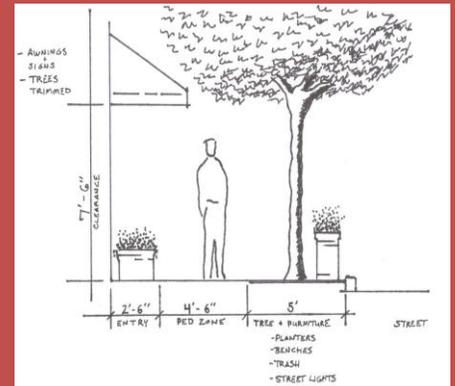


# Conover station

## MASTER PLAN





# Conover Station Master Plan Conover, North Carolina

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## Plan Purpose

The purpose of the Conover Station Master Plan is to tell the story of the site and create an instrument to guide the form of the future development. This plan seeks to provide clear guidelines and recommendations with the goal of creating a vibrant, mixed-use, infill project that will be a source of community pride for decades to come. New development should respect the character of the city by borrowing from the past, while also looking to the future.

## Principles of the Plan

The Conover Station Master Plan consists of four basic principles:

- I. Plan for the future, with a clear understanding of the past.
- II. Inclusive Transportation: Maintain and build upon the Downtown's pedestrian-friendly environment, embrace multimodal transportation and provide connectivity through the extension of the existing street network.
- III. Context Sensitive Building and Site Design: Incorporate building design standards that promote good urban form and intensify growth with compact, well designed, mixed-use development.
- IV. Be Green: Plan, implement and promote sustainable / green design practices and provide centrally located and accessible public open space for all citizens.

### Important note to the reader:

Recommendations by Staff will be made throughout the body of this plan and any of which may be in the form of text, picture or graphic illustration. For ease of reading this document you will see a  bullet illustration, for "recommendation" next to an important text recommendation of emphasis. Other reports related to analysis of the site have been outsourced by the City and authored by other qualified firms in their fields of expertise. Text from these reports will be referenced by a blue color and different font type.

**Principle I:**

**Plan for the future, with a clear understanding of the past.**

**General Site Information & Background**

The Broyhill Furniture factory that once employed over 400 workers closed its doors in 2004. In 2005, the City of Conover took a proactive approach in helping to insure the future vitality of the central business district by purchasing the 27 acre property in the heart of downtown Conover. Since 2005 the City has explored opportunities for the Broyhill Redevelopment area, which is now referred to as “Conover Station”.





### Chronology of Events

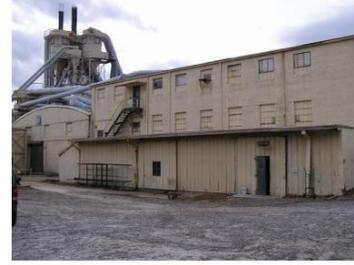
Since the purchase of the property Conover has worked diligently to lay the groundwork for improving the site. The timeline of the events are as follows:

1916-2004 Furniture and textile manufacturing operates on the site



2004 Broyhill Furniture Factory ceases operations

2005 Motivated by concerns of the potential blight that a deteriorating vacant factory in the downtown could create, the City of Conover purchased the property



2005 City initiates Phase I and Phase II environmental testing of the site for contamination

2006 City distributes 5000+ mailing of citizen survey to obtain public input. The survey was developed to gauge the public perception and vision for the site

2006 City hires architectural and structural engineering consultants to determine feasibility of rehabilitation of structures. Only two buildings are deemed feasible for rehabilitation; “Warlong Glove” and “Finishing Building”

2006 Site receives Brownfield eligibility

2007 City completes Brownfield analysis

2007 City applies for and receives \$735,000 in funding from HUD Economic Development Initiative Program to facilitate infrastructure improvements

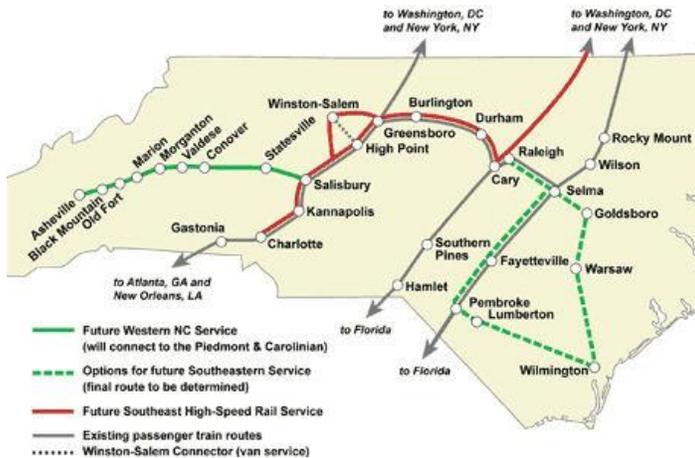
2008 City retains engineering firm to design infrastructure improvements



2008 City funds the demolition of the majority of buildings on the site minus the two buildings feasible for rehabilitation



2008 NCDOT Rail Division names site as the sole passenger rail station stop for Catawba County along the future Western North Carolina Corridor



2009 The Hickory Metropolitan Statistical Area (MSA) unemployment rate rose substantially from 8.5% in October 2008 to 15.6% in February 2009.<sup>1</sup> The Hickory MSA has the highest unemployment rate of any Metro area in North Carolina



2009 City applies and receives \$2,146,400 in funding from the Dept. of Transportation - Congestion Mitigation and Air Quality (CMAQ) program. Funding is dedicated to the rehabilitation of “Warlong Glove” building into a LEED certified, multimodal transportation center for passenger rail and bus transit



2009 City holds public workshop downtown to facilitate public involvement. Open house with maps, photos and information is displayed. Architect Don Tise presents overall plan and details of Warlong Building Rehab



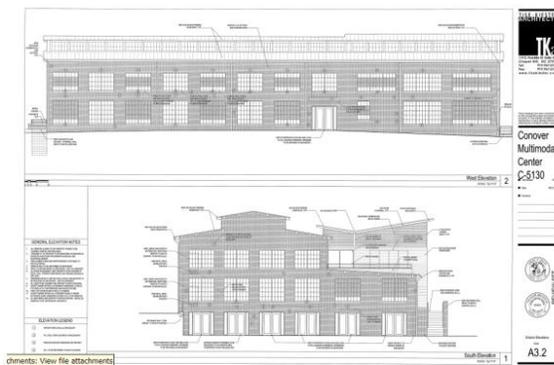
2009 A second public forum is held where information is shared and comments/questions are taken

2009 Additional environmental testing is completed including soil vapor intrusion study

2009 City applies and receives \$200,000 in funding from the Environmental Protection Agency. This funding will facilitate the clean-up of contamination on the site



2009 City retains architectural firm to complete design of the rehabilitation of the Multimodal Center



2009 Focus groups are held with community stakeholders and public surveys are distributed and made available online to solicit public input

2010 City enters into Brownfield agreement with the North Carolina Department of Environment and Natural Resources. The property is officially designated as a Brownfield Site

2010 On-site construction begins on streets, water and sewer infrastructure

2010 Rehabilitation and construction begins on Multimodal Center

2010 Work begins on clean-up of contaminated soil on-site



## History of the Site



This history of this property tells a story and helps to illustrate a powerful example of the industrious nature, not only of Conover citizens, but the people of the greater region. Manufacturing has long been a mainstay and way of life for the area. Over the past century this site has served that purpose.

In 2007 the City of Conover enlisted Acme Preservation to conduct “Historic Architectural Resources Survey Report and Intensive Identification and Evaluation”. The following excerpts are from that study:

Conover’s favorable location at the junction of two railroad lines and several significant early roads, attracted merchants and tradesmen in the late 1870s and 1880s. Even with a population of less than 500, Conover claimed general stores, a blacksmith, a doctor, carpenters, and a drug store.

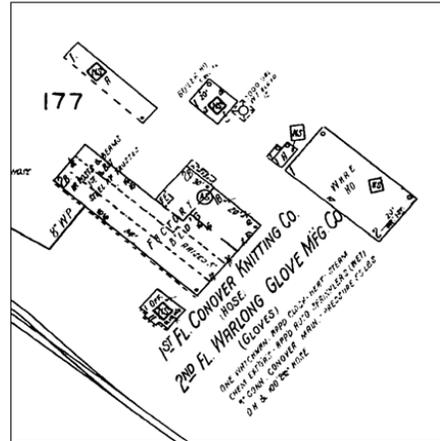
The opening of manufacturing plants to process wooden products proved to be a significant impact on the area in the nineteenth-century. In the same way that the production of cotton as the county’s chief cash crop spurred the development of textile, hosiery, and knitting mills, new wood products provided another outlet for local timber, which was most fully realized in the local furniture industry.

The site’s manufacturing history began with the Warlong Glove Manufacturing Company. The founder of which was Adrian L. Shuford, Sr., a significant local business leader and industrialist. The original frame building was erected around 1918 by Adrian L. Shuford, Sr., and Charles R. Brady, who purchased the Warlong Glove company in 1916 and moved it to this location from Newton, where the company had been founded by George A. Warlick, L. F. Long, and Robert B. Knox.

## Conover Station Master Plan



Warlong Glove Manufacturing Company Ca. 1935



Warlong Glove Manufacturing Company Building, Detail of Sanborn Map, Conover, NC, 1932 edition, sheet 18

Under Shuford's tenure, the Warlong Glove Manufacturing Company grew steadily into a notable manufacturer of work gloves. Six additions were made to the original building to accommodate the expansion of the business.

An additional mill building was subsequently constructed on the site to the north of the Warlong Building. The furniture mill was built ca. 1925 on the site of the old Hunsucker Picker Stick and Handle Factory. The mill was originally constructed in two parts—a cruciform factory building and a rectangular shipping and packing building. The shipping and packing building, which also housed a storage area and the varnishing operation on the second story, stood to the north of the main factory. According to the 1932 Sanborn maps a few other structures were located to the east, including a large lumber shed, chemical storage, dry kiln, boiler house, and other storage buildings. In the 1940s, following the purchase of the facility by James Edgar Broyhill's Lenoir Chair Company, the Conover Furniture Company buildings were substantially remodeled, enlarged, and interconnected.



### Historic Sites Nearby

Adjacent Historic Sites include the eleven-acre Bolick Historic District (NR, 1990), which straddles Conover's busy First Avenue (NC 16) on the south side of US 70. The district contains the remaining buildings of the Jerome Bolick & Sons Company buggy works and four houses built for members of the Bolick family. The original one-story, brick and stone buggy shop, built in 1883, represents the beginning of one of the town's important manufacturing companies and the oldest surviving industrial building in Conover.

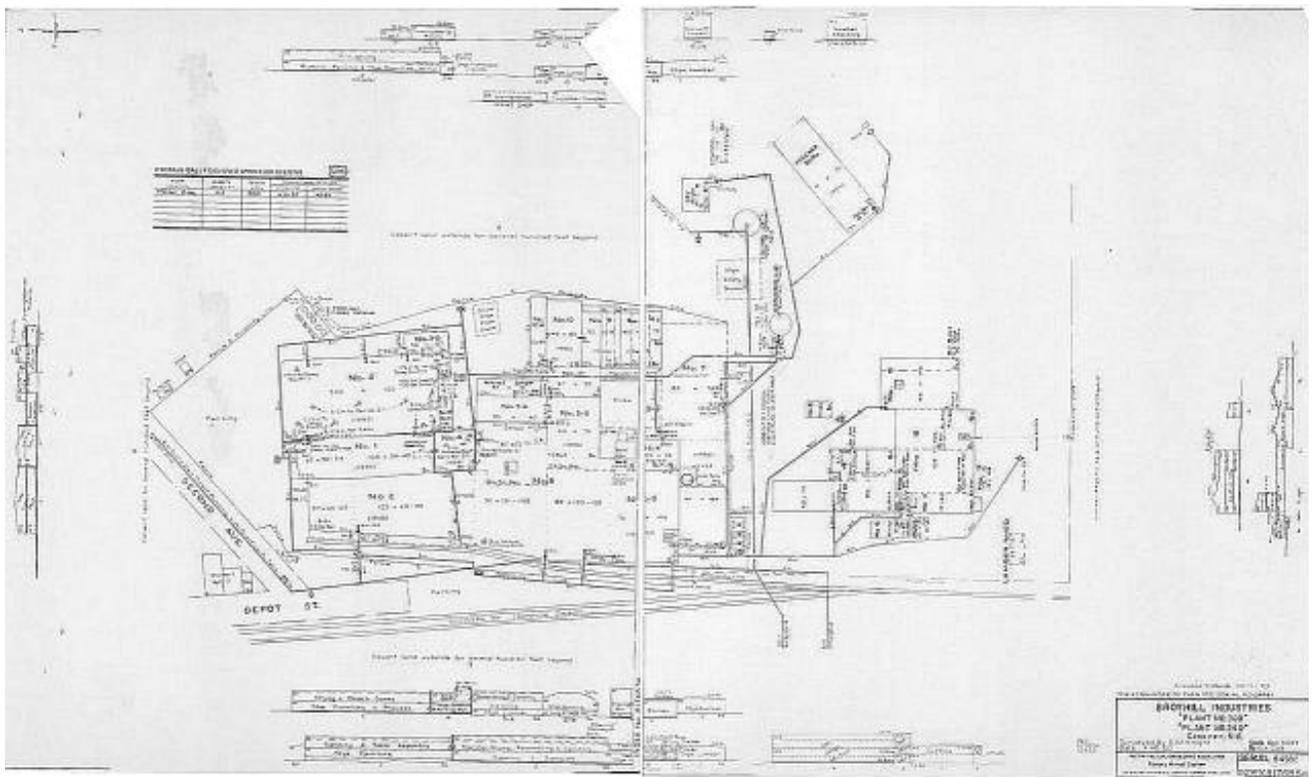
The study's purpose was twofold; to establish a clear understanding of the history of the site and to determine the sites National Historic Register eligibility. The following is the final evaluation from the report:

Acme Preservation Services, LLC (APS) conducted an intensive-level historic resources survey to evaluate the National Register eligibility of the Broyhill Conover Plant (CT 1083), comprised of the old Warlong Glove Manufacturing Company and Conover Furniture Company buildings. During the investigation, APS identified one additional historic resource located within the project boundary. The southernmost point of the legal boundary for the former Broyhill Conover Plant is located in the center of the Railroad Bridge (CT 1017) over US 70, which was documented during the Catawba County survey of historic architectural resources in the late 1970s and early 1980s.

The two historic architectural resources identified by APS during this project are recommended as not eligible for the National Register. The Broyhill Conover Plant is comprised of two earlier enterprises that were brought into the Broyhill company, a prominent furniture manufacturing conglomerate based in Lenoir, North Carolina, in the 1940s and 1950s. The Conover Furniture Company building, which was acquired by Broyhill in 1941, continued to produce furniture for Broyhill and was substantially altered and enlarged through the twentieth century. The changes to the building are not atypical for other industrial plants in the Conover-Newton area of Catawba County, but they are extensive. In the area of industry, the original companies, as well as the later Broyhill operation, played an

## Conover Station Master Plan

important role in the local economy, but lack any special defining significance among the numerous industrial plants located throughout Catawba County. The Broyhill Conover Plant does not possess the requisite significance and integrity for National Register eligibility. Similarly, the Railroad Bridge located at the edge of the property is an attractive example of a common bridge type and does not possess the requisite significance for National Register eligibility.



Broyhill Industries Survey Ca. 1960

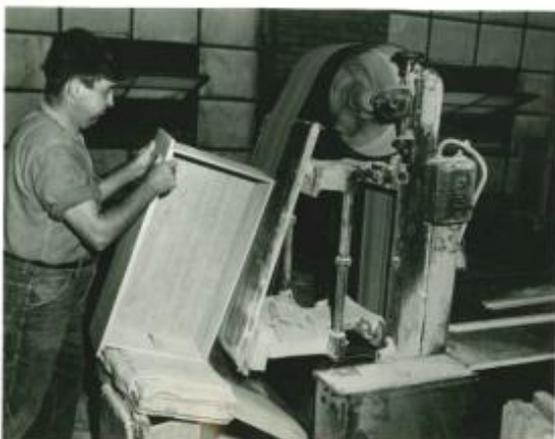
The Warlong Glove Manufacturing Company building, taken individually, is recommended as eligible for the National Register under Criteria B and C for its close association with founder Adrian L. Shuford, Sr., and its architecture. A significant local business leader and industrialist, the Warlong mill represents Shuford's primary business interest during his productive life. The Warlong mill building also retains a high degree of architectural integrity and stands

as one of the most intact mill buildings in the Conover-Newton area. The proposed National Register boundaries for the Warlong Glove Manufacturing Company building are delineated to include on the mill building itself and are generally defined by the paved and gravel driveways that circumscribe the building.

APS conducted the survey and prepared this report in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation (48 FR 44716); 36 CFR Part 60; 36 CFR Part 800; and the North Carolina State Historic Preservation Office manuals for historic resource surveys and National Register evaluation.<sup>ii</sup>

### Documenting History

In accordance with the stipulations of the Economic Development Initiative Grant from the Department of Housing and Urban Development the North Carolina State Historic Preservation Officer (SHPPPO) was required to review and comment on the "Historic Architectural Resources Survey Report and Intensive Identification and Evaluation". The Preservation Officer's findings were that if the City intended to demolish any portion of the buildings on site a "Recordation Plan" must be developed and a "Memorandum of Agreement" must be adopted between the City and SHPPPO. The Recordation Plan states that in connection with the rehabilitation of the Warlong factory the City shall "mount and maintain a public display(s) explaining the history of the site and its place in the community. The display for each project shall include, but not be limited to, the use of documentary photographs and appropriate text". This display must be reviewed and approved by SHPPPO prior to display.



At the public outreach forum held in March of 2009 the City requested that citizens of Conover provide any and all photos or memorabilia that could assist in documenting the history of the site. A number of citizens responded to the request by bringing boxes of old photographs and other items to City Hall.

- ④ The City should work with a graphic design professional or someone competent in the field to fully utilize the items provided by the citizens of Conover to develop an attractive and professional historic display for the Conover Station Multimodal Facility.



Examples of the interior historic demonstration / exhibit area within the City of Durham's recently rehabilitated passenger rail station.





## **Broyhill Mill Redevelopment Market Study: Warren and Associates**

In December of 2007 a market study was conducted by Warren and Associates of Charlotte, NC. The purpose of this study was to analyze the various local market conditions, area demographics, site and area amenities, development trends and other comparable mill redevelopment projects within North Carolina. The goal was to help establish a realistic understanding of the potential real estate uses that the site could support. The following are excerpts from the “Executive Summary”:

### **Strategic Direction**

The 27-acre Broyhill site is uniquely positioned in the Conover market. It functions as both a geographic link between the pedestrian-oriented historic downtown to the north and highway commercial/industrial uses along US-70 to the south, and also as a demographic link between middle- and upper-income neighborhoods to the east and lower-income neighborhoods to the west. While the site’s size and visibility support a number of prospective uses, its shape, access, and adjacencies will affect the viability of each alternative.

### **Light Industrial**

Purchasing the balance of the Broyhill block and developing a light industrial/flex business park would be consistent with the adjacent railroad, and neighbors along US-70 such as Rock Tenn and the lumber yard. It would also provide an opportunity to accommodate a mix of office, light industrial, and research uses in a market that has been focused on large manufacturing and distribution employers.

### **Residential**

The site’s primary residential potential is focused along 3rd Street NE facing the Concordia Church and School. Given the comparative isolation from Conover’s growth corridors to the north and east, and the lack of connectivity to established neighborhoods, new stacked-flat condominiums and townhouses would be difficult to sell. The presence of retail and civic amenities could generate some for-sale demand, but with an emphasis on live-work units between 2nd Avenue and the Warlong Glove building.

### **Retail**

The new NC-16 corridor is going to capture most of the new retail development in Conover and Newton over the next decade. This road offers a more direct route to I-40 for residents of the primary growth corridor east and north of



Conover. It is possible that some existing retailers such as Bi-Lo in the US-321 corridor in Newton will eventually gravitate to new centers on NC-16. Harris Teeter recently closed its only store in Newton. The new Wal-Mart Supercenter at NC-16 and I-40 will continue to attract "shadow" retailers. Additional centers could emerge at this interchange for junior anchors, as well as small shops and restaurants.

Downtown Conover offers an authentic alternative to the Wal-Mart experience, and the streetfront occupancy rate is now estimated at 95%, an exceptionally strong measure for a market the size of Conover. However, the new NC-16 is redirecting traffic that supports retail, and the downtown tenant mix is dominated by uses such as antique shops and religious organizations that generate minimal weekday pedestrian activity and sales. In order to generate more downtown traffic, destination restaurants and merchants will be vital to the area's success. Given the attractive streetscape along 1st Avenue and the availability of off-street parking, the area should be able to support one or two more full-service restaurants, as well as a coffee shop. A local farmer's market could also be pursued in one of the surface parking lots. The Broyhill site could accommodate restaurants and destination retailers that would generate more foot and automobile traffic on 1st Avenue. Even though the existing pedestrian connection is hidden and awkward, candidate chains could be identified as part of Phase II of this assignment. It is important to note that the absence of an interchange or at-grade intersection at US-70 and NC-16 Business precludes the southern portion of the site from being competitive for a supermarket or pharmacy.

### **Office**

The office market in Conover is very limited, and consists of Class B and C space. Reported rents of \$10 to \$12 per square foot would not justify single-use new construction. However, it could be viable above retail or in a live-work configuration.

### **Civic/Education/Arts**

Incorporating civic or cultural uses on the site would be one of the most critical success factors, providing the anchor(s) to attract residents from the surrounding market

area. However, these public or non-profit uses typically pay modest or below-market rents, with some form of subsidy required. Educational possibilities include a Charter School, as illustrated at two of the six comparable mill redevelopments, or an expansion of the Concordia Day School across 3rd Street NE. A school would be a mutually supportive neighbor for a library and other performing/visual arts operations. On-street parking could be allowed on 3rd Street NE adjacent to Concordia. A discussion with the co-Executive Directors of the United Arts Council of Catawba County revealed strong interest to provide visual artist studio and gallery space, as well as performance and rehearsal venues for grass-roots music and theater organizations in the Newton/Conover and Catawba areas. Unfortunately, noise from the Norfolk-Southern main line would be a deterrent for many performing arts groups on the Broyhill site, but potential opportunities include photography, pottery, painting, and dance studios. On-street parking for artists and students could be allowed on 3rd Street NE. An example of a civic use is the New Art School, currently housed in the Newton/Conover Civic & Performance Place (former Newton Elementary School building). The New Art School leases approximately 20,000 square feet from the Newton/Conover Schools for \$1 per year, with a 99-year lease. The space includes the school's auditorium for performances. Plans are underway to renovate a basement area. The school provides after-school classroom and performance space. It also houses the Green Room, a local theater company that could be a candidate for new or expanded space in the market.

### **Site Recommendations**

- Consider purchasing adjacent properties to square up the property and provide more opportunity for US-70 access. A primary problem with the site is its inability to "breathe" and connect with surrounding uses.
- Obtain commitments from the City to participate in infrastructure and site work to mitigate costs.
- Because demand will be driven largely by local residents and businesses, the City could also have to reconsider land values, contribute to vertical



- construction costs, and provide incentives such as master leases.
- Attempt to preserve the Warlong Glove building as a community icon and project anchor. Loss of profit could be offset by goodwill and support by area residents.
  - Consider adaptive re-use of the on-site Finishing Building.
  - Pursue historic tax credits as an option for the Warlong Glove and Finishing buildings.
  - Given the limited marketability for residential units along US-70, determine the impact of the stream dividing the southern half of the property on a potential new street connector to 3<sup>rd</sup> Street SE to serve commercial/light industrial uses.
  - In order to succeed as a mixed-use development, a stronger pedestrian connection to 1<sup>st</sup> Avenue downtown shops and offices will be required. This would involve additional property acquisition.
  - Even if a stronger downtown connection is realized, retail opportunities will remain focused on local merchants. Provide prominent corners for a coffee shop and one or two restaurants. Low traffic counts and inadequate NC-16 Business connectivity will preclude national retailer interest.
  - Conduct a more detailed Phase II analysis to determine site-specific opportunities for light industrial, residential, retail, and civic uses.
  - Evaluate impacts of the Norfolk Southern Railroad right-of-way, including potential rent claims by the Railroad on parts of the site.<sup>iii</sup>
- ④ Develop an understanding and benefit from some of the basic findings of the Warren and Associates report, but consider that the findings and recommendations were based on research and statistics conducted prior to the ongoing national recession and the challenging real estate market environment of today.

**Principle II:**

**Inclusive Transportation: Maintain and build upon the Downtown’s pedestrian-friendly environment, embrace multimodal transportation and provide connectivity through the extension of the existing street network.**

**Pedestrians Come First:**

For many, the word “transportation” brings to mind cars. There is no denying that automobiles remain the most popular and common mode of transportation, but are far from the only mode. Automobiles being the primary form of transportation for the majority of our population over the past several decades has not only shaped our everyday lives, but shaped our built environment. Automobiles have given us freedom of mobility, but that also comes at a high cost:

- Cost of automobile ownership and maintenance is estimated at 19.9% of the average American household income according the Bureau of Labor report “Consumer Expenditures survey 2004”<sup>iv</sup>
- The North Carolina Department of Transportation’s annual budget is \$3.9 billion dollars. Of that, \$957 million goes to highway maintenance and \$147.8 million goes to “Other Modes”.<sup>v</sup> A recent report by the non-profit “The Road Information Program” or TRIP, estimates that North Carolina will require an additional \$65 billion over the next 20 years, or face a crumbling, deteriorated road system.<sup>vi</sup>
- The national average drive-time to work is about 24.3 minutes. Americans now spend more than 100 hours a year commuting to work, according to the U.S. Census Bureau's American Community Survey. That's more than an average two weeks of vacation time (80 hours) taken by many workers during a year.
- A recent survey with over 1000 respondents conducted by the “Catawba County Aging Leadership Planning Project” indicated that the highest concern/need of the aging community is availability of transportation.
- More roads and more parking lots mean more impervious surfaces. More impervious surfaces contribute negatively to our area’s water quality by the pollutants from their runoff.
- More roads and parking lots also contribute significantly to “urban heat island effect”. For example, on a typical summer day sprawling Atlanta, GA is 10 degrees hotter than surrounding areas.



Do we

Build for Cars.....



Or,

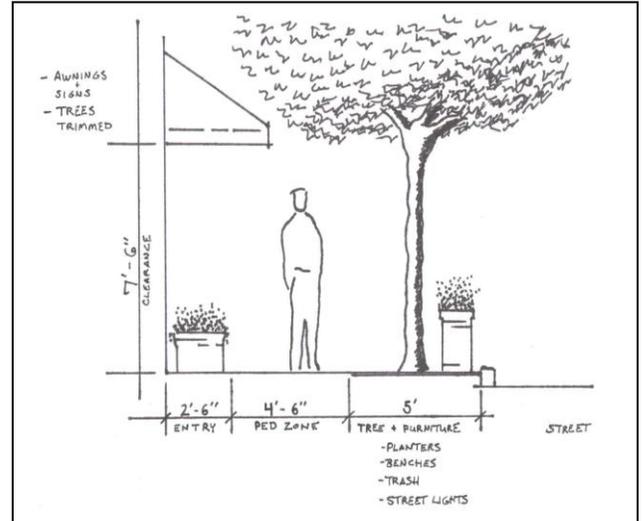
Build for People?

All of the aforementioned facts are but a snapshot of the symptoms that our “suburban” development pattern has provided us over the past 60 years. There was very different type of development before this time that cars became king. This was when downtowns as we know them were created. It is not then surprising that the majority of downtowns or older central business districts are almost always the most pedestrian friendly spaces in a City. This is due to the fact that essentially all downtowns were built before virtually every household had a car (or today, multiple cars per household), so naturally they are more scaled for pedestrians. Conover’s downtown is no different. Wide sidewalks, with street trees, planters and benches create a safe and welcoming pedestrian area. “Complete Streets” are streets that take all users in to account when being designed. The features listed below are all aspects of the complete street planning design.

- ④ New development plans should incorporate sound pedestrian design similar to what is currently in Downtown and promote pedestrian mobility
- ④ Streetscape and building that acknowledge and plan for alternative transportation such as bicycle and pedestrian traffic should be encouraged



**Sidewalks:**



Providing sidewalks for the project is perhaps the most obvious way to improve pedestrian access on Conover Station. By including sidewalks that are inviting, well-planned and accessible, people would be more inclined to walk to Conover Station. Sidewalks are always an important aspect of any dynamic public space. The sidewalks provide an opportunity for transportation, exercise and recreation.

- Ⓡ Sidewalks should be incorporated as an integral element of the Conover Station development along all new streets
- Ⓡ Sidewalks should also be integrated within any off-street parking lot

A goal of Conover Station is to be accessible to all residents of the area, including those who do not drive or do not wish to drive. As gas prices continue to rise more and more citizens will choose to walk to their nearby destinations. The sidewalks provided along all of the streets in the project will make for a safe journey for walkers.

Sidewalks also provide an opportunity for exercise. Walking is the simplest exercise people can do. It is easy, it does not require any special equipment, and best of all, it is free. Local residents who are looking for a good place to walk will find one at Conover Station. The sidewalks that are along the streets will form a loop that walkers will be able to enjoy. The sidewalks connect to existing sidewalks along 1<sup>st</sup> Avenue South and the Concordia Square area.

The sidewalk that enters Conover Station from downtown will be consistent with that of the downtown, being 10 feet in width.

- ④ The development pattern of the new street leading from the downtown should mimic that of the existing downtown. That means that buildings fronting along this street should have minimal setbacks.
- ④ The sidewalks should provide access for walking, window shopping, street trees, street furniture and entering or exiting the businesses along the street. The first few feet extending from the front of the buildings along the street can almost be viewed as an extension of the building itself.
- ④ To encourage a lively street atmosphere, cafes and restaurants should have the opportunity to place small tables and chairs outside without obstructing pedestrian travel. Some buildings will have awnings and place chairs in the shade. Adding street furniture makes the area feel welcoming to those passing by.
- ④ Building awnings and signs should be designed as to provide ample head clearance for the general public. In addition, street trees should also be trimmed to that consistent horizontal line.



The sidewalks that will be part of Conover Station should be included on the Carolina Thread Trail. The Carolina Thread Trail is a trail made up of greenways and sidewalks that will extend from South Carolina through 14 counties in North Carolina. The portion of the trail in Conover will take walkers down the Gateway Park along 1<sup>st</sup> St W through downtown past Downtown Park and then through Conover Station. Being included on this trail will make Conover Station a destination on the trail being used by people from all over North Carolina who might not otherwise come to the site.

- ④ Encourage and support the inclusion of Conover Station as a destination along the Carolina Thread Trail



## Crosswalks

In yet another attempt to improve pedestrian safety, Conover Station will have multiple marked crosswalks. Crosswalks are important because they encourage pedestrian street crossings at distinct and planned points which make for safer streets for both motorists and pedestrians. The crosswalks at Conover Station should be marked with a different material than the street so it is obvious to motorists that they are approaching an area where pedestrians could be.

- Ⓜ It is preferable to use stamped concrete or a thermoplastic crosswalk so that they are easily seen and produce an exaggerated audible rumble that a motorist can hear and feel



Stamped Concrete crosswalk on 2<sup>nd</sup> Av NE



Thermoplastic crosswalk on 2<sup>nd</sup> Av NE

## Bulbouts / Curb Extensions

Bulbouts are a type of curb extension that provide multiple benefits to a street. When a bulbout is located at a crosswalk, it helps pedestrians to see around cars that are parked on the street while at the same time allows motorist to see the pedestrian waiting to cross. Bulbouts also shorten the amount of time a pedestrian is in the path of vehicles.



Bulbouts can also act as a traffic calming device by “choking” the street, or making it more narrow which causes motorists to slow down since they are navigating through an area with less room for error.

On-street parking will be utilized all over Conover Station and that is another area where bulbouts can be successfully used. Bulbouts can act as starting point for an on-street parking strip. In the picture below taken from 3<sup>rd</sup> Av SE, the bulbout at Concordia church starts the angle of the on-street parking while also protecting the first car.



Bulbout near Concordia Church at 5<sup>th</sup> St SE and 3<sup>rd</sup> Av SE

- ④ Use bulbouts / curb extensions at every feasible crosswalk and street intersection location and locations where on-street parking is present.

### Median

A median is going to be used on Conover Station SE. The median is going to serve several purposes. There will be on-street parking spaces on the street which means cars will be backing out into traffic when leaving. Placing a median in the road helps the driver not to have to worry about traffic coming from both directions. The median will have trees and planting areas which will only add to the green space of the site. Lastly, the median will serve as a refuge space or “halfway point” for pedestrians crossing the street. A pedestrian can cross the east-bound lanes and then wait in the median for the west-bound lanes to clear.

- ④ Plant trees in the median that will grow tall and have a significant canopy to create a tunnel-like feel entering Conover Station.



## Street Trees

Similar street trees to those already on 1<sup>st</sup> Av S will be continued onto the Conover Station site. Street trees tend to be underappreciated for all that they provide to a streetscape. Aesthetically speaking, street trees can “soften” an urban area by adding much needed green plant life. They provide significant increases in real estate values, create attractive settings for commercial businesses, and improve community neighborhood appeal. A tree-lined commercial street entering Conover Station from 1<sup>st</sup> Av S will create a sense of place that is unique but at the same time compliments the existing downtown. They provide a canopy, thereby creating shade for sidewalks, buildings and parking lots. Due to a concentration of a variety of infrastructure and uses along any given street, the placement and species of trees should be carefully planned.

- ④ Placement: Trees should be placed between the street and sidewalk. This provides optimal overhead canopy to the street and sidewalk area, as well as providing a psychological and physical safety buffer between cars and pedestrians.
- ④ Spacing: In accordance with the Conover Zoning Ordinance requirements for street trees along new streets, all trees should be spaced at approximately forty (40) feet apart.



- ④ Type: The *Zelkova serrata* or *Japanese Zelkova* is considered an excellent street tree due to its pyramidal growth pattern which means limbs grow upward, reducing obstruction with cars, pedestrians and street sweepers. This upward growth pattern also greatly reduces, if not eliminates the need to trim and perform repetitive maintenance. They are a recommended street tree by the North Carolina Department of Forest Resources and are recommended for use on City Streets where no overhead utility lines exist (smaller pyramidal species, such as Carolina Cherry Laurel should be used where overhead utility lines are present).



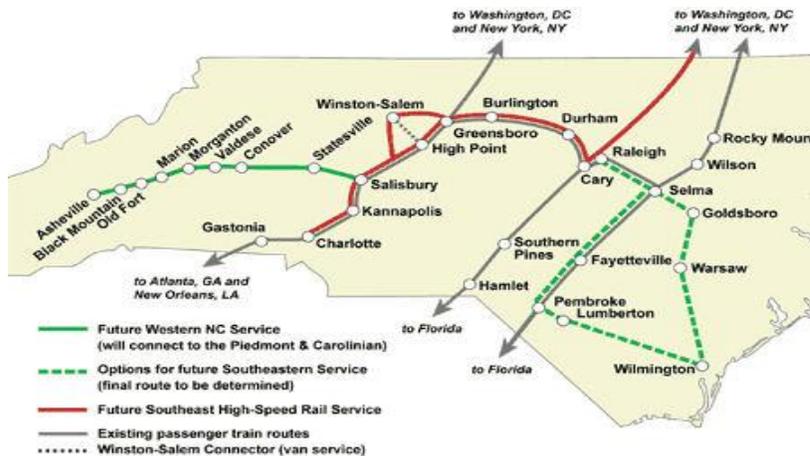
Some of the benefits of street trees are easy to see and appreciate but some others are a little harder to recognize. For instance, street trees also contribute to a healthier environment. One way trees do this is by reducing heat from the built environment and thus helping to reduce the urban heat island effect. The first way a tree does this is easy and obvious. Tree canopies create shade below by blocking the sun’s rays. Someone sitting in shade on a hot day experiences a much more comfortable rest than if they had to sit in the sun.

- Ⓡ Place street furniture such as benches, in areas where it will be shaded by a street tree.

## Public Transportation

### Passenger Rail:

Perhaps the most well known and publicized aspect of Conover Station is the future passenger rail stop that will be located in the rehabilitated Warlong Glove Building (Multimodal Center). Conover is the only stop in Catawba County on the Western North Carolina Passenger Rail Line which will connect Asheville to the west with Salisbury to the east. The map below, developed by NCDOT Rail Division, shows both existing and future passenger rail service in the State.



With the addition of the new rail service, a Conover resident could potentially walk to the train station and take the train from Conover to Charlotte, Raleigh, New York City, Washington D.C. or Atlanta. Conover has been an outspoken champion and advocate for bringing passenger rail back to western North Carolina and has dedicated funding and resources toward that goal.



- ④ City Staff should work with NCDOT Rail Division toward the design of the passenger rail platform and any other associated infrastructure required to support future rail service.
- ④ The City should seek additional opportunities toward the funding of such infrastructure.



Conceptual Rendering of Multimodal Station

## Greenway Public Transportation

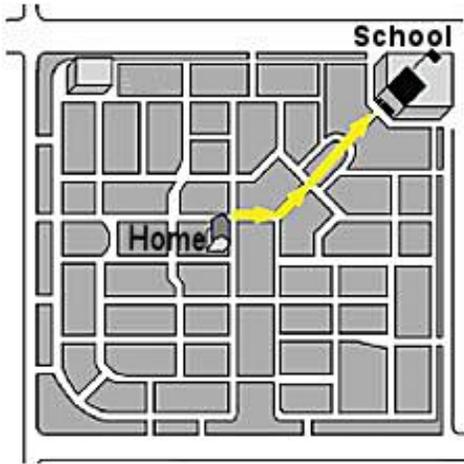


The Greenway Public Transportation System is the local fixed route bus and van shuttle system for the region. The Greenway Public Transportation System provides almost 300,000 trips annually to the citizens of Alexander, Caldwell, Burke and Catawba Counties. Fixed bus routes can be found along the major corridors of Newton, Hickory and Conover, while the van shuttles provide service throughout the region. Ridership on the Greenway has been consistently rising so it is important to give access to the riders to Conover Station.

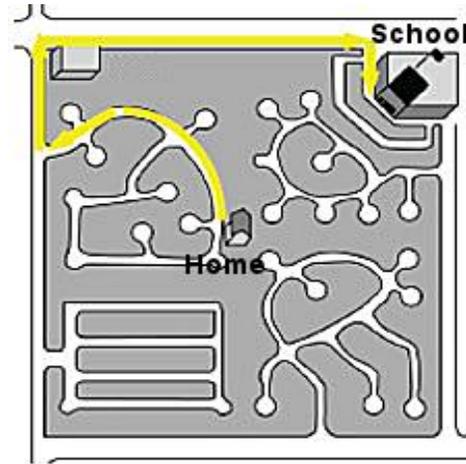
- ④ Encourage the Greenway Public Transportation System to incorporate a bus stop location on the Conover Station site and provide passenger waiting area and amenities at the Multimodal Station

## Street Network

The predominant style of street design in recent decades has led many cities to have a disconnected feel to them. Many residential neighborhoods were built with winding roads with cul-de-sacs or dead end streets without connections to adjacent developments or land uses. Many neighborhoods across the country have been designed with limited entrances and exits. This creates a sense of isolation. This may be perceived as a positive attribute to some residents, however it produces many negatives for the overall health of the street system and delivery of services. For example, this “collector” type of system would route many trips to a single collection point, not allowing alternative route options to a driver. The result is an entire neighborhood of drivers attempting to enter or exit their subdivision at one point, thus creating traffic congestion. On a larger scale, the same effect happens, and results in gridlock during peak traffic volume hours. Lack of connectivity in the street network has also been proven to reduce emergency services response times and increase other service costs related to water, sewer and sanitation pick up. Furthermore, street designs of this type create an auto-dependent development, with little or no hope for any future opportunities for non-auto related transportation.



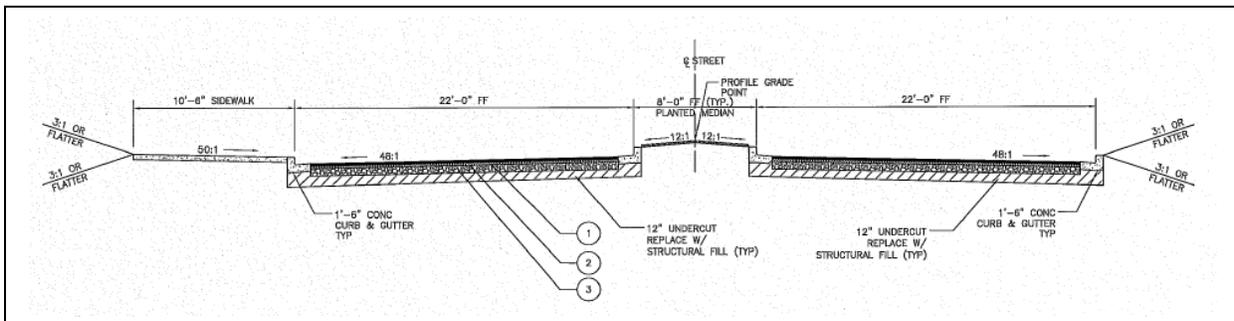
Street Network with good connectivity



Street Network with poor connectivity

“Connectivity” is a word that is commonly used to describe a more ideal street network. Connectivity refers to the density of connections in path or road network and the directness of links. A well-connected road or path network has many short links, numerous intersections, and minimal dead-ends (cul-de-sacs). As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more accessible and resilient system. Connectivity can apply both internally (streets within that area) and externally (connections with arterials and other neighborhoods). Having a connected street network leads to shorter commutes times and shorter trips in terms of miles traveled. Reducing time and distance of vehicle trips helps the local air quality by cutting down on the time an engine is running.

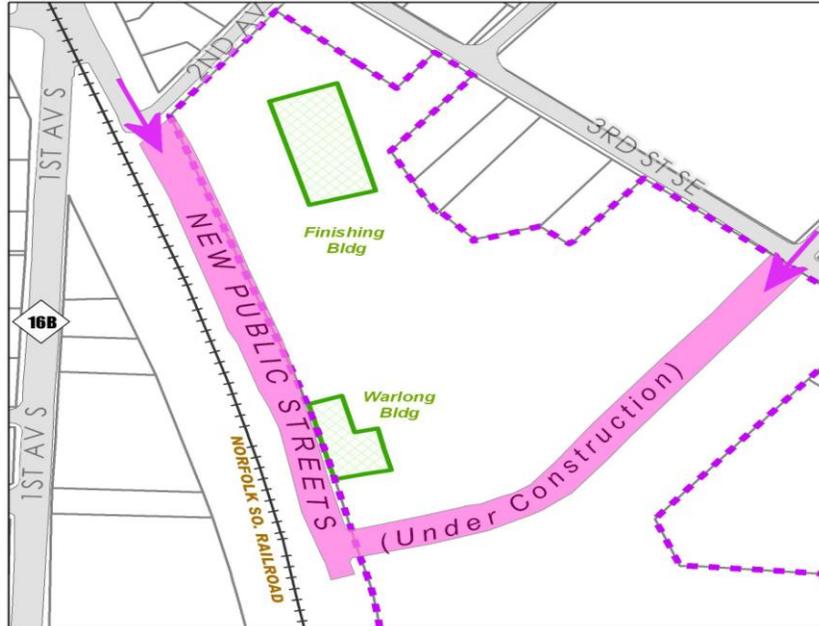
- Design and promote a connected street network that provides mobility option for motorists.
- Strategically plan driveway cuts to promote efficient traffic flow and provide pedestrian safety.



Example of Street Cross-section of Conover Station.



The future backbone of streets in Conover Station has been designed and is currently under construction. Following the principle of street connectivity this will create a loop that connects to 5<sup>th</sup> St SE and 4<sup>th</sup> St PI SE.



### Vehicle Parking

The primary concept of vehicular parking at Conover Station is to design and build for people, not for cars. “Parking lots do not sell goods, employ people or pay much in property tax. Businesses do.”<sup>vii</sup> As addressed in opening of this chapter, vehicles are the predominant mode of personal transportation and will be for the foreseeable future. However, with strategic planning and design the placement of vehicular parking lots and other infrastructure can be done as to not dominate the landscape. The following are recommendations regarding vehicular parking.

- ④ The street currently under construction has been designed to accommodate approximately 186 on-street parking spaces. This parking should be utilized to reduce the total number of off-street parking spaces required for future development on the site. This can be accomplished through the site plan review process, calculated individually based on the proposed use and is subject to the review of the Site Review Committee (SRC).
- ④ Any off-street parking lot abutting a street should provide a continuous screen between it and the street. This can be accomplished by masonry



or stone fencing at a height of three (3) feet. This could also be accomplished by landscaping, so long as the species utilized shall be a pre-approved evergreen and provide a minimum height of four (4) feet at maturity within 3 years of planting and shall be maintained as such.

- Ⓡ Any area of an off-street parking lot not dedicated to drive aisles, parking spaces or loading areas shall be landscaped.
- Ⓡ No parking lot shall comprise more than thirty (30) parking spaces without a contiguous landscaped island separation.
- Ⓡ Primary pedestrian routes through parking areas must be delineated by crosswalk material consistent with Conover’s approved on-street crosswalks within the development.
- Ⓡ Internal lighting of off-street parking areas and any associated pedestrian corridors shall contain a sufficient number of fixtures. Such fixtures shall be consistent with Conover’s approved on-street decorative lighting.
- Ⓡ Any alleys and off-street parking lots constructed at Conover Station should follow the principle of connectivity by providing driveway access between one another.
- Ⓡ Bioretention cells and rain gardens are encouraged within landscaped parking lot islands.
- Ⓡ A common /shared parking area within the heart of site should be explored with the possibility of public / private partnership, wherein future maintenance could be shared or conducted by the City. Individual private development could contribute to a “parking fund” that could be utilized for new parking lot construction and/or maintenance.



**Principle III:**

**Context Sensitive Buildings: Incorporate building design standards that promote good urban form and intensify growth with compact, well designed, mixed-use development.**

Downtown's Character



The identity of Conover is inextricably tied to its downtown. It is the area of our City most identified as our core and geographic center. Through the years the downtown has served as the center of history, culture, commerce and architecture. Ask any citizen where the “center” of Conover is and you will likely get the response “downtown”. But what makes Conover’s downtown unique? There are likely several answers to this question. It could be the local businesses, banks, City Hall, post office, the history, the accessibility, the density or that hard to define feeling of community support and nostalgia. One could say that any or all could be considered correct answers.

One answer is also the built environment of the downtown; that is to say the overall look, feel and functionality of the area. No other part of the City is built like the downtown. The sidewalks are wide, street trees give shade in the summertime, many buildings are two stories tall and built up to the sidewalk and cars can park along the street. All of these features contribute the overall feel and character of the downtown.

Principle III of this Master Plan helps to put into words and images those basic practices that created our downtown buildings (and other downtowns across the country) and will serve as a guiding document for future buildings that are built at Conover Station.

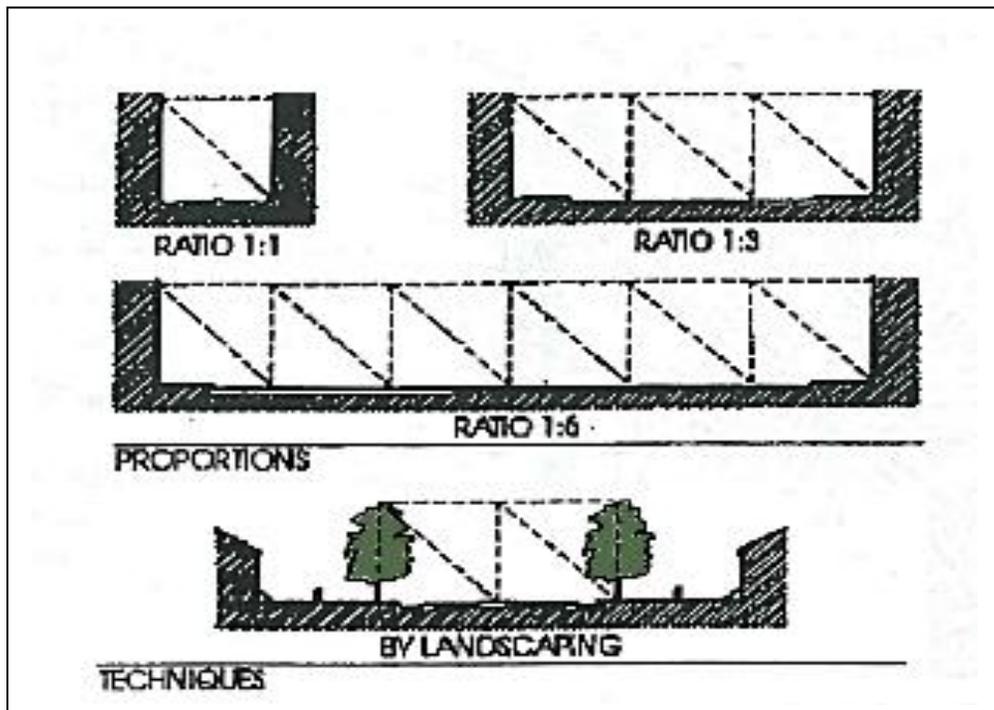


**Existing Conditions**

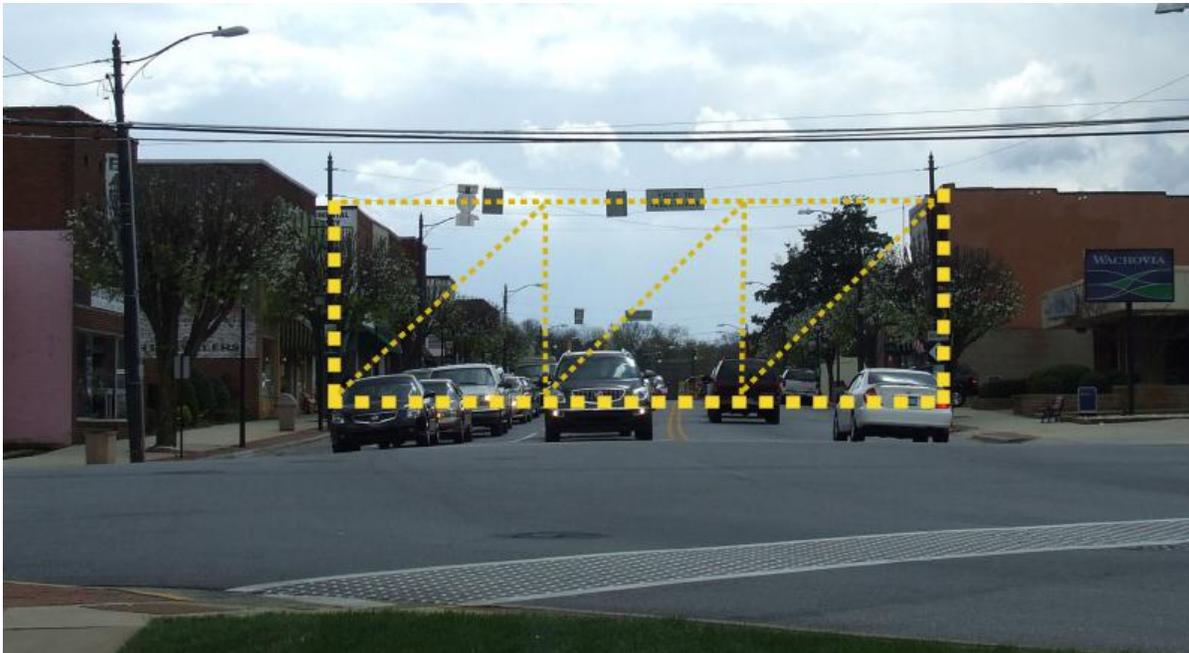
Many of the buildings in the downtown were built in the early to mid 20<sup>th</sup> century. A typical lot was subdivided with 25 feet to 50 feet in width with 100 feet of depth. Most buildings are built to the sidewalk, with a shopfront window and entrance and are served by an alley to the rear. Many buildings are two stories tall.

**Buildings Frame the Public Space of the Street**

First Avenue South, which could be considered “main street” of Conover is spatially defined by buildings. As the City “Zoning Ordinance” addresses this issue “...alignment and delineation of the public street space occurs when the facades of adjacent buildings are aligned much like the walls forming a room. Buildings that make up the street edges are aligned in a disciplined manner. The defined space observes a certain ratio of height to width. As a general rule, the tighter the ratio, the stronger the sense of place. As a general rule, 1:6 is the minimum perceivable ratio to people. The ratio of 1:3 is considered as being a good effective medium. Very tight relationships of 1:1 can create special pedestrian places.” See graphic below:



Graphic excerpt from Section 312.6.3 of Zoning Ordinance



The above is a picture of 1<sup>st</sup> Avenue South (downtown Conover), looking south from Conover City Hall. This image helps to illustrate the height to width ratio that is created with a typical downtown built environment.

- ④ Use building placement, height and mass to “frame” the streets of Conover Station.

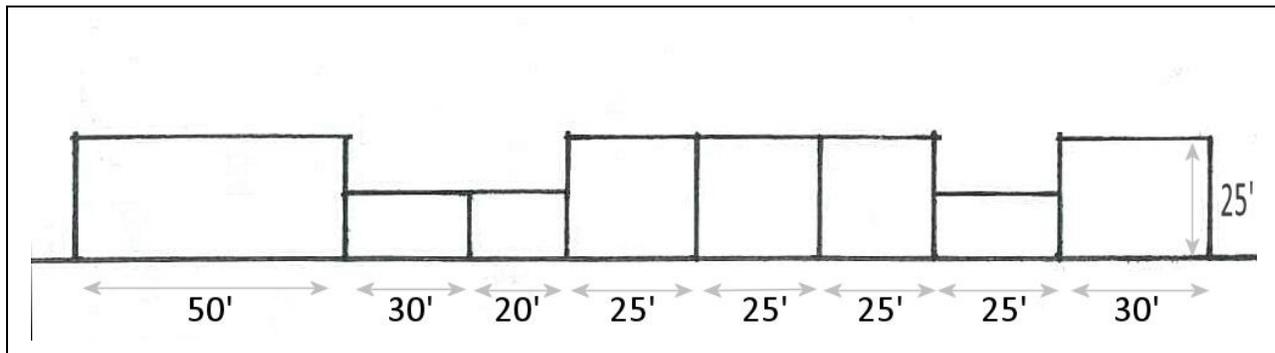


### Building Mass and Proportion

Along with “framing” the street, buildings also provide a presence on the streetscape. This presence is often tied to their “mass” or “proportion”. For the purpose of this plan we will consider the “mass” and “proportion” of a building to be its dimension or relation of height and width. This relation creates not only a presence and a feel for the building, but often times it directly affects the streetscape itself. The photos below were assembled to show approximately 230’ of eastern facing building elevations fronting on 1<sup>st</sup> Avenue South. There is varied massing of the buildings, however common proportions of windows and doors create continuity and visual harmony.



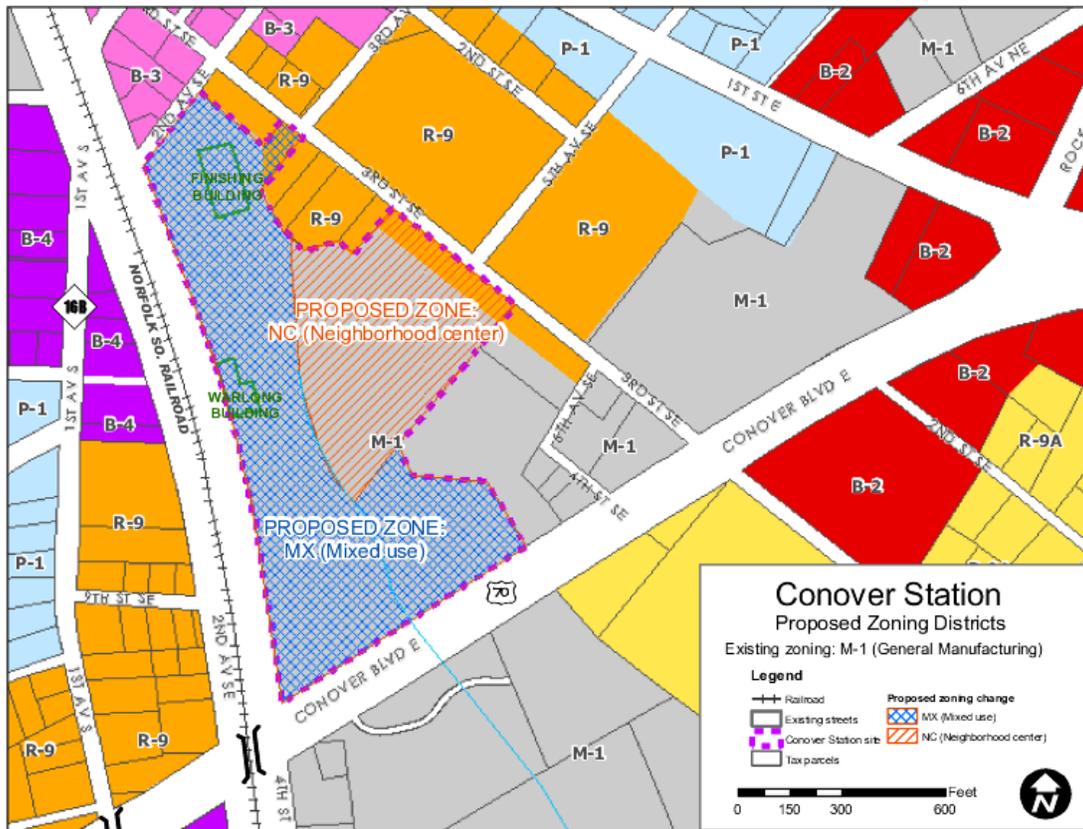
Downtown shopfront buildings are traditionally 25’ to 50’ in width. Many are two (2) stories in height and feature storefront windows and doors. This example is not exclusive to Conover, as many downtown building across America have been developed in this style. This is the building style that is synonymous with downtown and often defines the heart of the community in which they are located. Extremely functional, these structures were often designed to have commercial activities in the lower floor and residential accommodations on the upstairs floor. Below is an approximate scale illustration of the above buildings.



The purpose of the above diagram is to illustrate the height and width proportions of this type of building and how we can integrate this type of development into new structures constructed on the Conover Station site.



- ① New commercial buildings are encouraged to conform to the “Shopfront” style of flat-roofed structures throughout the existing downtown.
- ① New commercial buildings are strongly encouraged to be two or three stories in height.
- ① New buildings should not have expanses of blank walls. Such buildings should have architectural treatments at a spacing of no greater than 25’ per wall face. Treatments shall include, but are not limited to projections of building materials vertically from lowest grade to highest parapet or roof line, variations in building materials, windows, awnings, etc. The purpose is to avoid monotony and recreate the varied, yet consistent architectural style of the existing downtown.
- ① Masonry is strongly encouraged to be the predominant building material.
- ① Metal siding, vinyl siding and unfinished concrete block should not comprise any wall face.
- ① Building architectural design and site layout should conform to the standards and provisions of the Conover Zoning Ordinance, Division 12. Traditional Neighborhood Development Zoning District Standards.
- ① The recommended zoning classification of the site should be Mixed Use District (MX), Neighborhood Center (NC) and Open Space (OS).





- Ⓜ These zoning district lines are intended to be flexible until such time as a planned unit development or site plan approval are established. It is understood that this flexibility is to be one hundred (100) feet and that it is the intent of the city council that such zoning amendments will be approved. Any boundary amendment over one hundred (100) feet will be reviewed on the basis of the proposal itself.

### Conceptual Modeling of the Site

Staff has utilized Sketchup® Software to create a virtual model of the site. This type of computer modeling has been utilized, almost from the inception of Conover Station, to help illustrate and present the vision of the site. Over the past few years Staff has presented these models to various audiences to show the long range plans for the site.

- Ⓜ Continue to utilize Sketchup, or other modeling software to present illustrations of the site concepts.

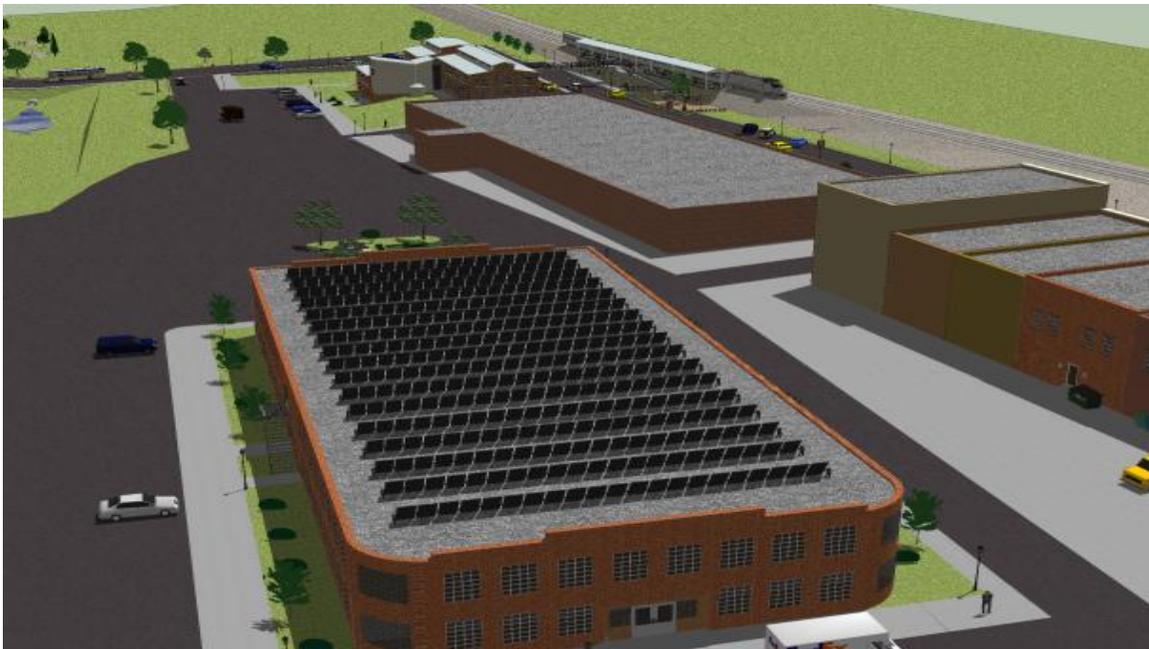
The following examples of images from the conceptual modeling used for the Conover Station Project.



Looking north, toward downtown, from the intersection of Conover Station SE and 5<sup>th</sup> Av SE.



Looking south from the downtown: The new street will have angled parking and building should be designed to respect the existing downtown.



This view shows the existing “Finishing Building” conceptually renovated with the “Multimodal Center” in the background. Between them is the future location for the common off-street parking for the site.



Looking toward downtown, this image helps illustrate the future improvements to the “Multimodal Center”, including the community room courtyard, off-street parking and associated sidewalks.



Along 3<sup>rd</sup> St SE, across from Concordia Church and School, buildings should be designed to respect the scale of adjacent development. Mature trees in this area should be protected.



**Principle IV:**

**Be Green: Plan, implement and promote sustainable / green design practices and provide centrally located and accessible public open space for all citizens.**

“Being Green” is a term we have heard a lot in recent years. It seems that everywhere we turn we hear the merits of being “green”. So what does it mean to be “green”, “sustainable” or more environmentally conscious? Is it defined by buying organic food, reducing your carbon footprint, recycling plastic bottles, not choosing paper or plastic at the grocery store, constructing green buildings, planting a tree, or driving a hybrid car? The short answer is yes, it could be any one of these things. When we say “green”, we are truly talking about “environmentalism”. Wikipedia states that:

“Environmentalism is a broad philosophy and social movement regarding concerns for environmental conservation and improvement of the state of the environment. Environmentalism and environmental concerns are often represented by the color green.”

This Chapter seeks to illustrate where Conover can play its part and be “green” when moving forward with the Conover Station project. The following pages will highlight Conover’s past, present and future “green” actions related to the planning and development of Conover Station.

Throughout the planning for the redevelopment of the site, Conover has strived to promote sustainable design and development and be an outspoken steward of the environment. We are promoting alternative modes of transportation by rail and public transit, coordinating smart land use policies through infill development and creating a more walkable city. A goal of the Conover Station project is to show that sustainable and responsible development can occur without degrading the environment or compromising the environmental or cultural landscape.



**Environmental Analysis of the Site**



Pre-demolition - 2005



Post-demolition - 2009

As discussed in earlier portions of this plan, the Conover Station site was an active location for both textile and furniture manufacturing for over 70 years. Conover purchased the property in 2005 fully aware of this fact and aware of the fact that some contamination could be present in the ground. Over the past 6 years numerous environmental tests have been conducted on the site. The majority of these tests have been conducted by Mactec Engineering and Consulting, Inc. The tests have confirmed that some contamination exists on the site.

Title	Prepared by	Date of Report
Report of Phase I Environmental Site Assessment	MACTEC Engineering and Consulting, Inc.	August 9, 2005
Report of Phase II Environmental Site Assessment	MACTEC Engineering and Consulting, Inc.	November 2005
Report of Brownfield Environmental Site Assessment	MACTEC Engineering and Consulting, Inc.	May 25, 2007
Limited Site Assessment Report Addendum and Incident Closure Request	Mountain Environmental Group	March 16, 2009
Limited Site Assessment Report for UST Incident 27987 Naphtha Release	Mountain Environmental Group	April 7, 2009
Limited Site Assessment Report for UST Incident 27988 Varsol Release	Mountain Environmental Group	April 7, 2009
Report of Additional Environmental Assessment	MACTEC Engineering and Consulting, Inc.	July 29, 2009

Excerpt from Brownfield Agreement



## **Brownfield Site Designation**

Conover Station has been designated as a “Brownfield Site”. A Brownfield site is an abandoned or underused industrial or commercial facility where expansion or redevelopment may be complicated by real or perceived environmental contaminations. The following is an excerpt from the Environmental Protection Agency’s website that gives some background into the Brownfields program:

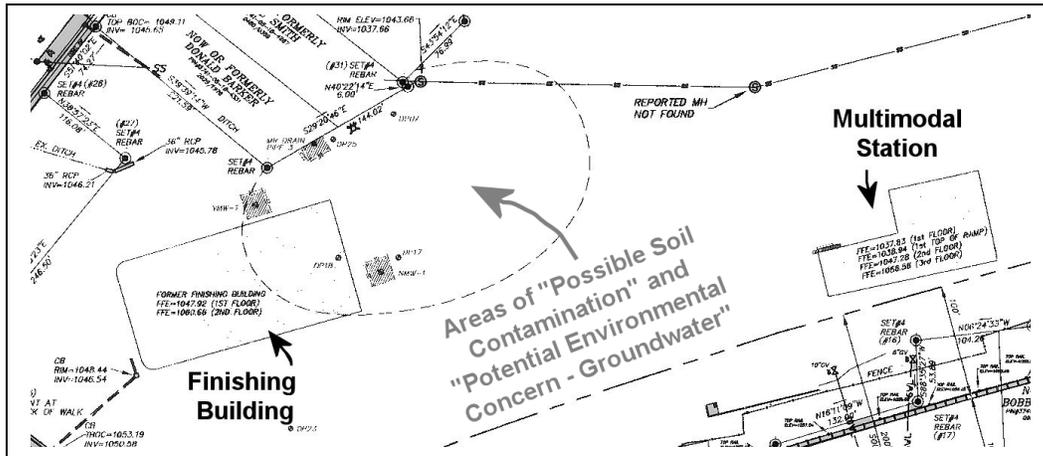
Since its inception in 1995, EPA's Brownfields Program has grown into a proven, results-oriented program that has changed the way contaminated property is perceived, addressed, and managed. EPA's Brownfields Program is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. It is estimated that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment. Initially, EPA provided small amounts of seed money to local governments that launched hundreds of two-year brownfield "pilot" projects. Through passage of the Small Business Liability Relief and Brownfields Revitalization Act, effective policies that EPA had developed over the years were passed into law. The Brownfields Law expanded EPA's assistance by providing new tools for the public and private sectors to promote sustainable brownfields cleanup and reuse.<sup>viii</sup>

The Brownfield designation of the site is the culmination of extensive work by City of Conover Staff, the City’s contracted environmental consultants and North Carolina Department of Environment and Natural Resources (DENR) staff. After environmental testing, analysis of the contaminants and potential land uses a public notice / comment period was held. Thereafter a Brownfield Agreement between the State of North Carolina and the City of Conover was signed on May 3<sup>rd</sup>, 2010. This agreement defines the areas of environmental concern on the site and contains land use restrictions that will be in place permanently.

The Brownfield Agreement also states “DENR expects Prospective Developer (the City of Conover) to evaluate, to DENR’s written satisfaction using the six areas incorporated into the US Green Building Council Leadership in Energy and Environmental Design certification (LEED) program (Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality and Innovation in Design), or using a similar program approved in writing



in advance by DENR, the potential for applying sustainability principles at the Property. DENR also expects Prospective Developer, where DENR deems it feasible and cost-effective based on the evaluation required by the preceding sentence and a Life-Cycle Cost Analysis using tools such as, but not necessarily limited to, those developed by the National Institute of Standards and Technology, to apply sustainability principles during all applicable phases of site redevelopment, as determined by DENR, including deconstruction, demolition, debris removal; site remediation; design and construction; and long-term stewardship activities.”ix



Excerpt from “Brownfield Property – Survey Plat”

### Environmental Remediation on the Site

In late 2009, the City of Conover was notified of receipt of an Environmental Protection Agency Grant. This grant, in the amount of \$200,000, is intended to assist in the remediation and clean up of the contamination existing on the site. City staff is working closely with the Land-of-Sky Council of Governments, the administrators of the grant and Mactec Environmental, the environmental engineers for the remediation project.



### **Infill + Brownfield Site = Recycling Land**

Over the last ten years, 1 million acres of open space in North Carolina has been lost to development—that's the equivalent of 100,000 acres per year.<sup>x</sup> This is the result of urban sprawl and the suburbanization of our countryside. This type of development devours prime agricultural land, forests and open spaces. Redeveloping underutilized parcels of land within the City has several benefits; Streets, water and sewer infrastructure already exist to serve the development, travel time by car to amenities is greatly reduced, if not eliminated, and undeveloped open space can be saved from development. Simply put, the Conover Station project will “recycle” land and the Brownfield designation will allow redevelopment on a site that would otherwise encounter development roadblocks due to the on-site contamination.

### **Repurposing = Recycling Materials on the Site**

In 2008 the City of Conover contracted the demolition of the majority of buildings on the former Broyhill Factory site. Through this demolition a great deal of materials were recycled.



All wood timbers from the demolished buildings that were over 6 feet in length and 5 inches in diameter were salvaged and recycled by the Bassett Mirror Company to build furniture.





## Repurposing Buildings

Conover has saved two buildings on the site that were considered candidates for renovation. One of which is the former “Warlong Glove”, which funding has been secured to rehabilitate into a multi-use, multimodal public building. The other building, the “Finishing Building”, is being considered for a variety of uses and the City is continuing to seek funding toward its renovation.



Former Warlong Glove, Constructed 1918



Former Finishing Building, Constructed 1945

## Salvaging Concrete, Block and Brick from the Site

As expected, the demolition of over 250,000 square feet of buildings resulted in a great deal of debris. Over the course of the demolition Conover sought to reduce the amount of materials that would find their way into landfills. The concrete foundations/pads, concrete blocks, bricks and asphalt were salvaged from the site. These materials were ground to a state suitable fill material for development on the site, as well as the road beds for the new streets currently under construction. The approximate amount of the material salvaged was 23,793 tons or 47,586,000 pounds!



## Conover Station Environmental Educational Park



It's a warm spring afternoon in Conover and people have come outdoors to enjoy the new City Park. Two children scurry down a walking trail and climb up on a large sculpture that looks like a turtle. Their mother, reading the nearby plaque, informs the children that this is an "Eastern Box Turtle" also known as *terrapene Carolina*, which is native to this area. Close by, a family is enjoying a picnic alongside a pleasant babbling stream that was specifically designed to treat urban stormwater runoff. They spot a colorful kiosk near the stream bank that educates passers-by to the water cycle, stormwater runoff and the importance of maintaining water quality in our local streams and rivers. Across the stream in a beautiful new open air pavilion, a local farmer is placing jars of delicious organic strawberry preserves on a table for sale at the weekly Conover Farmer's Market. This is Conover Station Park, a green and sustainable city park for the next generation.

The City currently has a grant application under review with the NC Clean Water Management Trust Fund to develop a "stormwater wetland" that will treat urban stormwater runoff, not only from this site, but for half of our current downtown. This park will serve as an example that an underutilized former manufacturing site can be converted to a vibrant, attractive, environmentally conscious park.



- ④ Conover should continue to pursue the Clean Water Management grant funding for the stormwater structure for the Park.

The North Carolina Parks and Recreation Trust Fund (PARTF) Grant that was intended to fund a portion of the park was not approved in 2009. Funding will be a challenge for the complete park vision to become a reality. With the current economic climate the North Carolina State Budget continues to be tight with reduced monies available to fund park improvements. The City of Conover's budget is no different and funding is limited, if not non-existent for park and recreational improvements.

- ④ Conover should develop a phased approach to develop the vision of the Conover Station Environmental Educational Park. This phased plan should include 3, 5 and 10 year goals with associated capital improvements budgeted.
- ④ Conover Station is anticipated to be located along the Carolina Thread Trail. The City should explore funding opportunities for trails from the Carolina Thread Trail.



Conceptual Rendering of Conover Station Park



## Green Buildings

The concept of “green building” is commonly understood as utilizing environmentally responsible and efficient practices and processes, not just during, or in the material used in the in the construction or rehabilitation of that building, but actions that will serve the building and its inhabitants for the life of that structure.

One of the major goals of green building is to reduce negative impacts to both the built and natural environment, while improving human health. Common practices include, but are not limited to the use of recycled materials in the construction, reduction in waste materials during construction, more efficient use of water, power and other resources and environmentally conscious site design.

## Leadership in Energy and Environmental Design (LEED)

In recent years, the U.S. Green Building Council (USGBC) has developed a voluntary, consensus-based national standard for the design of high-performance and sustainable buildings. In shaping these guidelines, representatives from across the building industry worked collectively to form what is known as “Leadership in Energy and Environmental Design” (or LEED) certification. These guidelines establish a universal standard of measurement that defines green building and stresses innovative plans for sustainable site development, resource savings and efficiency, building material selection and indoor environmental quality. According to the Green Building Council, LEED standards also seek to support integrated, whole-building design practices, recognize environmental leadership, and transform the building market by inspiring green competition and raising consumer awareness.

In order to achieve LEED certification, a project must earn credits based on six categories of performance: sustainable sites, energy and atmosphere, water efficiency, indoor environmental quality, materials and resources, and innovation in design. Building projects must earn credits to be eligible for certification. For new construction and land development projects, the decision to “go green” must be made in the very early stages of planning and be carried out through every stage –from initial groundbreaking to finishing interior touches. The various certifications based on the amount of points earned are as follows:

- **Certified**
- **Silver**
- **Gold**
- **Platinum**



According to a study conducted by McGraw-Hill Construction, a building's value increases by almost 8%, return on investment improves approximately 7% and occupancy ratio and rent ratio increases grow more than 3% when 'green' is a part of the equation. The United States Green Building Council (USGBC) projects that commercial green construction starts will grow approximately 10% in 2010, despite the general decline in construction. 43 states, 190 localities and 12 federal agencies or departments have policies or initiatives that include LEED certification.

The built environment has a profound impact on our natural environment, economy, health, and productivity.

In the United States alone, buildings account for:

- 72% of electricity consumption,
- 39% of energy use,
- 38% of all carbon dioxide (CO<sub>2</sub>) emissions,
- 40% of raw materials use, 30% of waste output (136 million tons annually)
- 14% of potable water consumption.

#### Benefits of Green Building

Environmental benefits:

- Enhance and protect ecosystems and biodiversity
- Improve air and water quality
- Reduce solid waste
- Conserve natural resources

Economic benefits:

- Reduce operating costs
- Enhance asset value and profits
- Improve employee productivity and satisfaction
- Optimize life-cycle economic performance

Health and community benefits:

- Improve air, thermal, and acoustic environments
- Enhance occupant comfort and health
- Minimize strain on local infrastructure
- Contribute to overall quality of life



### Conover Multimodal Station – A LEED Certified Rehabilitation Project

The rehabilitation and new construction of the former Warlong Glove factory into Conover’s Multimodal Station has been designed and planned as receiving LEED certification. The final level of certification is unknown at this time.

- Ⓡ Obtain the highest level of the U.S. Green Building Council’s LEED accreditation within reason for the Multimodal Station.



### LEED – Other Development on the Site

In addition to the LEED accreditation for the Multimodal Station, the approved and adopted “Brownfield Agreement” for the site includes language that states;

“DENR expects Prospective Developer to evaluate, to DENR's written satisfaction using the six areas incorporated into the US Green Building Council Leadership in Energy and Environmental Design certification program (Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality and Innovation in Design), or using a similar program approved in writing in advance by DENR, the potential for applying sustainability principles at the Property.”

- Ⓡ The City should encourage and give preference to future development on the site that incorporates LEED standards into building and site design.



## Resources

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- <sup>i</sup> Economic Indicators Newsletter, Volume 12, Number 2, A publication of the Western Piedmont Workforce Development Board
- <sup>ii</sup> Acme Preservation “Historic Architectural Resources Survey Report and Intensive Identification and Evaluation”.
- <sup>iii</sup> Warren and Associates “Broyhill Mill Redevelopment Market Study”
- <sup>iv</sup> Bureau of Labor “Table 47. Age of reference person: Shares of average annual expenditures and sources of income, Consumer Expenditure Survey, 2004”  
<http://ftp.bls.gov/pub/special.requests/ce/share/2004/age.txt>
- <sup>v</sup> NCDOT Finance and Budget  
<http://www.ncdot.org/about/finance/>
- <sup>vi</sup> TRIP: A National Transportation Research Group Report “*The Future of North Carolina’s Transportation System: Preserving and Maintaining North Carolina’s Economic Lifeline to Ensure Safe, Smooth and Efficient Mobility,*”  
[http://www.tripnet.org/Charlotte\\_PR\\_032310.pdf](http://www.tripnet.org/Charlotte_PR_032310.pdf)
- <sup>vii</sup> Quote from Strong Towns Blog Entry “Getting a Higher ROI on Parking”  
<http://www.strongtowns.org/journal/2010/4/15/getting-a-higher-roi-from-parking.html>
- <sup>viii</sup> About Brownfields: by US Environmental Protection Agency  
<http://www.epa.gov/brownfields/about.htm>
- <sup>ix</sup> Brownfield Agreement and associated exhibits between the City of Conover and the North Carolina Department of Environment and Natural Resources. Recorded at the Catawba County Register of Deeds Deeds Deed Book 3024, Pages 0784-0819 and Plat Book/page 69-148 and 69-149.
- <sup>x</sup> North Carolina Conservation Network  
[http://www.nccconservationnetwork.org/issues/land\\_issues/index\\_html](http://www.nccconservationnetwork.org/issues/land_issues/index_html)
- NCDOT Rail Division  
Western NC Rail Corridor Committee  
Western Piedmont Council of Government



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Ms. Ruby Blake – Page 3 and 12-Broyhill Furniture Employees

Mr. Carl Beason – Page 8-Aerial of Broyhill Ca. 1968

Broyhill Industries – Site survey and building elevations, 1960

Sanborn Map, Conover, NC 1932, sheet 18

NCDOT Rail Division, Page 25-Future service map & “City of Asheville” train engine

Greenway Public Transportation – Page 27-Bus

Catawba County Geospatial Information Services – Page 40-Aerial Images

Basset Mirror – Logo and Furniture

U.S. Green Building Council – Page 49-LEED Certification seal