, to supply stone ballast for the railroad beds. commercial quarry had been established about 1890 by Durham entrepreneur, James Stagg, and remains in operation. In 1902, a new brick rail station was built at Henderson with additions occurring in 1913. In 1910, a new station and tower were built at Alberta, Virginia, although the facility was replaced in the late 1950s. In the 1930s, the Great Depression forced even greater efficiencies on most railroad companies, and during the decade, the Seaboard closed many of its telegraph offices and stations in rural locations, replacing them with simple combination freight/passenger sheds. In the late 1930s, the Seaboard also improved its entire roadwaylaying heavier rail and treated ties, adding ballast, and installing longer passing sidings and automatic block signals (Griffin 1991: 55, 57, 75, 77; Griffin 1999: 15-17).

In 1915, the S.A.L. underwent a corporate restructuring with the merger of a number of railroads in eastern South Carolina and the establishment of six divisions. The new company became known as the Seaboard Air Line Railway Company, and after World War I, the company began an ambitious expansion program throughout Florida, following the real estate boom in that state. By 1929, the Seaboard Air Line was operating a 4,500 mile system with over 600 miles in North Carolina and Virginia. However, as had so often occurred throughout the nineteenth century, such building campaigns often resulted in financial overextension, and the Seaboard went into receivership in 1930. The S.A.L. already faced a territorial disadvantage, being flanked by the wealthy Atlantic Coast Line Railroad and the powerful Southern Railway, and this competition exacerbated the company's financial difficulties. Receivership for the S.A.L. lasted for fourteen years, and in 1945, the company was sold at foreclosure and reorganized as the Seaboard Air Line Railroad (Prince 2000: 101-102).

In the subsequent decade, under the presidency of Leigh Powell and his successor, John W. Smith, improvement campaigns modernized the Seaboard system. The S.A.L. became the first railroad in the South to have air-conditioned trains and employ lightweight, stainless steel passenger coaches. Dieselization of locomotives, begun in the 1930s, was completed by 1953. (The last steam locomotive was retired from S.A.L. service in 1958). In the early 1950s, the company installed new automatic block signals and new stations and shops. At the end of the

decade, the SAL's corporate offices were relocated from a collection of buildings in Norfolk and Portsmouth to a modern, expansive facility in downtown Richmond. In 1954, a fifty-eight-track classification and repair yard was constructed at Hamlet, North Carolina, where five of the Seaboard's main lines converged. Hamlet became the central hub of the S.A.L., boasting the enormous freight yard and the company's largest ice manufacturing plant during the steam era. The 150 miles of railroad between Norlina and Hamlet provided the heaviest concentration of freight and passenger traffic on the entire system. To accommodate the traffic load, the railroad constructed sections of double track between Raleigh and Neuse (south of Wake Forest), and from Norlina south to Middleburg. These double track sections are now single track (Griffin 1999: 20-23, 44, 170; Hobbs 2001).

Beginning after the second World War and accelerating in the 1950s, competition from motor vehicles led to the closing of depots, the abandonment of rail lines, and corporate restructurings. In the late 1950s and 1960s, the Seaboard began eliminating its passenger stations and replacing them with combination passenger/freight facilities, underscoring the decline in passenger traffic. In 1967, the Seaboard merged with the Atlantic Coast Line to create the Seaboard Coast Line Railroad. Subsequent mergers led to the formation of the Consolidated Seaboard Expanded (CSX) Transportation Corporation in 1980. The S.A.L. is now known mostly the S Line of CSX. The new company razed Hermitage Yard in Richmond, removed twelve miles of main line track between Richmond and Petersburg, and abandoned the segment between Roanoke Rapids and Warren Plains, North Carolina. Subsequently, the shops and yards at Portsmouth and Raleigh were dismantled, and in 1986 seventy-three miles of track between South Collier, Virginia (near Petersburg), and Norlina were closed. The track was removed in 1987, leaving only the railroad bed. The section between Norlina and Raleigh remains the only active rail service within the existing project corridor. This segment was kept in operation primarily to serve the rock quarry at Greystone where the railroad continues to get carloads of ballast and trap rock (Griffin 1991: 21, 23, 159; Griffin 1999; 23-25).

SUMMARY OF FINDINGS

The importance of the railroads to the history of American settlement and economic development is difficult to overestimate. In the words of Southern environmental historian, Jack Temple Kirby, early railroads created the beginnings of a "modern linearity in the hinterlands" that defied nature's "inconvenient geography". Rail lines were critical to the exploitation of the backcountry, a feat unimaginable to a pre-railroad world bound by seaports and rivers. Economically, train service provided the first rapid, reliable, all-weather transportation that not only spurred commercial and industrial development but, perhaps more importantly, allowed for the integration of all regions of the country into a highly developed, capitalist economy. Before railroads, only those areas along the eastern seaboard that were situated below river fall lines or near the major rivers of the America's midsection could fully participate in national and international trade. Even in coastal states such as Virginia and North Carolina, the interior Piedmont and mountain regions were mainly remote, subsistence places before the arrival of trains (Kirby 1995: 95).

Largely completed by the turn of the twentieth century, the American rail network has undergone almost continuous alteration since its beginnings in the 1830s as railroad companies struggled to remain profitable. Ongoing maintenance, technological improvements—such as the introduction of diesel engines in the 1920s and 1930s—and a need for greater efficiencies in the face of stiff competition from cars, trucks, and airplanes all forced the railroads to modify their facilities. In efforts to trim costs and improve service, railroad companies often shuttered rural depots and stations, closed rail yards, abandoned lines, removed track, demolished water tanks, and abandoned or replaced culverts, bridges, and trestles.

Cycles of corporate restructuring and mergers have also resulted in changes to historic lines. In the nineteenth century, the railroads underwent periods of rapid expansion that often left the companies overextended and vulnerable to bankruptcy and acquisition. During the Depression of 1893, numerous American railroad companies went bankrupt simultaneously, and the subsequent reorganization produced a national web of fewer, larger, more financially secure railroad systems. Consequently, few rail lines remain under original ownership.

All three rail lines that constitute the high speed project corridor between Petersburg, Virginia, and Raleigh, North Carolina, have undergone varying degrees of alteration and reorganization. The seventy mile section of the former Richmond, Petersburg, and Carolina Railroad, between Petersburg and Norlina, North Carolina, has had all of its trackage removed. Because of this loss of integrity, and a lack of historical significance, this segment of the project corridor was determined not eligible for the National Register as a result of the Phase I Architectural Survey Report (2005) for this project (Virginia Department of Historic Resources 2006).

The remainder of the project corridor encompasses segments of the former Raleigh and Gaston Railroad and the historic Petersburg Railroad. Both dating to the antebellum era, these two railroads had the historical significance and sufficient integrity to merit Phase II evaluation. Each historic line is assessed for National Register eligibility in the following sections.

Raleigh and Gaston Railroad/Seaboard Air Line Railway: Evaluation of Eligibility

The portion of the historic Raleigh and Gaston Railroad/Seaboard Air Line corridor that lies within the project area is recommended for National Register eligibility under Criterion A for transportation. The Raleigh and Gaston has exceptional statewide significance. Completed between the state capital and the falls of the Roanoke River in 1840, the Raleigh and Gaston was one of the two earliest railroads in North Carolina. The line played a pivotal role in opening the isolated North Carolina interior to development after a long period of economic torpor and set the stage for the emergence of Piedmont cities as the economic engines of North Carolina during the late nineteenth century. Furthermore, the route of the Raleigh and Gaston, connecting the Piedmont with the Roanoke River, clearly illustrates the national pattern of rail development during its infancy when railroads were typically short lines built to supplement or compete with existing water-oriented trade routes. The path of the Raleigh and Gaston Railroad thus remains a graphic historic corridor that continues to illustrate and evoke the road's exceptional significance in the early economic and cultural progress of the state.

The period of significance begins in 1840 when the Raleigh and Gaston opened for service and ends in 1957 in compliance with the fifty year termination guideline for National Register eligibility. The period of significance encompasses resources constructed as part of the original Raleigh and Gaston Railroad as well as facilities added after its merger into the larger Seaboard Air Line system following the Depression of the 1890s.

The principal and most significant resource is the alignment and grade (or bed) of the Raleigh and Gaston corridor. As shown on an 1863 military survey map of the Raleigh and Gaston Railroad and on a detailed survey of the line conducted in 1874, the rail alignment and grade remain essentially unchanged along the entire project area (as well as eastward from Norlina to Weldon) (Figures 7, 8A-8C; Plates 1-3). Modifications to the railroad bed have been minor. The principal change has been slight shifts in alignment with the construction of new bridges which permitted new spans to be erected without interrupting service. Evidence of this pattern can be found along the Raleigh and Gaston at Crabtree Creek, the Neuse River, Cedar Creek, and the Tar River. Although track and ballast had to be replaced periodically, these modifications caused little change to the overall alignment and grade of the line. In this region, ballast would typically last for seven years while ties needed replacement roughly every twenty years (Harris Interview 2006).

Other significant resources associated with the operation of either the Raleigh and Gaston or the Seaboard Air Line during the period of significance remain intact. The Phase II architectural survey of the Raleigh and Gaston line from Raleigh north to Norlina (the project area) recorded a number of historic buildings and structures associated with the rail line that were either listed in the National Register or were determined eligible for the National Register (Louis Berger and Associates Inc., 1990; Mattson, Alexander and Associates, Inc. 2005).

Illustrated in Plates 4-11, these resources are:

- * Seaboard Air Line Railway Station and Warehouses, Raleigh (D.O.E. 2005)
- * Neuse Railroad Station (Seaboard Air Line), Neuse Crossroads (D.O.E. 1998)
- Seaboard Air Line Railway, Passenger Station, Wake Forest Historic District (N.R. 2003)
- * Raleigh and Gaston Passenger Station (N.R.), Franklinton Historic District (D.O.E. 2005)
- Seaboard Air Line Railway Bridge, Franklinton Historic District (D.O.E. 2005)
- Seaboard Air Line Railway, Maintenance Building, Franklinton Historic District (D.O.E. 2005)
- * Raleigh and Gaston Railroad Bridge Piers, Tar River (D.O.E. 2005)
- Seaboard Air Line Railway Freight Station, Henderson Central Business Historic District (N.R. 1987)
- * Greystone Quarry (Seaboard Air Line Railway), Henderson vicinity
- William J. Hawkins House (Oakley Hall) (N.R. 1978) (Plates 12-13)

The project area also contains a number of other resources associated with the Raleigh and Gaston or Seaboard Air Line railroads that have not been evaluated for eligibility but that reflect the historic operation of the line. Of particular note is the former Raleigh and Gaston Turntable which is all that remains of the nineteenth century Raleigh and Gaston rail yards in downtown Raleigh (Plate 14). The turntable was documented by Louis Berger and Associates, Inc. in 1990 during its excavation of the Raleigh and Gaston roundhouse, but no formal determination of eligibility was made at that time. However, the Office of State Archaeology states that the turntable is considered eligible for the National Register (Hall interview 2007). Nearby is a rail shops buildings built by the Seaboard Air Line during the 1930s that is also one of the sole vestiges of the historic yard operations in Raleigh (Plate 15).

North of Henderson is Greystone Quarry which has supplied the stone used as ballast along the rail line for over 100 years. The ballast lining the rail bed had to be replaced periodically, and a reliable, nearby supply of stone was necessary for the ongoing repair of the railroad. The commercial quarry at Greystone had been founded ca. 1890 by Durham businessman, James Stagg, but in 1901, the Seaboard Air Line purchased the quarry to supply its expanded system. The quarry remains in operation to supply the railroad with carloads of ballast and trap rock. Greystone is significant for its association with the historic maintenance operations of the railroad.

Along the line are several granite bridge piers that supported timber deck truss spans built along the Raleigh and Gaston Railroad during the nineteenth century. Although the trusses are no longer extant, the rock-faced, ashlar piers survive in three locations: Crabtree Creek (Raleigh); Neuse River (Wake Forest vicinity); and Cedar Creek (Franklinton vicinity) (Plates 16-18). Similar piers are also found over the Tar River, and these were determined eligible for the National Register during the 2005 Phase II survey. Numerous stone-lined culverts, built by the Raleigh and Gaston, also survive.

In addition to the Raleigh and Gaston bridge piers, a long, steel deck girder span survives at Cedar Creek (Plates 19-20). Built at the turn of the twentieth century, the structure exemplifies the standard design used by the Seaboard Air Line during their improvement campaigns soon

William J. Hawkins was president of the Raleigh and Gaston, and he built his house, Oakley Hall, in the 1850s along the line at Ridgeway.

after their acquisition of the Raleigh and Gaston. (The earlier granite piers are situated beneath the ca. 1900 steel span.) Along the right-of-way just north of the Cedar Creek bridge is a 1940s shed that housed defect and dragging detection equipment, a safety feature developed by a Seaboard Air Line employee and first used in the 1940s (**Plates 21-22**). Quickly adopted by other railroads and installed every twenty-five miles or so, this facility near Franklinton is now a rare survivor (Harris 2006).

Near the community of Manson in Warren County is an intact, one story, frame section house (1880s) that is the only one to survive within the A.P.E. (**Plate 23**). Once common, section houses were built every five to ten miles to provide accommodations for the section gangs that repaired the railroad (Harris interview 2006). A good, intact example of a now rare property type, the section house near Manson contributes to the significance and integrity of the former Raleigh and Gaston rail corridor.

Also surviving along the line are several reinforced concrete bridges erected in the 1920s during the national grade separation movement. The bridges were built to carry the elevated rail line over heavily traveled local streets and thereby reduce train and vehicle collisions at busy grade crossings. Examples remain at Wake Forest, Franklinton, and Norlina. Spanning U.S. 158, the Norlina bridge is a reinforced concrete structure with arcaded pier supports that in its design and classically inspired detailing typifies the bridges erected during the grade separation movement of the early twentieth century (**Plates 24-27**). Also at Norlina is a repeater tower for radio dispatch signals erected by the Seaboard Air Line Railway (**Plate 28**).

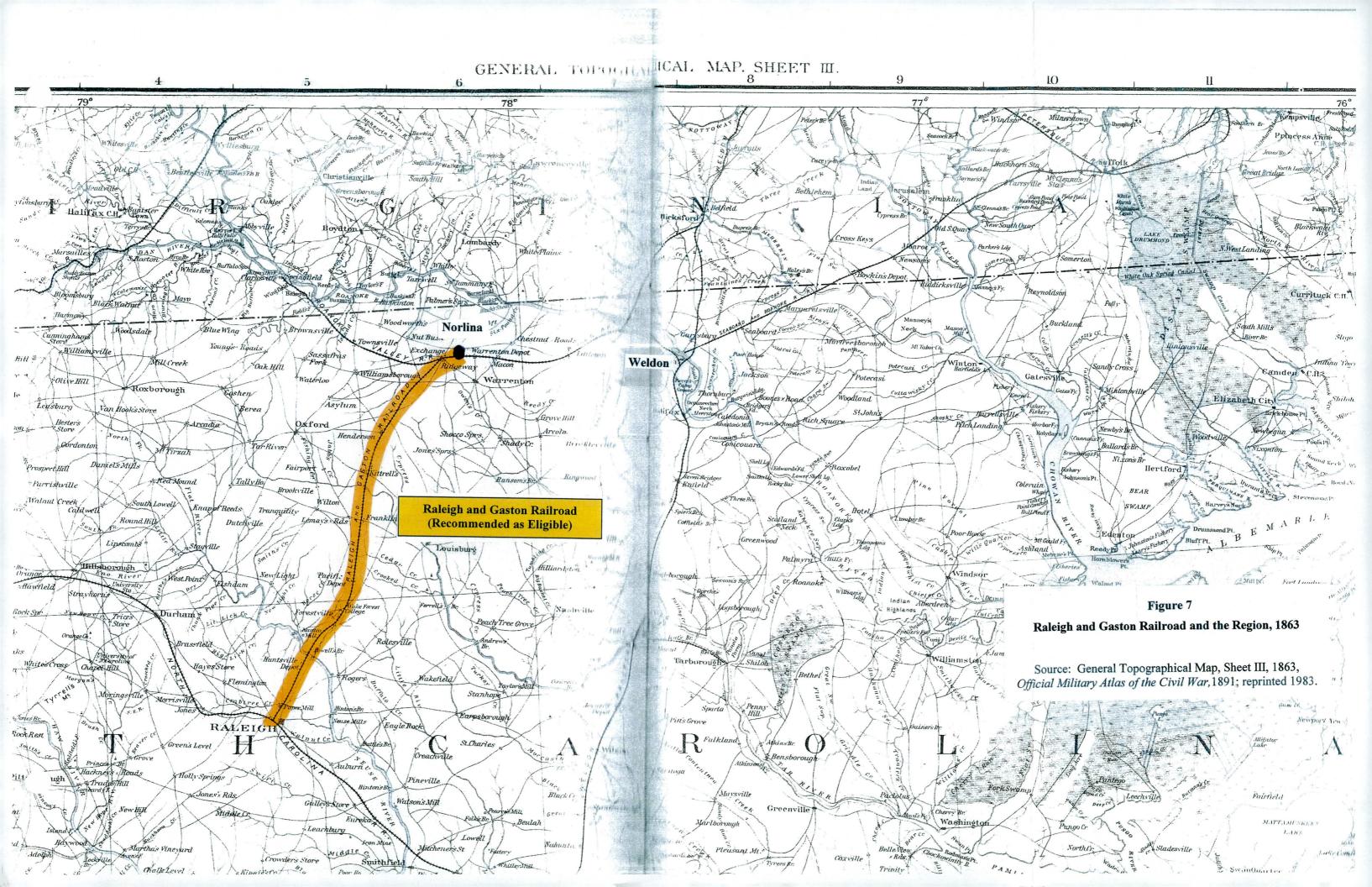
The railroad gave rise to a string of small towns along its route, and segments of the railroad contained within several of these small town historic districts should be counted as contributing resources to the individual districts. These small town historic districts include: Youngsville Historic District (Study List), Downtown Wake Forest Historic District (N.R.), Wake Forest Historic District (N.R.), Franklinton Historic District (D.O.E.), Henderson Central Business Historic District and Boundary Expansion (N.R.), and the South Henderson Industrial Historic District (D.O.E.). The locations of these towns are depicted on **Figure 1**, and the boundaries of each historic district are shown on maps found in **Appendix A**.²

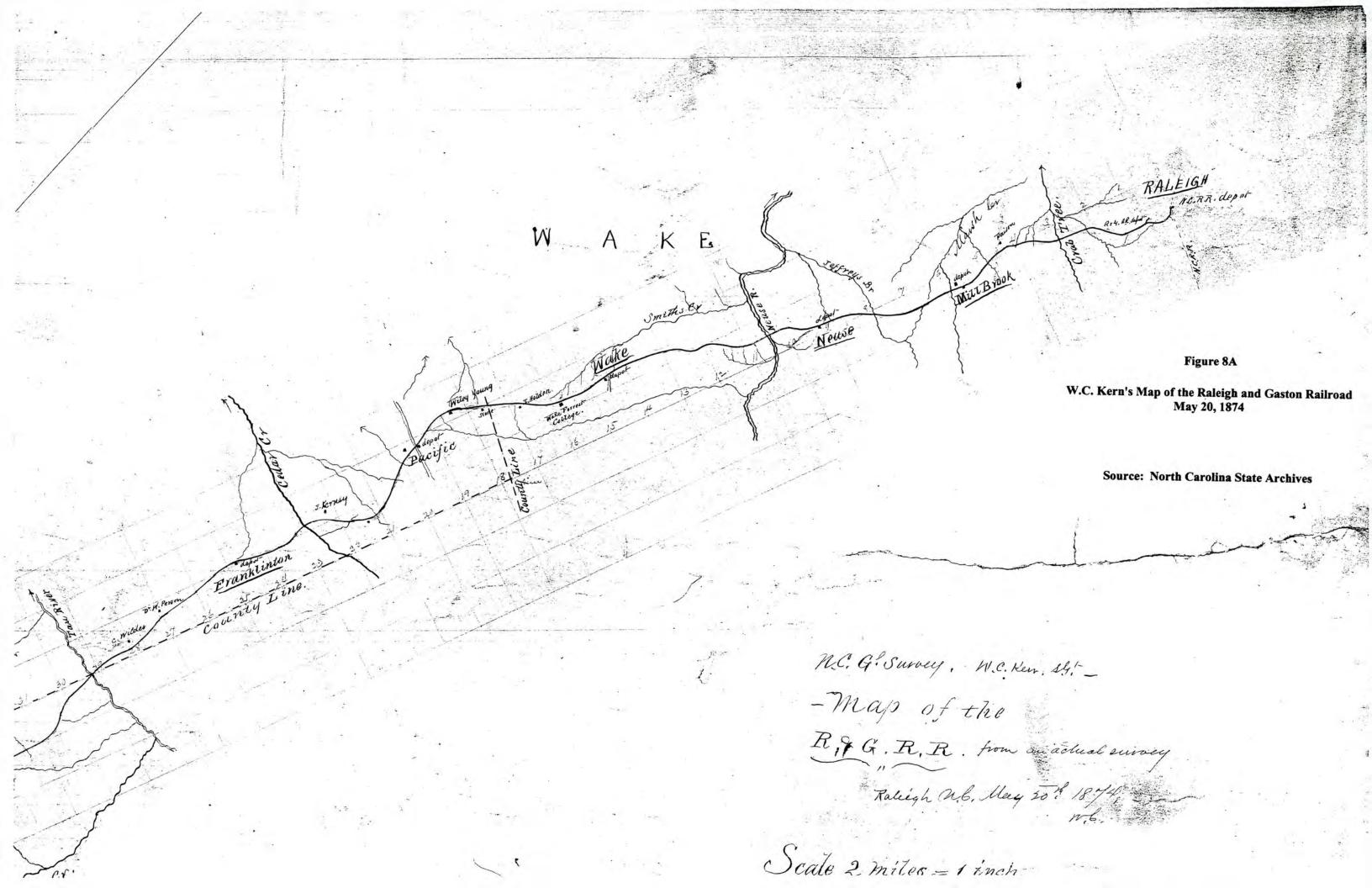
The intact railroad alignment and grade and the remaining rail-related features between Raleigh and Norlina all contribute to the significance and integrity of the railroad corridor. Like other working, rather than designed, resources, all railroad systems have undergone numerous changes, and the surviving rail grades and alignments are typically the most tangible remnants of these dynamic cultural landscapes. Ties and ballasts, as well as the spectrum of support structures and stations, were often replaced or demolished, but as noted in the National Register Nomination, Logging Railroad Resources of the Coconino and Kaibab National Forests, Arizona (1995), grades are "still strong visual clues" to the importance of the railroads. The grade is the property type most clearly associated with the historic context of the railroads. To expect all the historic elements of the line to remain extant is to impose an unrealistically high threshold for integrity and eligibility, one that few transportation resources could meet.

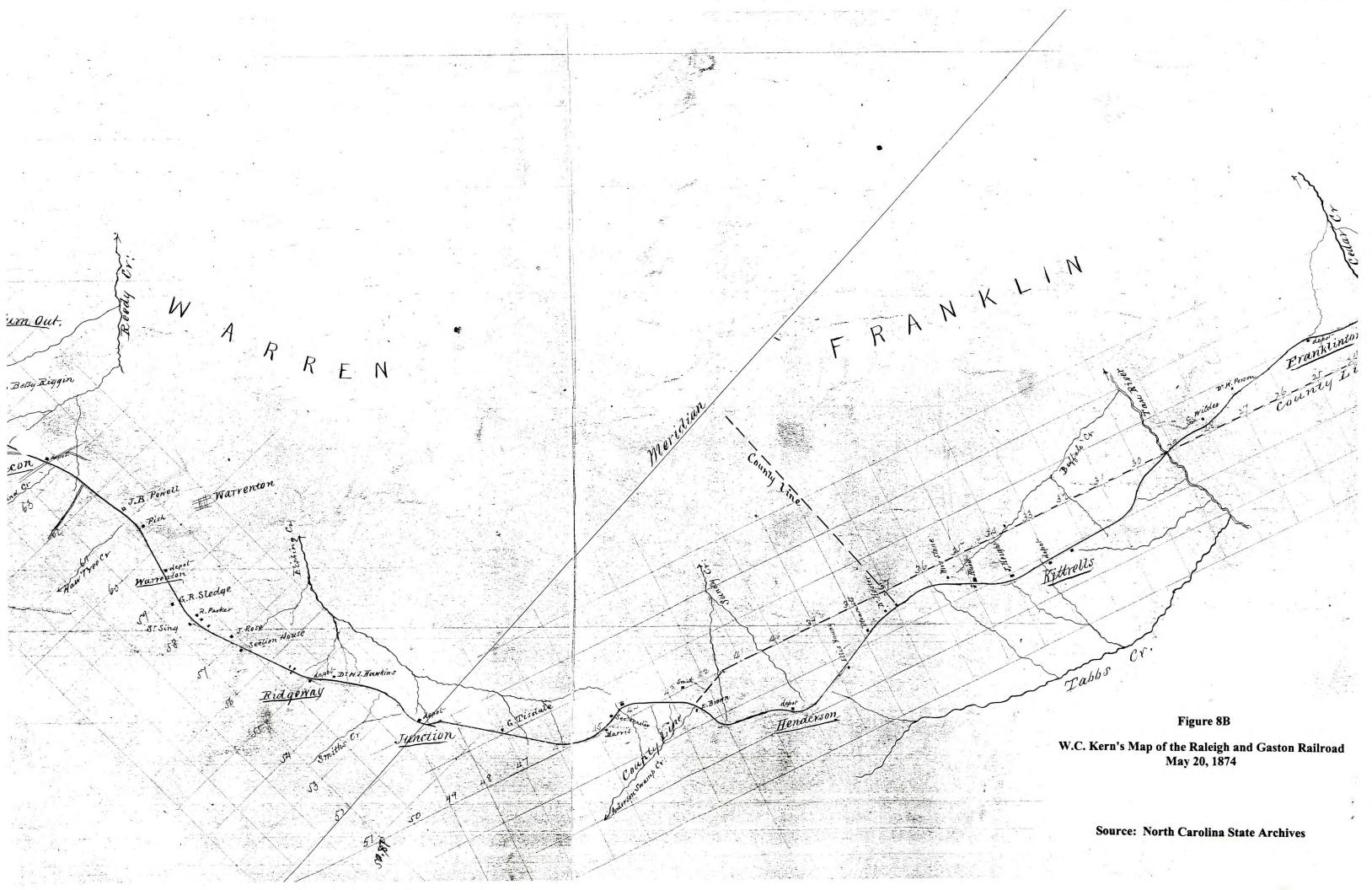
The proposed boundaries for the Raleigh and Gaston Railroad/Seaboard Air Line Railway would generally follow the railroad right-of-way except where the boundaries extend to include adjacent or nearby contributing resources. At the south end, the proposed National Register boundaries

² The Youngsville Historic District was added to the Study List in 2007, but National Register boundaries have not yet been defined for this district.

encompass the Seaboard Air Line shops building and the Raleigh and Gaston turntable, the site and last vestige of the nineteenth century Raleigh and Gaston rail yards in the capital city. Extending roughly sixty miles north to the town of Norlina, the National Register boundaries would end north of the former Norlina station site where the historic rail line turned east towards Weldon and away from the A.P.E. for this project. The resources described above contribute to the significance of the rail corridor. The proposed boundaries are depicted in **Figure 9**.









Southeast High Speed Rail Project

North Carolina

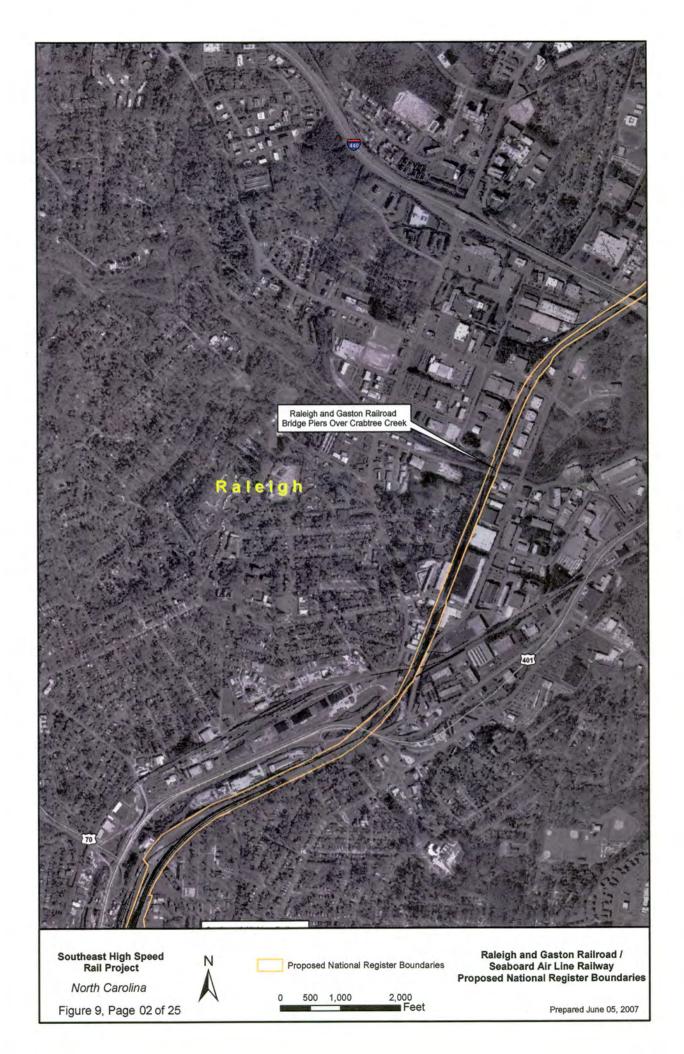
Figure 9, Page 01 of 25

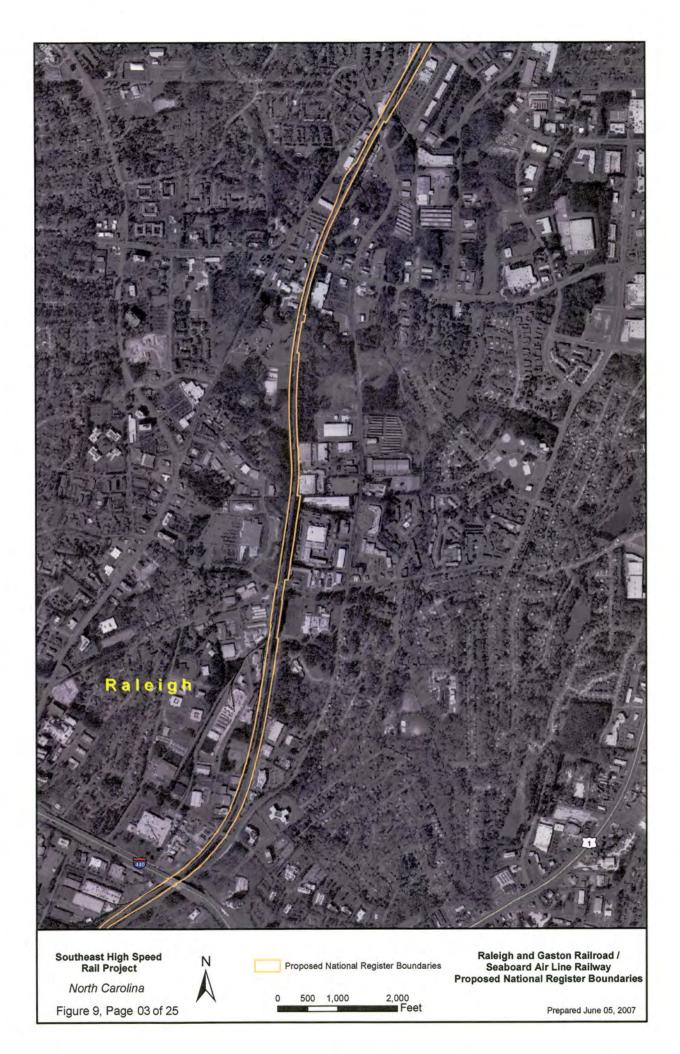
Proposed National Register Boundaries

2,000 Feet 500 1,000

Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries

Prepared June 05, 2007







Southeast High Speed Rail Project

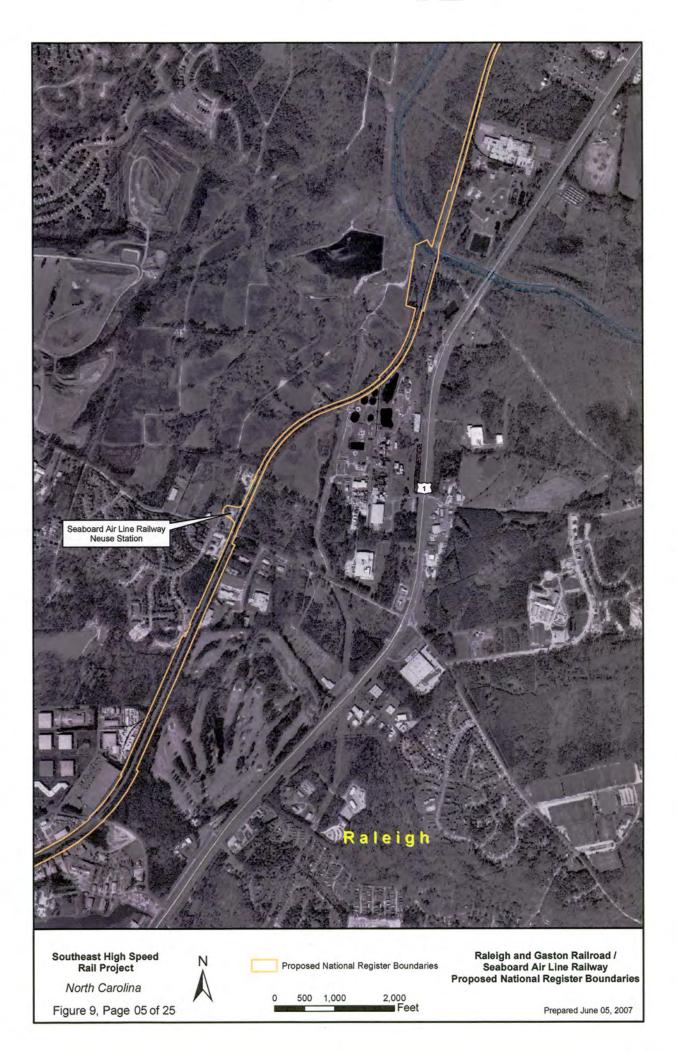
North Carolina

Figure 9, Page 04 of 25

Proposed National Register Boundaries

0 500 1,000 2,000 Feet Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries

Prepared June 05, 2007





Southeast High Speed Rail Project

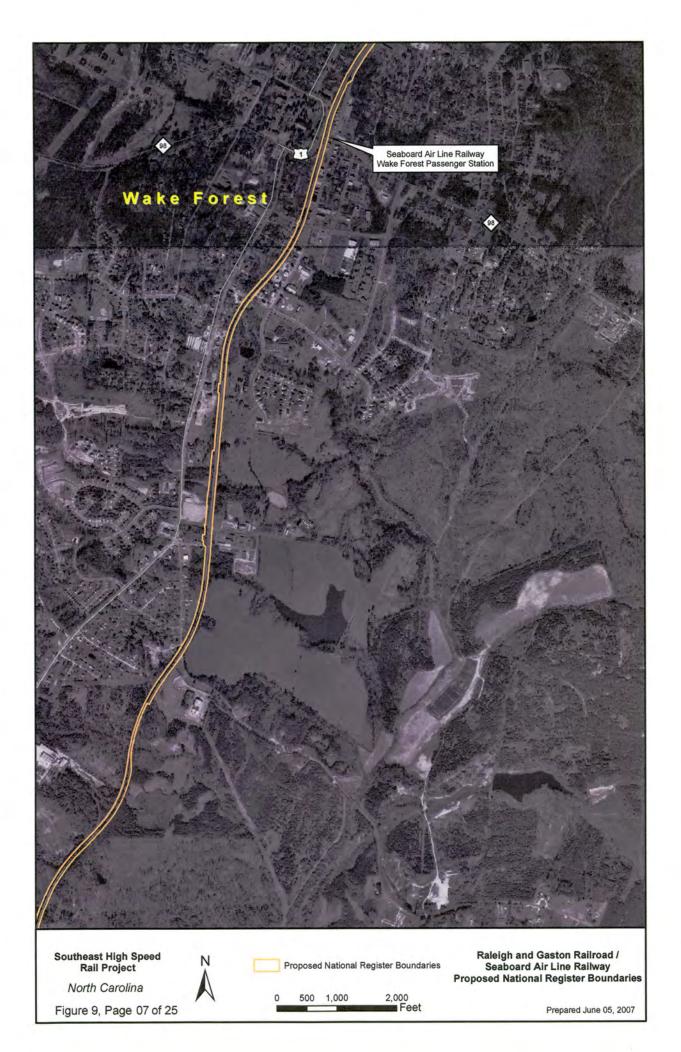
North Carolina

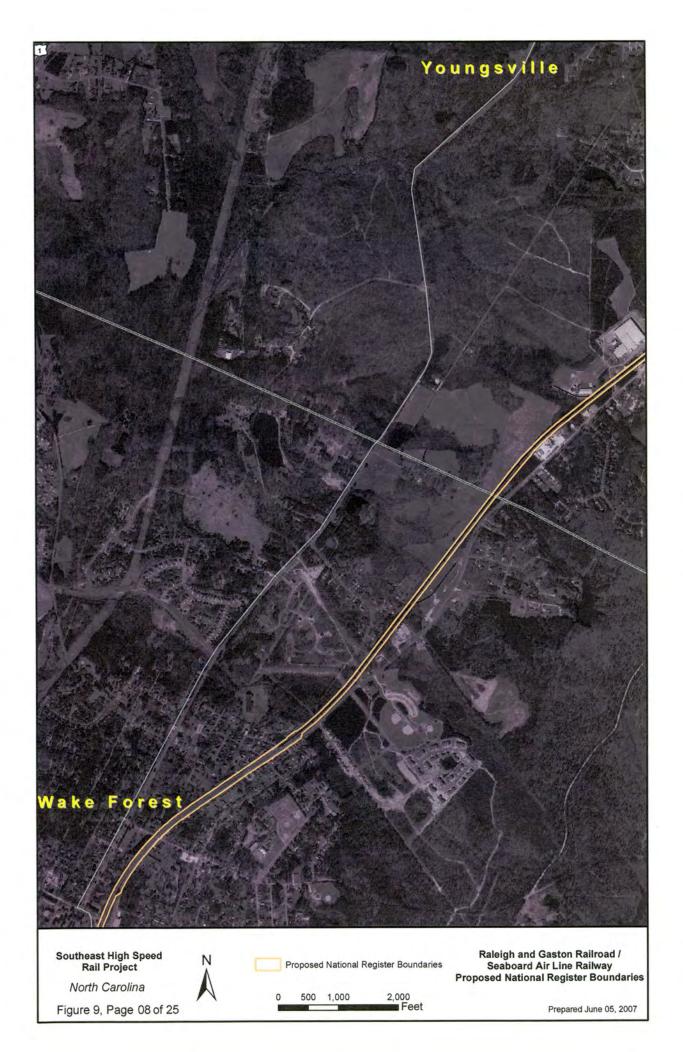
Figure 9, Page 06 of 25

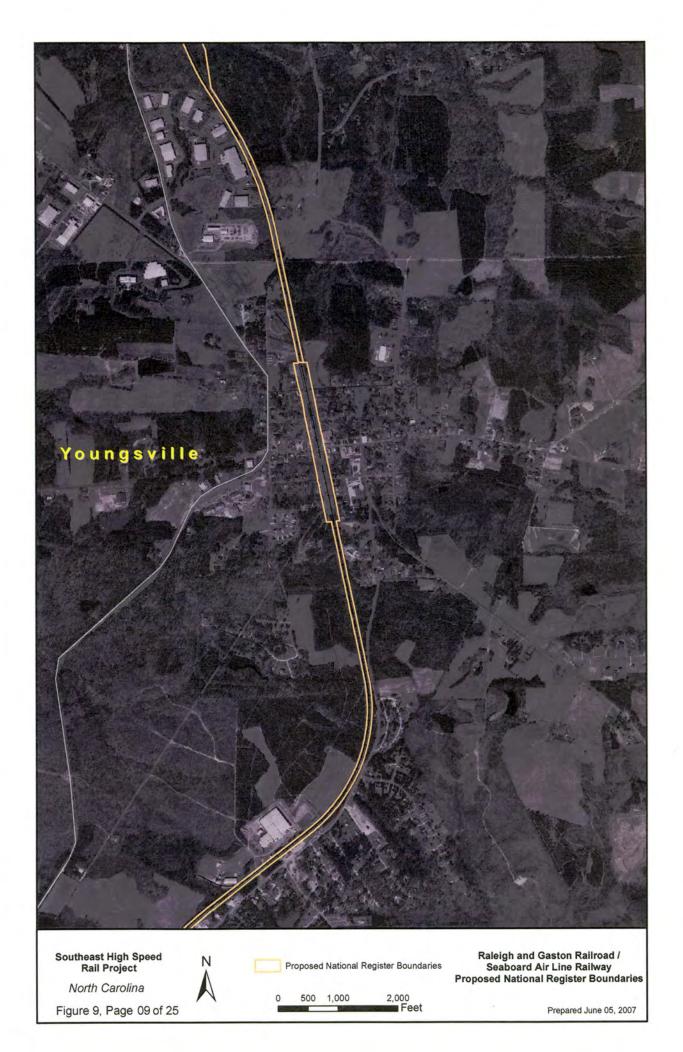
Proposed National Register Boundaries

500 1,000 2,000 Feet Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries

Prepared June 05, 2007









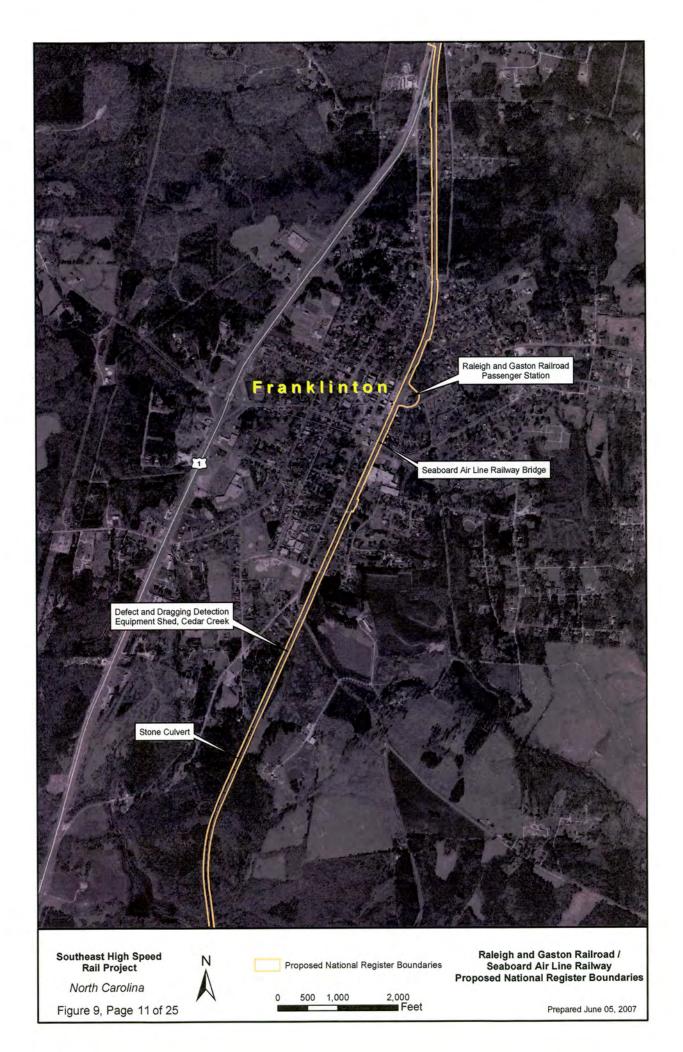
North Carolina

Figure 9, Page 10 of 25

Proposed National Register Boundaries

2,000 Feet 500 1,000

Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries





North Carolina

Figure 9, Page 12 of 25

Proposed National Register Boundaries

2,000 Feet 500 1,000

Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries





North Carolina

Figure 9, Page 14 of 25

Proposed National Register Boundaries

0 500 1,000 2,000 Feet Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries



North Carolina

Figure 9, Page 15 of 25

Proposed National Register Boundaries

2,000 Feet 500 1,000

Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries

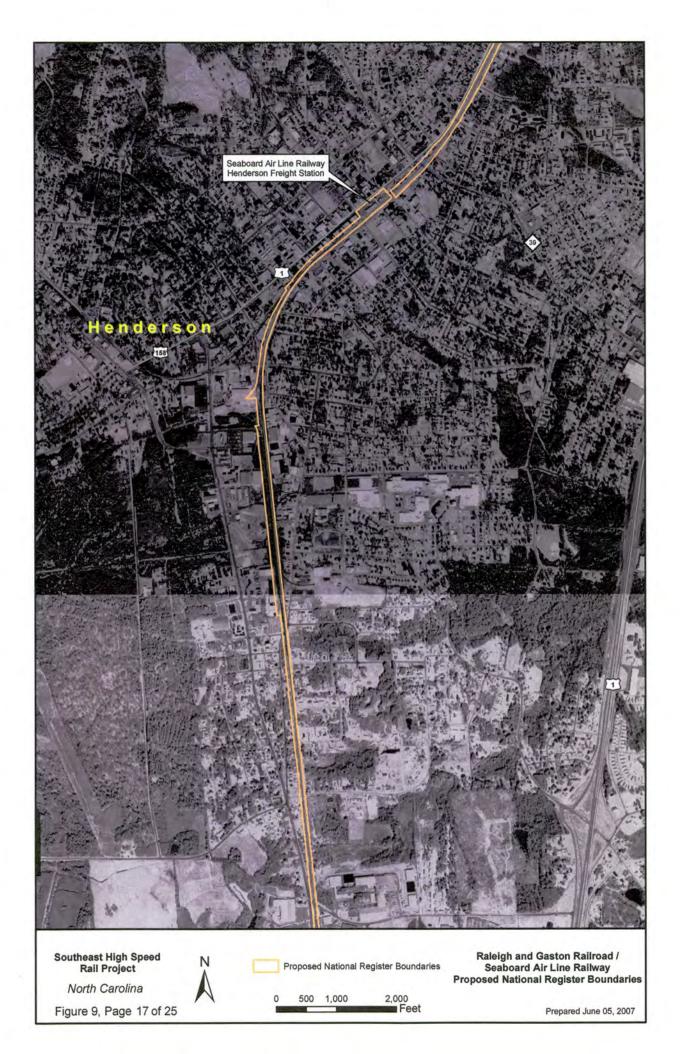


North Carolina

Figure 9, Page 16 of 25

Proposed National Register Boundaries

0 500 1,000 2,000 Feet Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries



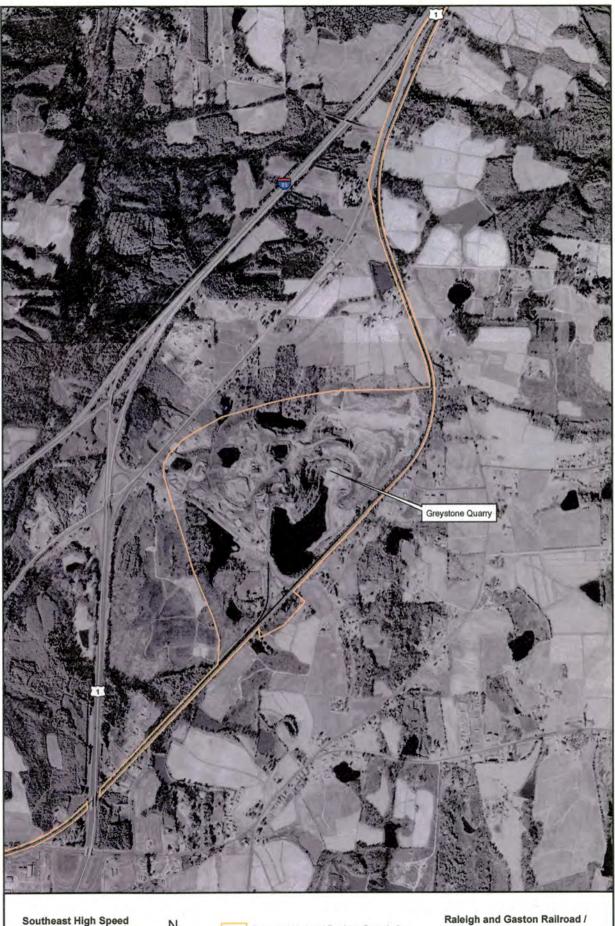


North Carolina

Figure 9, Page 18 of 25

Proposed National Register Boundaries

0 500 1,000 2,000 Feet Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries



North Carolina

Figure 9, Page 19 of 25

Proposed National Register Boundaries

2,000 Feet 500 1,000

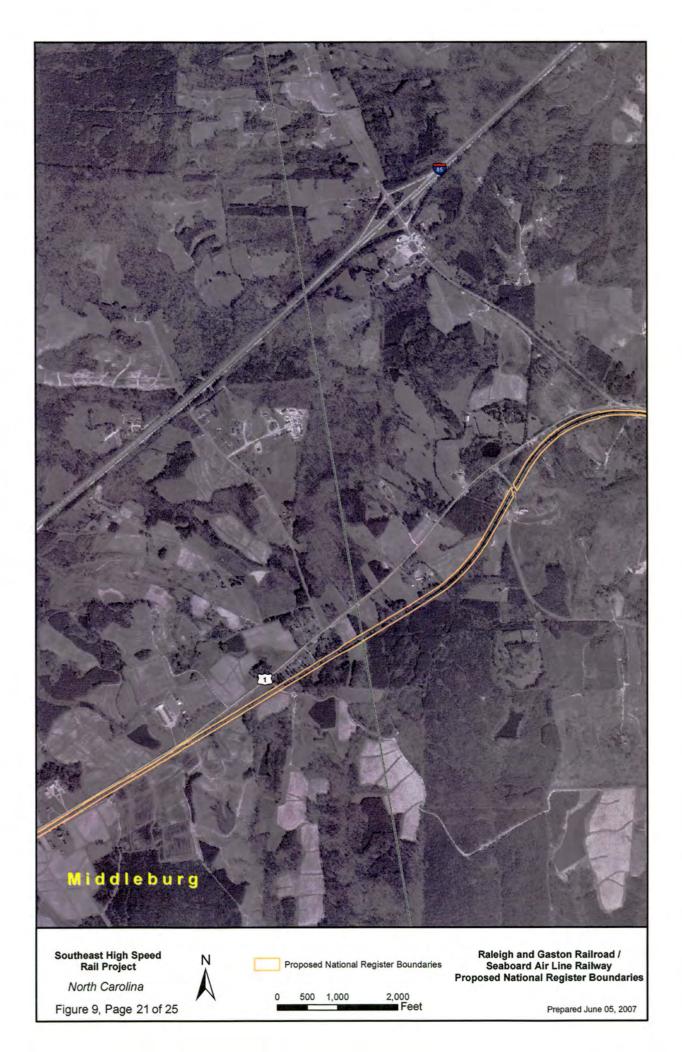
Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries



North Carolina

Figure 9, Page 20 of 25

2,000 Feet 500 1,000





North Carolina

Figure 9, Page 22 of 25

Proposed National Register Boundaries

0 500 1,000 2,000 Feet Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries



North Carolina

Figure 9, Page 23 of 25

2,000 Feet 500 1,000

Raleigh and Gaston Railroad / Seaboard Air Line Railway Proposed National Register Boundaries

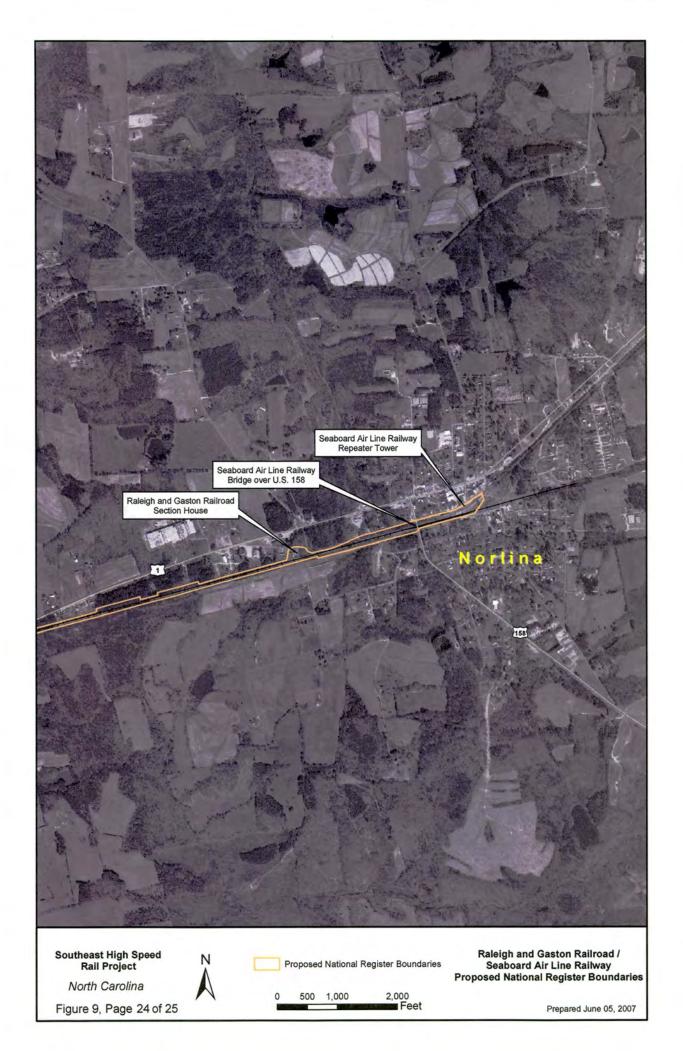






Plate 1. Railroad Bed, Wake Forest, Wake County, Looking North.



Plate 2. Railroad Bed, Crossing S.R. 1501, Middleburg, Vance County, Looking North.



Plate 3. Railroad Bed, Norlina, Warren County, Looking North.



Plate 4. Seaboard Air Line Railway Station and Warehouses, Rail Station, Raleigh, Wake County, Looking North.

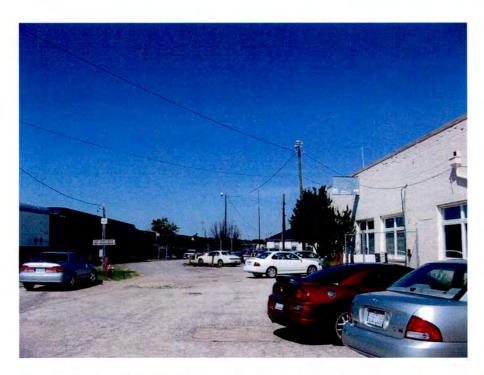


Plate 5. Seaboard Air Line Railway Station and Warehouses, Warehouses on Right, Rail Line on Left, Raleigh, Wake County, Looking North.



Plate 6. Seaboard Air Line Railway Station and Warehouses, Warehouses, Raleigh, Wake County, Looking North.



Plate 7. Seaboard Air Line Railway Station and Warehouses, Warehouse, Raleigh, Wake County, Looking East.



Plate 8. Seaboard Air Line Railway Station, Neuse, Wake County, Looking North.



Plate 9. Raleigh and Gaston Railroad Passenger Station, Franklinton, Franklin County, Looking North.



Plate 10. Raleigh and Gaston Railroad Bridge Piers at Tar River, Modern Seaboard Air Line Bridge in Background, Franklin County, Looking South.

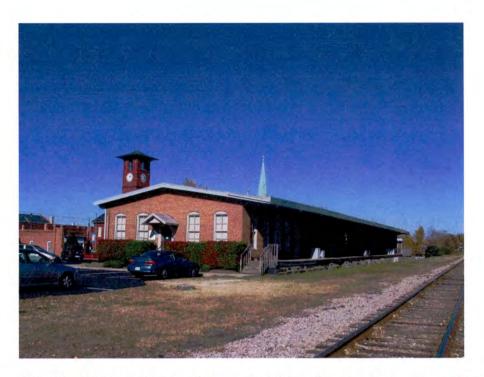


Plate 11. Seaboard Air Line Railway, Freight Station, Henderson, Vance County Looking North.



Plate 12. William J. Hawkins House (Oakley Hall), Ridgeway, Warren County Looking East.



Plate 13. William J. Hawkins House (Oakley Hall), Ridgeway, Warren County Looking Southeast.

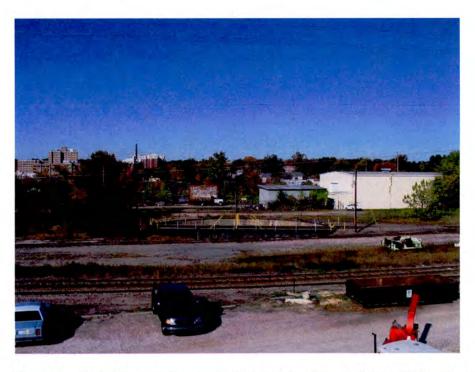


Plate 14. Raleigh and Gaston Railroad Turntable, Raleigh, Wake County, Looking West.

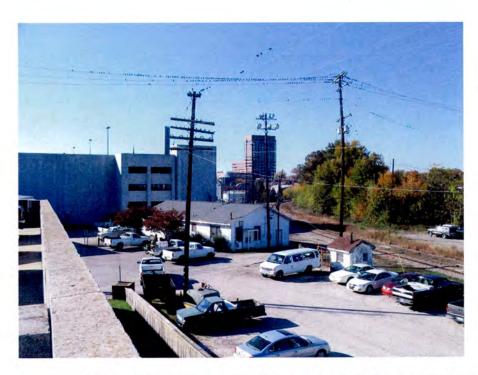


Plate 15. Seaboard Air Line Shops Building, Raleigh, Wake County, Looking Southwest.



Plate 16. Raleigh and Gaston Bridge Piers at Crabtree Creek, Modern Seaboard Air Line Bridge Above, Raleigh, Wake County, Looking North.



Plate 17. Raleigh and Gaston Bridge Piers at Crabtree Creek, Raleigh, Wake County, Looking North.



Plate 18. Raleigh and Gaston Railroad Bridge Piers at Crabtree Creek, Raleigh, Wake County.



Plate 19. Seaboard Air Line Railway Bridge over Cedar Creek, Franklin County, Looking South.

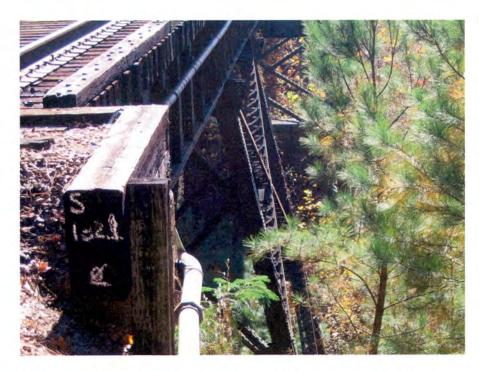


Plate 20. Seaboard Air Line Railway Bridge over Cedar Creek, Raleigh and Gaston Railroad Bridge Piers Visible Beneath Bridge, Franklin County.

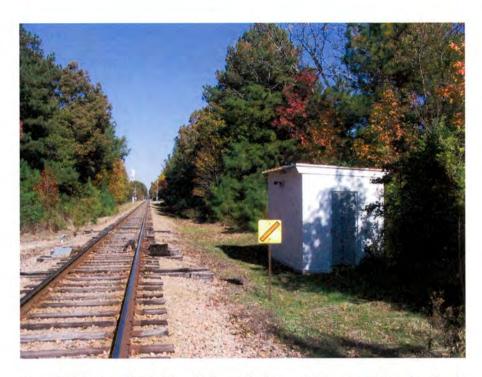


Plate 21. Seaboard Air Line Railway Defect and Dragging Detection Equipment Shed at Cedar Creek, Franklin County, Looking North.

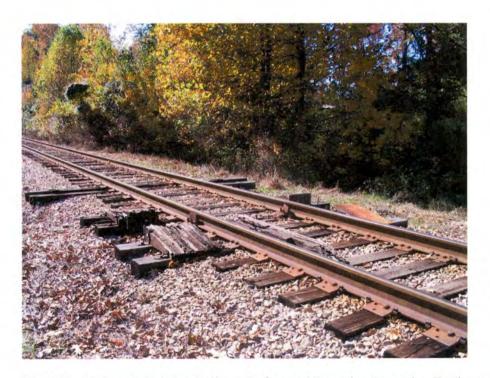


Plate 22. Seaboard Air Line Railway Defect and Dragging Detection Equipment at Cedar Creek, Franklin County.

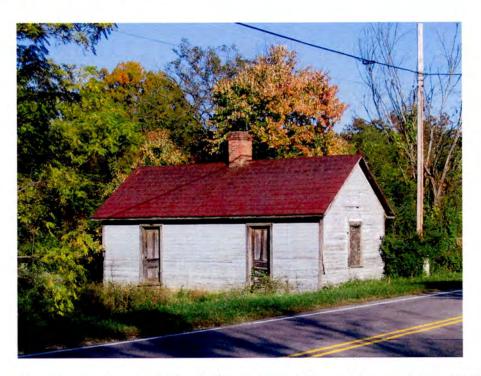


Plate 23. Raleigh and Gaston Railroad, Section House, Manson vicinity, Warren County.



Plate 24. Seaboard Air Line Railway Bridge over U.S. 158, Norlina, Warren County, Looking West.



Plate 25. Seaboard Air Line Railway Bridge over U.S. 158, Substructure and Abutments, Norlina, Warren County.

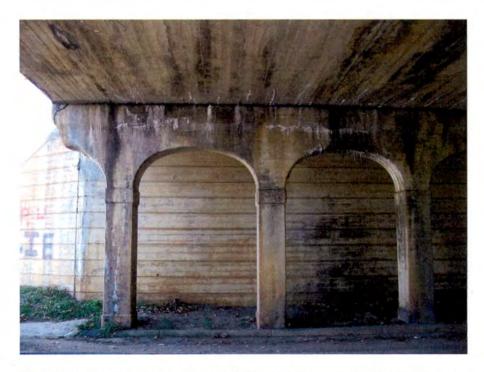


Plate 26. Seaboard Air Line Railway Bridge over U.S. 158, Substructure, Norlina, Warren County.



Plate 27. Seaboard Air Line Railway Bridge, Tracks over U.S. 158, Norlina, Warren County, Looking South.



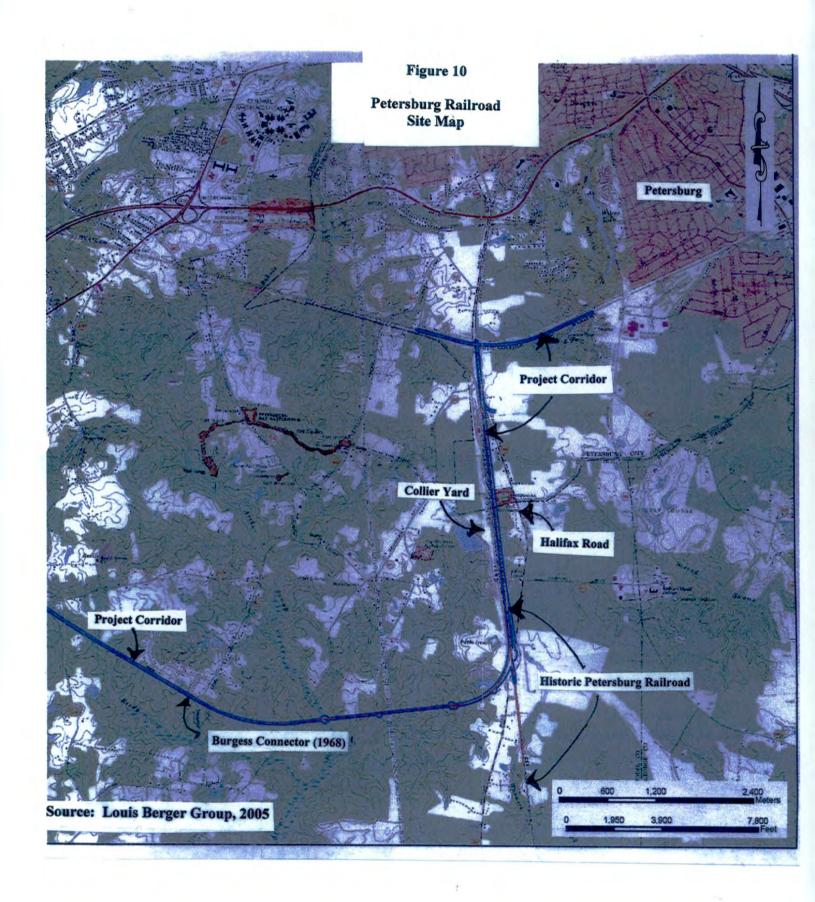
Plate 28. Seaboard Air Line Railway, Repeater Tower, Norlina, Warren County, Looking West.

Petersburg Railroad: Evaluation of Eligibility

As with the Raleigh and Gaston, the 1833 Petersburg Railroad has historical significance. The railroad joined the Roanoke River to the Appomattox River where boat traffic carried goods and travelers to Richmond, Norfolk, Baltimore, and northern cities. By the Civil War, additional railroads tied Petersburg to Richmond and beyond, running northward to New York and eastward to the Chesapeake. The Petersburg Railroad gained special importance during the Civil War as a vital conduit for troops and supplies to Petersburg and Richmond. During the Siege of Petersburg, the railroad was the target of repeated Union attacks. In August 1864, the Battle of Weldon Railroad focused on the rail line at Globe Tavern where Federal troops successfully cut Petersburg's primary rail connection with Wilmington, North Carolina.

The present study evaluated only an approximately two mile segment of the Petersburg Railroad (Figure 10). As far as can be determined from this narrow examination, the railroad corridor does not retain sufficient integrity for National Register eligibility under any criterion. In the early twentieth century, after the railroad became part of the Atlantic Coast Line, the alignment in this area was straightened and shifted west of its original route (present-day Halifax Road) to its present location at Collier Yard. Halifax Road itself was subsequently improved and graded, and consequently, no significant trace remains of the original railroad grade that gained special importance during the Civil War. Figure 11 depicts the alignment of the Petersburg Railroad in 1894 when it followed Halifax Road north into Petersburg (Louis Berger Group 2005; U.S.G.S. Map 1894, reprinted 1917). Collier Yard has also been modernized in recent years. No other historic resources associated with the Petersburg Railroad or the Atlantic Coast Line survive in this segment (Calkins Interview 2007).

The segment of the Petersburg Railroad located within the A.P.E. for the project is fully contained within Weldon National Battlefield which was designated as a core battle area by the National Park Service in 2002. However, the relocated and modernized railroad was not considered a contributing resource to the battle area. **Figure 12** shows the boundaries of the Weldon Battlefield Core Battle Area.



Petersburg Railroad

Figure 11

South of Petersburg, Virginia 1894

(Source: USGS Quadrangle, Petersburg Sheet, 1894, reprinted 1917)

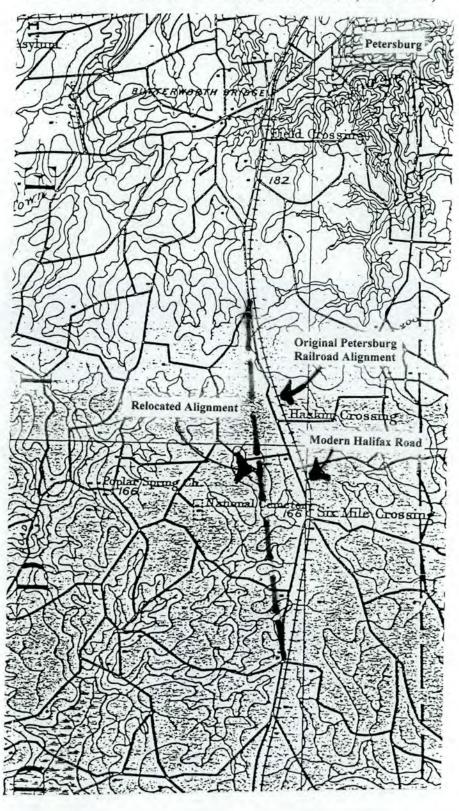
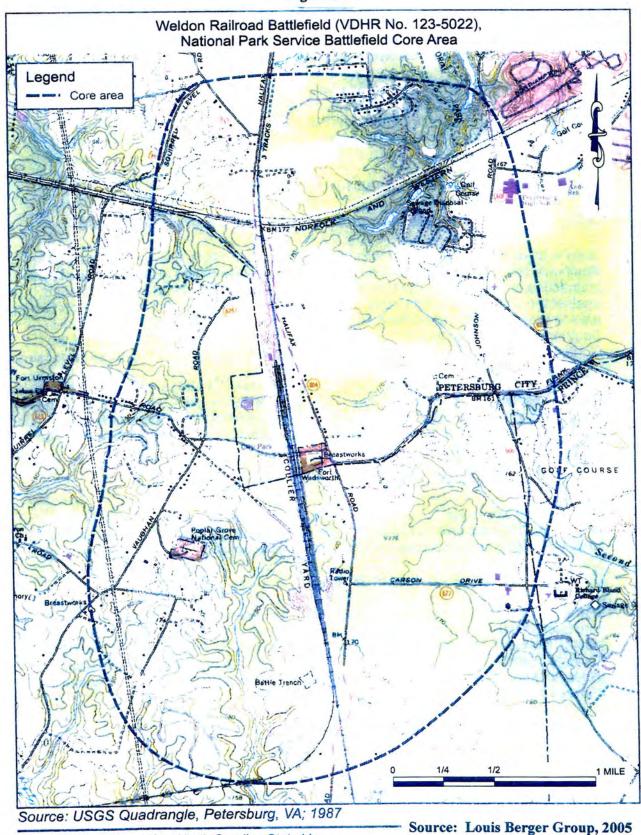


Figure 12



SEHSR Petersburg, VA to North Carolina State Line Archaeological & Architectural Survey and Evaluation, December 2005

BIBLIOGRAPHY

- The Advent and Development of Railroads in Iowa: 1855-1940. National Register of Historic Places, Multiple Property Documentation Form. 1990.
- Avers, Edward L. The Promise of the New South. New York: Oxford University Press, 1992.
- Bankhead Highway Historic District. National Register of Historic Places Nomination.

 Washington, DC: United States Department of the Interior, National Park Service, 1998.
- Bishir, Catherine. North Carolina Architecture. Chapel Hill: University of North Carolina Press, 1990.
- Bishir, Catherine W. and Michael T. Southern. A Guide to the Historic Architecture of Eastern North Carolina. Chapel Hill: University of North Carolina Press, 1996.
- ----. A Guide to the Historic Architecture of Piedmont North Carolina. Chapel Hill: University of North Carolina Press, 2003.
- Bishir, Catherine W., et al. A Guide to the Historic Architecture of Western North Carolina. Chapel Hill: University of North Carolina Press, 1999.
- Bradford, T.G. "Map of North Carolina." 1839. North Carolina State Archives, Raleigh.
- Buck, John E. "Map of Warren County." 1924. North Carolina State Archives, Raleigh.
- Bumbalough, Barbara Sinn. Come with Me to Germantown: Ridgeway, North Carolina, Revisited. Oxford, North Carolina: School of Graphic Arts, 1998.
- Calkins, Christopher. Chief of Interpretation, Petersburg National Battlefield, National Park Service. Interview with principal investigator. 14 March 2007.
- Chandler, Alfred D. The Visible Hand: The Managerial Revolution in American Business. Cambridge: Harvard University Press, 1977.
- Colton, G.W. "G. Woolworth Colton's New Guide Map of the U.S. and Canada." 1863. North Carolina State Archives, Raleigh.
- Colton, G.W. and C.R. Colton. "Map of the Seaboard and Raleigh Railroad." 1874. North Carolina State Archives, Raleigh.
- Dixie Highway—Hastings, Espanola and Bunnell Road. National Register of Historic Places Nomination. Washington, DC: United States Department of the Interior, National Park Service, 2005.
- Fuller, W.N. "Map of Franklin County." 1869. North Carolina State Archives, Raleigh.
- Gilbert, John. Compiler and Editor. Crossties Through North Carolina, The Story of North Carolina's Early Day Railroads. Raleigh: The Crossties Press, 1982.

- Goolsby, Larry. Correspondence with Richard Mattson. 6 October 2006. Forum. Atlantic Coast Line & Seaboard Air Line Railroads Historical Society, Inc.
- "Gray's Atlas Map of North Carolina." 1864. North Carolina State Archives, Raleigh.
- Griffin, William E., Jr. All Lines North of Raleigh: A History of the Seaboard Air Line Railway's Virginia Division. Richmond, Virginia: William E. Griffin, Jr., 1991.
- ----. Seaboard, The Route of Courteous Service. Lynchburg, Virginia: TLC Publishing, Inc., 1999.
- Hall, Delores A. Deputy State Archaeologist. Land Office of State Archaeology. North Carolina Department of Cultural Resources. Raleigh, North Carolina. Interview. 25 May 2007.
- Harris, James B. Engineering Manager. North Carolina Department of Transportation Rail Division. Engineering and Safety Branch. Raleigh, North Carolina. Interview. 19 October 2006.
- Hobbs, Vern. 21 January 2001. Forum. Atlantic Coast Line & Seaboard Air Line Railroads Historical Society, Inc.
- Johnson, Robert Wayne. Through the Heart of the South. The Seaboard Air Line Railroad Story. Erin, Ontario: Boston Mills Press, 1995.
- Kern, W.C. "Map of the R. & G. R. R. from Actual Survey." 1874. North Carolina State Archives, Raleigh.
- Kirby, Jack Temple. *Poquosin, A Study of Rural Landscape and Society*. Chapel Hill: University of North Carolina Press, 1995.
- Klein, Maury. "Southern Railroad Leaders, 1865-1893: Identities and Ideologies," *Business History Review* 1968, Vol. XLII, No. 3: 288-310.
- Klein, Maury and Kozo Yamamura. "The Growth Strategies of Southern Railroads, 1865-1893," Business History Review 1967, Vol. XLI, No. 4: 358-377.
- Lally, Kelly A. The Historic Architecture of Wake County, North Carolina. Raleigh: Wake County Government. 1994.
- Lincoln Highway. National Register of Historic Places Nomination. Washington, DC: United States Department of the Interior, National Park Service, 2003.
- Logging Railroad Resources of the Coconing and Kaibab National Forests, Arizona. National Register of Historic Places Multiple Property Documention Form. Washington, DC: United States Department of the Interior, National Park Service, 1995.
- Louis Berger and Associates, Inc. Excavation of the Raleigh and Gaston Railroad Roundhouse, Raleigh, North Carolina. Prepared for North Carolina Department of Administration, State Construction Office. Raleigh. 1990.

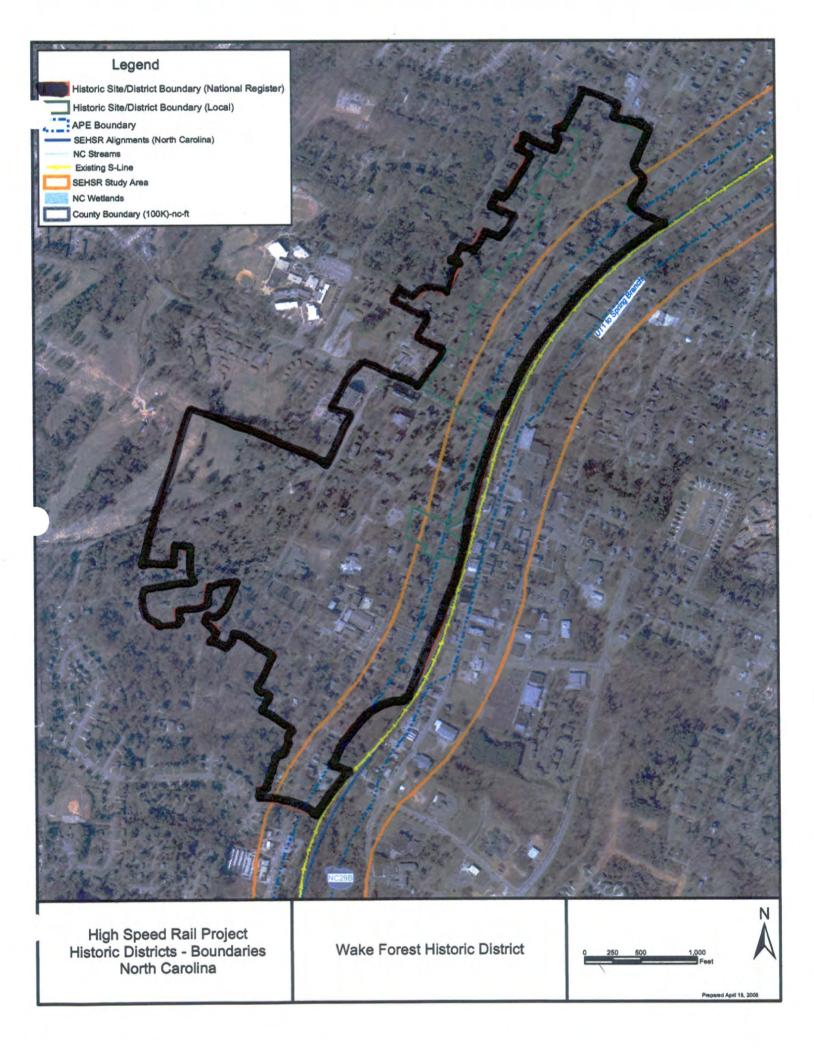
- The Louis Berger Group, Inc. Archaeological Survey and Architectural Survey and Evaluation, Southeast High Speed Rail Corridor. Vols 1 and 2. Prepared for the North Carolina Department of Transportation, Rail Division, and Buck Engineering, Inc. Raleigh. March 2005.
- Mattson, Alexander and Associates, Inc. Phase II Historical Architectural Survey and Evaluation, Southeast High Speed Rail Corridor. Prepared for the North Carolina Department of Transportation, Rail Division, and Buck Engineering, Inc. Raleigh. 2005.
- McFarland, Kenneth. The Architecture of Warren County, North Carolina, 1770s to 1860s. Warrenton: Warren County Historical Association, 2001
- Meinig, D.W. The Shaping of America: Continental America, 1800-1867. Vol. 2. New Haven: Yale University Press, 1993.
- Official Military Atlas of the Civil War. New York: Fairfax Press, 1891; reprinted 1983.
- Paschall, R.D. "New Map of North Carolina." 1863. North Carolina State Archives, Raleigh.
- Pearce, T.H. Early Architecture of Franklin County. Freeman, South Dakota: Pine Hill Press, 1988.
- Prince, Richard E. Seaboard Air Line Railway. Bloomington, Indiana: Indiana University Press, 2000.
- ----. Atlantic Coast Line Railroad: Steam Locomotives, Ships, and History. Green River, Wyoming: Richard E. Prince, 1966.
- Raleigh Planning Department. Early Raleigh Neighborhoods and Buildings. Raleigh: Raleigh Planning Department. 1983.
- Seaboard Air Line Railroad. "Corporate History Chart." 1938. Private Collections. North Carolina State Archives, Raleigh.
- Seawell, James. "Committee on Internal Improvements Report, 1833." In Jack Claiborne and William Price, ed. Discovering North Carolina: A Tar Heel Reader. Chapel Hill: University of North Carolina Press, 1990.
- Stover, John F. *The Routledge Historical Atlas of the American Railroads*. New York: Routledge, 1999.
- ----. American Railroads. Chicago: University of Chicago Press, 1961.
- ----. The Railroads of the South, 1865-1900. Chapel Hill: University of North Carolina Press, 1955.
- Trelease, Allen W. North Carolina Railroad, 1849-1871, and the Modernization of North Carolina. Chapel Hill: University of North Carolina Press, 1991.
- Trudeau, Noah Andre. The Last Citadel: Petersburg, Virginia, June 1864-April 1865. New

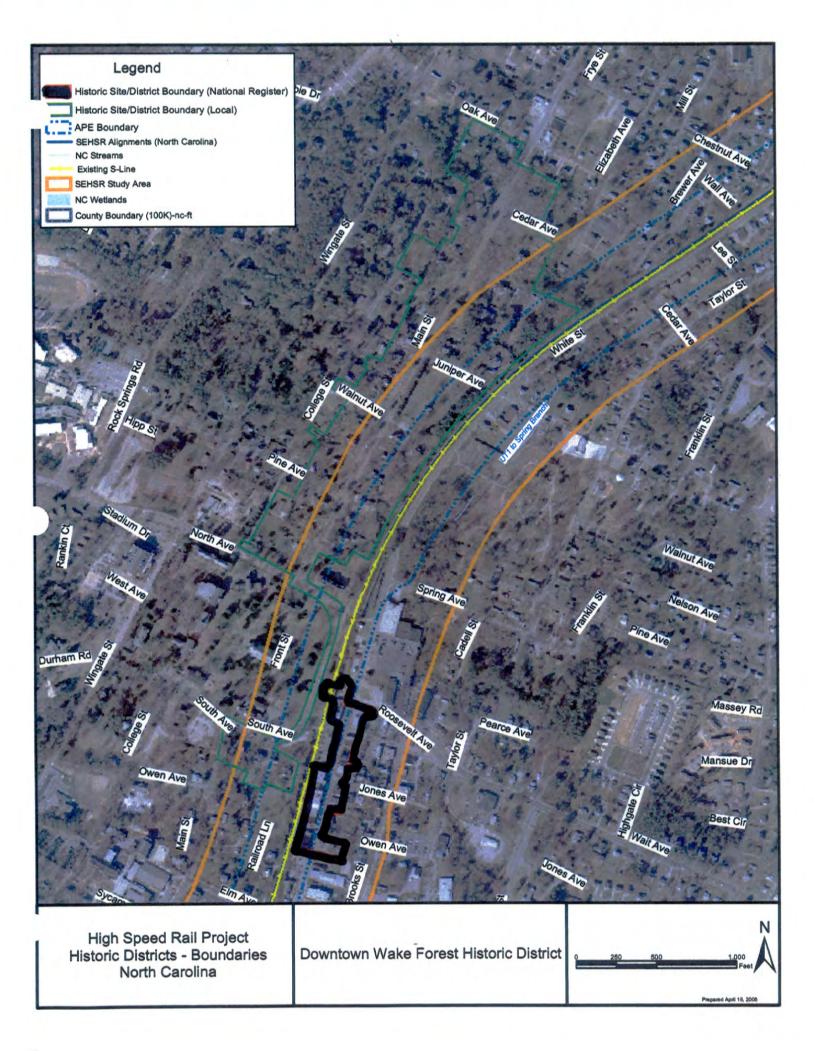
- York: Little, Brown, and Company, 1991
- Turner, Charles W. Chessie's Road. Richmond, Virginia: Garrett and Massie, Inc., 1956.
- Tyler-McGraw, Marie. At the Falls: Richmond, Virginia, and Its People. Chapel Hill: University of North Carolina Press, 1994.
- Vance, James E., Jr. The North American Railroad: Its Origin, Evolution, and Geography. Baltimore: Johns Hopkins University Press, 1995.
- Ward, James. A. Railroads and the Character of America, 1820-1887. Knoxville: University of Tennessee Press, 1986.
- Willard, George-Anne, ed. *Franklin County Sketchbook*. Louisburg, North Carolina: Franklin County-Louisburg Bicentenary Committee. 1982.

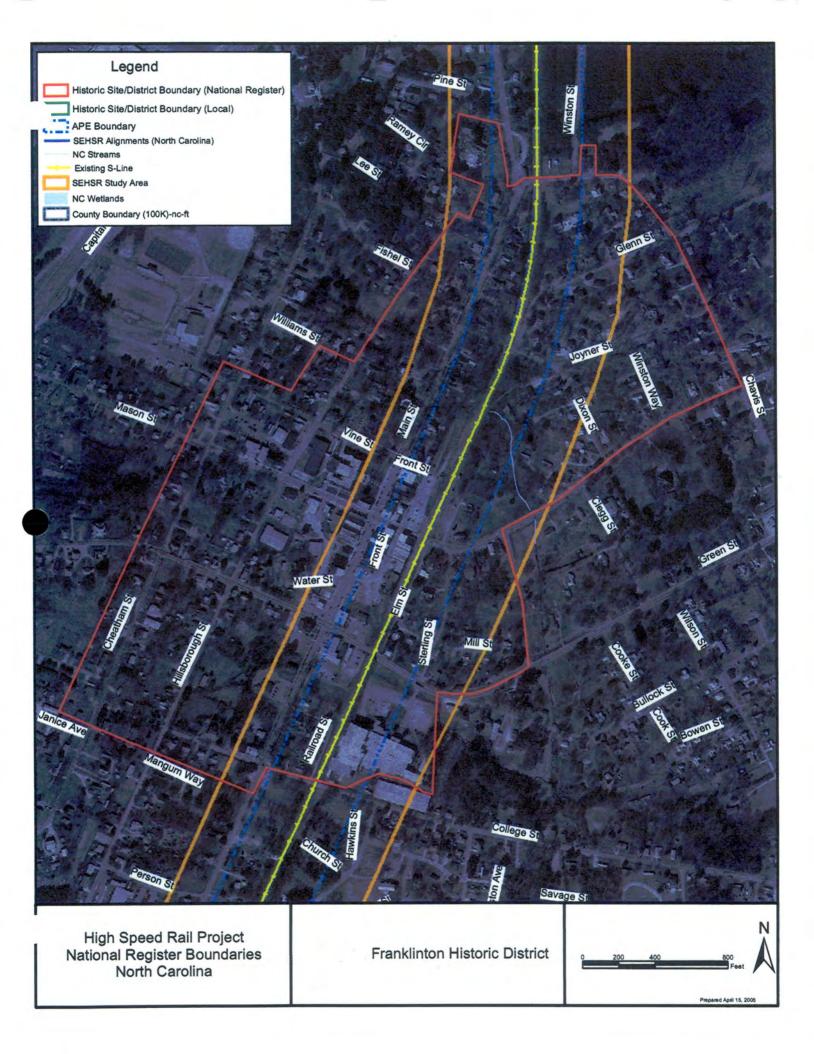
APPENDIX A:

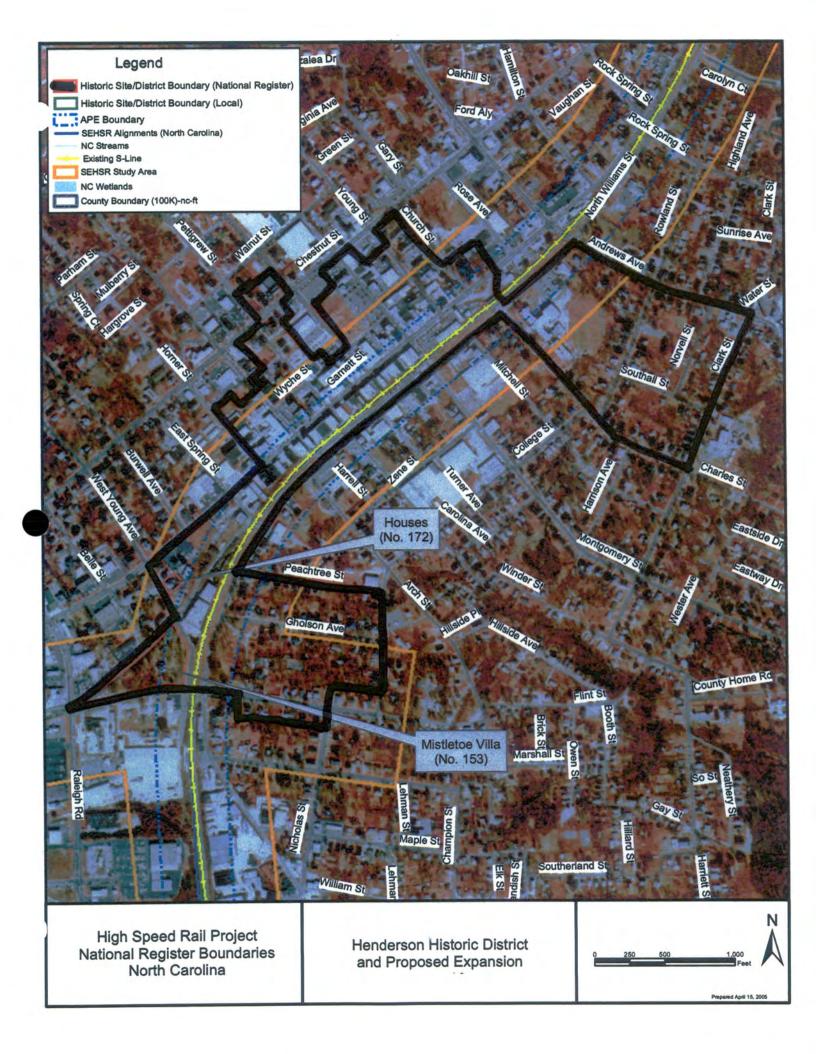
HISTORIC DISTRICT BOUNDARY MAPS

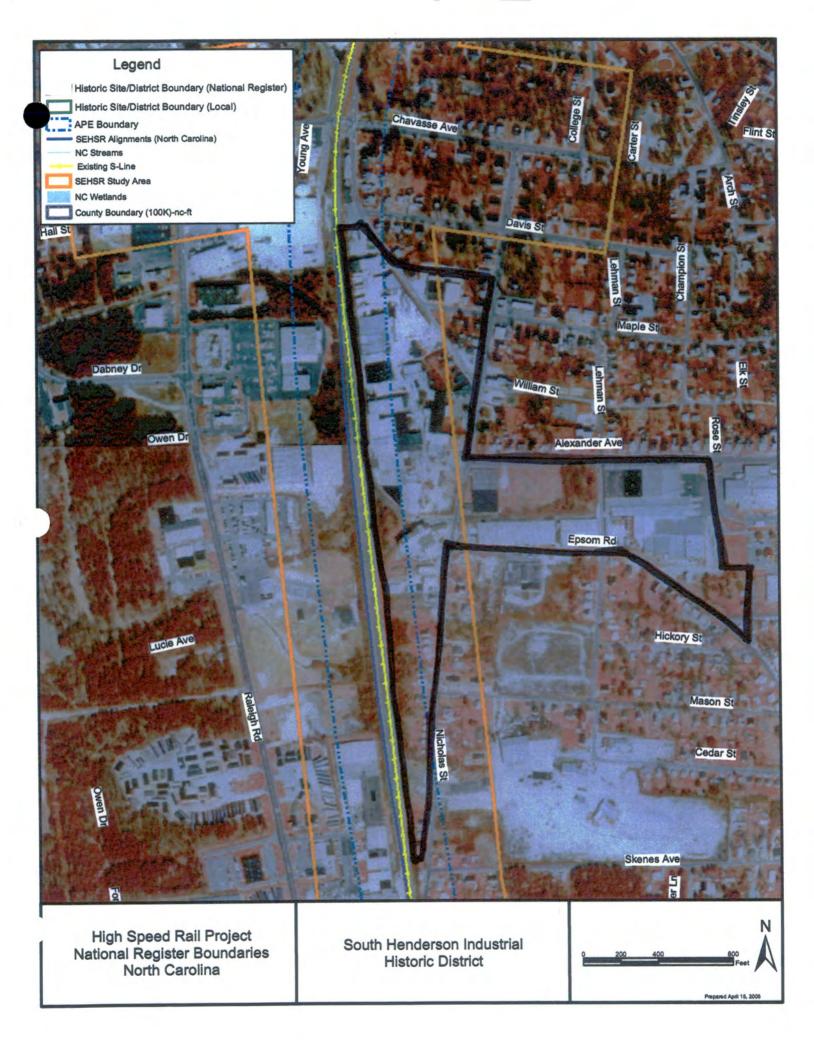
Wake Forest Historic District (National Register)
Downtown Wake Forest Historic District (National Register)
Franklinton Historic District (D.O.E.)
Henderson Historic District and Proposed Expansion (National Register)
South Henderson Industrial Historic District (D.O.E.)











APPENDIX B:

PROFESSIONAL QUALIFICATIONS

Frances P. Alexander Architectural Historian

Education		
1991	M.A. American Civilization-Architectural History George Washington University Washington, D.C.	
1981	B.A. History with High Honors Guilford College Greensboro, North Carolina	
Relevant Wor	Experience	
1991-date	Architectural Historian, Mattson, Alexander and Associates, Inc. Charlotte, North Carolina	
1988-1991	Department Head, Architectural History Department Engineering-Science, Inc., Washington, D.C.	
1987-1988	Architectural Historian, Historic American Buildings Survey/Historic American Engineering Record, National Park Service, Washington, D.C.	
1986-1987	Historian, National Register of Historic Places, National Park Service, Washington, D.C.	
1986	Historian, Historic American Engineering Record, National Park Service, Chicago, Illinois	

Richard L. Mattson, Ph.D. Historical Geographer

Educa	tion	
1988	Ph.D.	Geography University of Illinois, Urbana, Illinois
1980	M.A.	Geography University of Illinois, Urbana, Illinois
1976	B.A.	History, Phi Beta Kappa University of Illinois, Urbana, Illinois
Releva	ant Work	Experience
1991-date		Historical Geographer, Mattson, Alexander and Associates, Inc. Charlotte, North Carolina
1991		Visiting Professor, History Department, Queens College, Charlotte, North Carolina
		Developed and taught course on the architectural history of the North Carolina Piedmont, focusing on African-American architecture, textile-mill housing, and other types of vernacular landscapes.
1989-1991		Mattson and Associates, Historic Preservation Consulting Charlotte, North Carolina
1988		Visiting Professor, Department of Urban and Regional Planning, University of Illinois, Urbana, Illinois
		Taught historic preservation planning workshop, developed and taught course on the history of African-American neighborhoods. The latter course was cross-listed in African-American Studies.
1984-	1989	Private Historic Preservation Consultant, Raleigh, North Carolina
1981-1984		Academic Advisor, College of Liberal Arts and Sciences, University of Illinois, Urbana, Illinois
1981		Instructor, Department of Geography, University of Illinois, Urbana, Illinois
1978-1980		Private Historic Preservation Consultant, Champaign, Illinois