

4.0 LAND USE, PUBLIC POLICY AND ZONING

This Chapter describes existing land use and proposed future land use within the study area for the proposed LYNX Blue Line Extension Northeast Corridor Light Rail Project (LYNX BLE). The chapter includes an evaluation of transportation and land use policies, as well as the potential direct effects of the alternatives under consideration in this Draft Environmental Impact Statement (EIS) to land use. Mitigation measures are described where potential direct land use impacts are predicted.

4.1 Affected Environment

The proposed project corridor travels through various land uses and development conditions including: high-density land uses in Center City Charlotte; redeveloping industrial areas and commercial areas along North Davidson Street; commercial areas along North Tryon Street/US-29; established suburban communities near North Tryon Street/US-29; and the rapidly developing University and suburban areas near the University of North Carolina at Charlotte (UNC Charlotte). The study area for this land use analysis extends ½-mile from each side of the proposed alignment.

4.1.1 Existing Land Use – Corridor Level

In the *Design Criteria, Chapter 3, Blue Line Extension Urban Design Framework (2009)*, the City has identified six general urban design districts categorized by similarity in terms of natural environment features, land uses, neighborhood character, transportation infrastructure and development patterns along this corridor. The following sections describe the six urban design districts; also illustrated in Figure 4-1.



View of Center City Charlotte from East 9th Street.

High Intensity Urban Core District (East 7th Street to I-277)

The highest density and intensity of development along the proposed project corridor is in the Center City Charlotte area, within the High Intensity Urban Core District. Center City Charlotte is Charlotte’s Central Business District (CBD) and is the major activity and employment center for the Charlotte region; containing office space, government offices, area attractions and venues. This district also includes a mixture of residential, commercial/mixed use, office, civic and institutional uses (See also, Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2).

Over the last ten years, this district has experienced significant office building construction and resurgence in residential construction. All of these projects, in addition to the opening of the LYNX Blue Line in November of 2007, reinforce the attractiveness of Center City Charlotte as the major destination area for the Charlotte region.



New residential construction at East 16th Street.

Industrial Communities (I-277 to East 32nd Street)

Just north of the High Intensity Urban Core District, the development character shifts from urban development to industrial uses along the existing rail corridor. The area developed as a result of the exceptional access to freight rail and highways. Some of these industrial uses are associated with the Norfolk Southern (NS) Intermodal Facility located on the eastern side of the existing rail corridor.

The area also includes residential neighborhoods which once served the mills and industrial areas along the rail corridor. Newer residential and commercial development, including in-fill, high-density residential and mill conversions have occurred in this area due to the proximity and access to Center City

Charlotte. Retail and commercial uses have also emerged to serve the new residential population. This district is well served by a number of civic and institutional land uses including: Cordelia Park; the Little Sugar Creek Greenway; CATS’ Davidson Street Bus Facility; Johnston Branch YMCA; and various

churches, schools and day care facilities (See also, Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2).

Historic Urban Communities (East 32nd Street to Craighead Road)

This district begins at 32nd Street and continues northeast to Craighead Road. The district includes the North Charlotte Historic District, locally known as the North Davidson (NoDa) neighborhood; generally bounded by Matheson Avenue, The Plaza, Sugar Creek Road and the NS right-of-way. North Charlotte was a textile community from the 1900s until the closing of the textile mills in the 1970s and 1980s, which brought temporary disinvestment. However, in the last ten years, this area has experienced significant redevelopment.



New residential construction in NoDa.

NoDa is now a vibrant arts district with commercial shops, restaurants and art galleries, as well as newer high density residences along North Davidson Street and single-family residential development on streets adjacent to the core. Redevelopment has led to conversion of warehouse and mill space to residential uses, offices, live-work units and artist studios. The rest of the Historic Urban District is comprised of active industrial warehousing and trucking facilities along the existing rail corridor and 36th Street, and new construction just north of 36th Street.

Community facilities, churches and day care facilities contribute to the vitality of this district and include: the Johnston Branch YMCA, Highland Park Elementary School, Highland Mill Montessori, the Neighborhood Theater, and various churches and day care facilities. (See Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2). Mecklenburg County Stormwater Services has also acquired land along Cullman Avenue and Little Sugar Creek as part of a floodplain acquisition project and this area has the potential to be developed as a park or community facility in the future.

Established Suburban Communities (Craighead Road to JW Clay Boulevard)

The Established Suburban Communities District is a transition area between the Historic Urban Communities and newer development found in the University District. This district contains a significant number of commercial uses along North Tryon Street/US-29, as this highly developed major arterial connects Center City Charlotte to northeastern Charlotte and Interstate 485 (I-485).



Commercial development along North Tryon Street/US-29.

Most of the commercial development from Sugar Creek Road to Tom Hunter Road is auto-oriented and early suburban (1960s and 1970s) in form and scale (e.g., Asian Corners and North Park malls). Industrial areas are also scattered throughout these commercial developments along North Tryon Street/US-29 and along the existing rail corridor in the southern portion of this design district. Most of the area north of Tom Hunter Road is “big-box” in form and developed over the past 20 years.

Some of the largest tracts of undeveloped properties and new communities in the corridor are located near the University City area. The land surrounding the portion of the district between Rocky River Road and University City Blvd./NC-49 is primarily undeveloped. In the past, development has been constrained by limited access in the “weave” area, where North Tryon Street/US-29 and University City Blvd./NC-49 intersect. A separate transportation project will restructure the “weave” intersection, providing better access to the tracts of undeveloped land. The extension of University City Blvd./NC-49 is under construction and two major retail sites (IKEA and Walmart) have opened in the past year.

Residential neighborhoods in this district are located behind the layer of commercial properties fronting either side of North Tryon Street/US-29. Most neighborhoods developed since the 1950s and contain



New construction on the UNC Charlotte campus.

single family homes, although clusters of multi-family residential clusters can also be found scattered throughout the district.

The residential neighborhoods are established and most have supporting civic and retail uses. Two county parks are located in this district behind the commercial properties lining North Tryon Street/US-29 and fronting the rail right-of-way (Howie Acres Park, a 13-acre neighborhood park; and Eastway Park, a 126-acre district sports park). Also, there are two schools located on along North Tryon Street/US-29 (on the western side, Martin Luther King, Jr. Middle School; and on the eastern side, Crossroads Charter School). (See Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2).

University District (JW Clay Boulevard to Mallard Creek Church Road)

The University District is a mixed-use activity center and includes the area between JW Clay Boulevard and Mallard Creek Church Road. Development around UNC Charlotte emerged in the 1950s and 1960s as a suburban alternative to the housing and office stock in Center City Charlotte. The majority of this district is made up of the University City Area Municipal Service District (MSD). The MSD is represented by the University City Partners (UCP), a non-profit organization comprised of major area stakeholders and land owners.

The University District has the second largest concentration of retail and office space outside of Center City Charlotte, as well as two of the largest employment centers along the corridor - the Carolinas Medical Center-University (CMC-University) and the UNC Charlotte campus. The core of the University District is located at the intersection of W.T. Harris Boulevard and University City Blvd./NC-49 and includes shopping and entertainment uses, hotel and some residential uses.

The UNC Charlotte campus encompasses approximately 950 acres, bounded by North Tryon Street/US-29, W.T. Harris Boulevard and Mallard Creek Church Road. UNC Charlotte includes classrooms, administrative buildings, research facilities, parking decks, residence halls and sports and recreation facilities. The *2009 Draft UNC Charlotte Campus Master Plan* outlines land uses on campus and expansion plans to meet the needs of the projected student population of 35,000 expected by 2020.

New Suburban Communities District (East Mallard Creek Church Road to I-485)

The New Suburban Communities District spans from Mallard Creek Church Road to I-485. Some of the most recent residential and retail developments in the corridor are located along North Tryon Street/US-29 between Mallard Creek Church Road and I-485. A number of multi-family apartment and town home developments supporting UNC Charlotte are located along Mallard Creek Church Road on both sides of North Tryon Street/US-29. The property along the eastern edge of North Tryon Street/US-29 consists of a County park (Kirk Farm Fields) and Mallard Creek. Land east of the park is occupied by a stone quarry. As the corridor approaches I-485, the Queen’s Grant mobile home park is located on the eastern side of North Tryon Street/US-29. Further north along North Tryon Street/US-29 and past I-485 there are retail commercial uses, multi-family developments, and the Verizon Wireless Amphitheatre, Charlotte’s largest outdoor concert venue.



Multi-family development on East Mallard Creek Church Road.

4.1.2 Existing Land Use – Proposed Station Areas

The following provides a summary of existing land uses at each of the 13 proposed Light Rail Alternative stations, as well as two additional stations associated with the proposed Light Rail Alternative – Sugar Creek Design Option. Future land use and zoning designations are also described.

9th Street Station

The proposed 9th Street Station would be the southernmost light rail station and would be located within the High Intensity Urban Core District in Center City Charlotte. The station would serve the First Ward and Fourth Ward neighborhoods.

The proposed 9th Street Station is directly bordered by the First Ward neighborhood, a mixed-income residential area containing both market-rate housing, as well as subsidized housing for low-income residents. This area also contains First Ward Place, a newer affordable housing complex. The First Ward neighborhood has benefited from new infill housing projects that are comprised of both single-family and multi-family residential uses; 11 percent and 8 percent of development within this station area, respectively. A number of community facilities such as schools, churches, libraries and municipal and state buildings are within ½-mile walking distance of this station (See also, Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2).



High-rise office development near East 9th Street.

Limited industrial uses are scattered throughout the area, but are concentrated in the northern portion of the station area on the eastern side of I-277. There are also a number of vacant parcels the 9th Street Station area; comprising approximately 36 percent of the land area. Many of the vacant properties located in this area are currently used for surface parking.

Beyond the immediate station area are some of Center City Charlotte's most active districts, including the East Trade Street and North Tryon Street/US-29 office district, and the entertainment district along North Brevard Street. North Tryon Street/US-29 is Charlotte's premier office address and has the highest concentration of high-rise office buildings in Center City Charlotte. Within the proposed 9th Street Station area, office uses account for 12 percent of the land area, while commercial uses account for 5 percent of the land area.

Much of the ½-mile area surrounding this station has a future land use and zoning designation of mixed-use. The Center City Charlotte area also features an extensive, in-place interconnected street network. The grid-street system and small block sizes of 500 feet or less make the area very accessible for development. There is also an existing pedestrian network with significant streetscape.

Future land use plans are currently underway to redevelop approximately 32 acres of underutilized land between East 7th Street, East 9th Street and North Brevard Street. The "First Ward Urban Village" will be a mixed-use development that will include office and retail space, residential units, a park and an underground parking deck. A new academic building for the UNC Charlotte Uptown Campus will anchor the initial phase of the First Ward Urban Village development. Additionally, 10th Street, which currently terminates at North Tryon Street/US-29 and North Davidson Street, approximately 500 feet west and 900 feet east of the First Ward Urban Village, will be connected through the mixed-used development. Figure 4-2 illustrates the existing land uses within ½-mile of the proposed 9th Street Station.

Parkwood Station

The proposed Parkwood Station would be within a historically industrial area. Approximately 25 percent of the land within the station area for the proposed Parkwood Station is occupied by existing industrial land uses, some of which are associated with the NS railroad and the NS Intermodal Facility. Another 19 percent of this area is comprised of single-family residential uses. Most of the residences within these neighborhoods are bungalows from the 1920s to 1930s. A few infill housing projects can also be found throughout the neighborhoods; and a few industrial parcels in this station area's southern end have also started to transition to residential and mixed uses. A number of institutional and civic land uses are also within ½-mile of the station area (See Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2).

Approximately 42 percent of the land located within this station area is classified as vacant property. The vacant property classification includes the NS Intermodal Facility, totaling over 18 acres. As part of a separate project, NS will be relocating this intermodal facility to property near the Charlotte-Douglas International Airport.

Within the proposed Parkwood Station area, areas designated with a future land use of mixed-use are underutilized, as many are currently developed with industrial and low-density residential uses. Access on the eastern side of North Davidson Street is adequate with a grid street system in the residential areas. However, access in the central portion of the station area is poor, as the area is currently occupied by industrial uses as well as the NS Intermodal Facility. These uses create a physical barrier to redevelopment. Restrictions to some properties also exist due to the railroad track west of North Davidson Street. Figure 4-3 illustrates the existing land uses within ½-mile of the proposed Parkwood Station.



NS Intermodal Facility.

redevelopment. Restrictions to some properties also exist due to the railroad track west of North Davidson Street. Figure 4-3 illustrates the existing land uses within ½-mile of the proposed Parkwood Station.

25th Street Station

The proposed 25th Street Station would be located within the heart of the industrial communities along the proposed alignment of the Light Rail Alternative. This proposed station is surrounded primarily by vacant property, industrial and single-family residential uses. As with the proposed Parkwood Station, the 25th Street Station area contains a high proportion of vacant and industrial use. Approximately 36 percent of the land area is vacant and 30 percent of this station area is

occupied by industrial land uses. Most of these industrial uses are associated with the NS Intermodal Facility (see “Parkwood Station” above for additional information regarding the potential relocation of this facility). Approximately 14 percent of the land uses are single-family residential uses. Most of the single-family residential development consists of the homes in the Belmont and Villa Heights neighborhoods. A Duke Energy utility station and a number of institutional and civic land uses, churches, schools and day care facilities are within ½-mile of the station. (See also, Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2). Little Sugar Creek also runs through this area.

Multi-family uses currently account for approximately 3 percent of the land within this station area. However, plans for additional multi-family development (including the Yards at NoDa condo development on the northwest corner of North Davidson Street and East 30th Street), indicate a strong interest by the private development community for new construction within this station area. Commercial uses are also emerging to support these residential uses (including the NoDa 28 development, with its retail stores and restaurants). Figure 4-4 illustrates the existing land uses within ½-mile of the proposed 25th Street Station.

36th Street Station

The proposed 36th Street Station would be located in core of the NoDa area. The proposed station location is primarily surrounded by vacant and industrial uses, as well as single-family residential development; 19 percent, 37 percent and 25 percent, respectively. Commercial uses are found in the core area of NoDa, along North Davidson Street between East 34th Street and 36th Street. This area has an increasingly urban character with the intensification of the surrounding residential development. Newer high-density residential uses can be found along North Davidson Street in the form of new construction and mill conversions. Single-family construction and rehabilitation can be found along streets adjacent to the commercial core.



New single-family redevelopment in NoDa.

Community facilities, churches and day care facilities, institutional and civic uses contribute to the vitality of this district (See also, Chapter 6.0: Neighborhoods, Community Services and Environmental Justice, Table 6-2).

Within the proposed station area the future land use designation of mixed-use is currently underutilized; however the location of the proposed station in the heart of NoDa makes this station area ideal for redevelopment. The grid street system in this station area provides well connected access to all properties. Due to the location of the Little Sugar Creek Floodplain, some environmental restrictions may create constraints to development. Figure 4-5 illustrates the existing land uses within ½-mile of the proposed 36th Street Station.

Sugar Creek Station

The proposed Sugar Creek Station is on the border of the North Charlotte neighborhood and the Hampshire Hills neighborhood. For the Light Rail Alternative, two park-and-ride options for this station are proposed; resulting in a combination of different parcels for the station park-and-ride. Both of the park-and-ride options for this station are generally located near the intersection of Sugar Creek Road and the existing rail corridor.

The predominant land uses surrounding both park-and-ride options for the proposed Sugar Creek Station are a combination of vacant, commercial, industrial, and single-family residential properties. The majority of the commercial development is located along North Tryon Street/US-29. The industrial and commercial uses combined account for approximately 48 percent of the land within this station area. Around 25 percent of this station area is comprised of single-family residential uses, most located within the North Charlotte neighborhood along Bearwood Avenue and Redwood Avenue. There are properties developed with multi-family residential development located in this area and scattered infill mixed-use development.

Approximately 25 percent of the land surrounding this proposed station is currently vacant and most properties are developed in accordance with their future land use designation. Several of the parcels are large in size and have a great deal of potential for redevelopment. The eastern side of the proposed Light Rail Alternative is developed with connected residential streets that provide ideal access on that side of the station area. The western side of this station area is developed with commercial and industrial uses with few roads. Sugar Creek Road is the main road through this station area and would provide a central connection to properties in the study area. Some environmental restrictions may create constraints to development within the station area due to the presence of jurisdictional streams. In addition, pedestrian improvements would be needed to enhance walkability in the station area. Figure 4-6 illustrates the existing land uses within ½-mile of the Sugar Creek Station.

Sugar Creek Station – Sugar Creek Design Option

The proposed Sugar Creek Station – Sugar Creek Design Option, located along the proposed Light Rail Alternative - Sugar Creek Design Option, is immediately surrounded by industrial and commercial uses. Residential uses are located on the periphery of these industrial and commercial areas. Single-family residential uses within this station area comprise approximately 27 percent of the existing land uses surrounding this proposed station. Industrial uses account for another 28 percent of the uses within this station area. Commercial uses account for approximately 15 percent of the existing land uses, many along North Tryon Street/US-29, and can be found within ½-mile around the northern perimeter of the station area. These commercial uses include the Asian Corners property and smaller strip commercial and highway-oriented uses.

Approximately 23 percent of the land surrounding this proposed station is vacant, and most properties are developed in accordance with their future land use designation. Access issues for this station area are generally consistent with those of the station area plan, and similar environmental constraints to development may also exist due to the jurisdictional streams within the station area. In addition, pedestrian improvements would be needed in the station area. Figure 4-7 illustrates the existing land uses within ½-mile of the proposed station.

Old Concord Road Station

Land use surrounding the proposed Old Concord Road Station consists of parks, industrial, commercial, office and single-family residential uses. Approximately 26 percent of the property is vacant within this station area and another 37 percent consists of industrial land uses. Single-family residential development accounts for approximately 13 percent of the existing land uses. North Park Mall is located on the eastern side of North Tryon Street/US-29 together with a few commercial out-parcels, a self

storage facility, a car dealership, and few single-story professional offices, a charter school and smaller retail malls. In total, commercial properties comprise around 13 percent of the land uses within this station area.

Properties that are designated Multi-Family for future land uses are currently underutilized. Access to the properties within the proposed station area is adequate with Eastway Drive and North Tryon Street/US-29 as the primary roadways serving these properties. Environmental constraints may exist with the presence of Eastway Park on the eastern side of the proposed Light Rail Alignment. Figure 4-8 illustrates the existing land uses within ½-mile of the proposed Old Concord Road Station.

Old Concord Road Station – Sugar Creek Design Option

The existing land uses surrounding the proposed Old Concord Road Station – Sugar Creek Design Option are similar to those surrounding the proposed Old Concord Road Station (located approximately 750 feet to the west). The majority of the existing land uses consist primarily of industrial uses, which comprise approximately 33 percent of the land uses. Approximately 30 percent of the land within this station area is vacant, while single-family residential uses and commercial uses account for approximately 14 percent and 13 of the existing land uses, respectively.

Properties that are designated Multi-Family for future land uses are currently underutilized. Access within this station area is similar to the access issues within the Old Concord Road Station area. Figure 4-9 illustrates the existing land uses within ½-mile of the proposed Old Concord Road Station – Sugar Creek Design Option.

Tom Hunter Station

Stable residential neighborhoods surround the proposed Tom Hunter Station. These neighborhoods are bordered by auto-oriented commercial uses (car rentals and dealerships), hotels, restaurants and vacant or underutilized properties along North Tryon Street/US-29. Residential land uses (single-family and multi-family) represent approximately 52 percent of the land uses in the station area, the largest amount of residential development surrounding any of the proposed stations. Industrial and commercial uses account for approximately 7 percent and 5 percent of the station area, respectively, while 26 percent of land within this station area is vacant.

Access to properties in the study area is adequate as the area is well developed with several roads located throughout. These roadways include Tom Hunter Road, West Arrowhead Drive, Heathway Drive and Gloryland Avenue. Environmental constraints are not anticipated within this station area. Figure 4-10 illustrates the existing land uses within ½-mile of the proposed Tom Hunter Station.

University City Blvd. Station

The land surrounding the proposed University City Blvd. Station is primarily undeveloped and approximately 59 percent of the land in this station area is classified as vacant. Scattered office, industrial and commercial uses can be found along North Tryon Street/US-29. Single-family residential development accounts for approximately 16 percent of the development within this station area. Newer development is emerging with the extension of University City Blvd./NC-49, improvements to “the weave” and the development of IKEA and Walmart stores. Figure 4-11 illustrates the existing land uses within ½-mile of the proposed University City Blvd. Station.



Commercial development near the proposed McCullough Station.

McCullough Station

The majority of the existing land uses surrounding the proposed McCullough Station are commercial and office uses; accounting for 25 percent and 24 percent, respectively. Most of the office development is located on the western side of North Tryon Street/US-29 and include several restaurants and gas stations. A small area of single-family residential development is located along Clark Boulevard, Hampton Church Road and Russell Street. This single-family development only accounts for 3 percent of land uses within this station area.

Many of the properties surrounding this station are already

developed with their future land use designation. However, areas designated for mixed-use are currently underutilized. Access is adequate with several feeder roads connecting to North Tryon Street/US-29. Figure 4-12 illustrates the existing land uses within ½-mile of the proposed McCullough Station.



CMC-University.

JW Clay Blvd. Station

The area surrounding the proposed JW Clay Blvd. Station captures a large portion of University area. The majority of existing land uses are public and institutional uses; UNC Charlotte and the CMC-University. These public and institutional uses account for approximately 38 percent of land uses within this station area. Commercial uses account for approximately 25 percent of the proposed station area land uses, with various restaurants, gas stations, hotels and retail along North Tryon Street/US-29 and W.T. Harris Boulevard.

Pockets of single-family residences and multi-family development are scattered behind the block of commercial parcels that line North Tryon Street/US-29 on the western side. The multi-family development accounts for approximately 9 percent of existing land uses, while single-family residential development accounts for only 3 percent of the existing land uses in this station area.

Approximately 20 percent of the land surrounding this proposed station is currently vacant. Many of the properties in this station area are developed with their designated future land uses. Access to this station area is adequate with most properties having frontage on North Tryon Street/US-29, W.T. Harris Boulevard and JW Clay Boulevard. Figure 4-13 illustrates the existing land uses within ½-mile of the proposed JW Clay Blvd. Station.

UNC Charlotte Station

The UNC Charlotte Station area primarily encompasses public and institutional uses on the UNC Charlotte campus, including research facilities. The public and institutional uses account for approximately 72 percent of property located within the station area. Pockets of single-family residential uses are located within this area and account for approximately 3 percent of the existing land uses. Multi-family development is also included along North Tryon Street/US-29 and East Mallard Creek Church Road and accounts for approximately 6 percent of existing land uses within this station area. Approximately 15 percent of the land area located within this station area is classified as vacant.



New research facilities on the UNC Charlotte campus.

The *2009 Draft UNC Charlotte Campus Master Plan* accommodates the proposed Light Rail Alternative alignment as well as the proposed UNC Charlotte Station. The majority of the property is developed with public and institutional uses, consistent with the future land use designation for this station area. Figure 4-14 illustrates the existing land uses within ½-mile of the proposed UNC Charlotte Station.

Mallard Creek Church Station

The Mallard Creek Church Station area is predominantly occupied by vacant and undeveloped properties as well as a County park and wetland viewing area. Vacant property accounts for approximately 45 percent of existing land uses within this station area. Public and institutional uses on the UNC Charlotte campus comprise approximately 17 percent of existing land uses within this station area. Single-family residential development accounts for approximately 7 percent of existing land uses in this station area. Multi-family residential development, most of it located off Mallard Creek Church Road, accounts for approximately 6 percent of the existing land uses within this station area. The northeastern quadrant of this station area is occupied by Kirk Farm Fields, a County park. East of Kirk Farm Fields Park and south of I-485 is vacant land as well as an active stone quarry.

Much of the vacant and industrial uses have future land use designations of Institutional Use and are currently underutilized. The area is accessed by two roads that transect the area: North Tryon Street/US-29 and Mallard Creek Church Road. Redevelopment of the industrial area and stone quarry in the northeast portion of the station area would require the improvement of Stone Quarry Road and Bonnie Cone Lane. There are environmental constraints that could restrict development with the presence of Kirk Farm Fields and the Toby Creek and Mallard Creek floodplains within this station area. Figure 4-15 illustrates the existing land uses within a ½-mile of the proposed Mallard Creek Church Station.

I-485/N. Tryon Station

The I-485/N. Tryon Station area includes mostly vacant and underutilized properties within the New Suburban Communities District. Vacant properties account for approximately 39 percent of the land within this station area. Industrial uses account for approximately 29 percent of existing land uses within this station area. The residential land uses within the station area include a mobile home park located off of Morningstar Place Drive. A few rural-density residential homes can also be found throughout this station area and multi-family development can be found on the western side of the US 29 Access Road. Single-family residential development accounts for approximately 11 percent of existing land uses within this station area. Multi-family residential development accounts for approximately 6 percent of the existing land uses within this area.

Most of the property located in this station area is developed with the designated future land uses of Park/Open Space and Institutional uses. Figure 4-16 illustrates the existing land uses within a ½-mile of the I-485/N. Tryon Station.

4.1.3 Development Activity

Development activity in the Northeast Corridor is increasing as the corridor provides a vital link between two major activity centers in the area; Center City Charlotte and University City. Center City Charlotte has seen a significant amount of development in the last decade consisting primarily of office and residential uses. University City has likewise seen a considerable amount of development activity in all sectors, including office, retail, commercial and residential (single-family and multi-family) uses. As such, the pace of new development, infill development and redevelopment initiatives has intensified along the Northeast Corridor between these two major activity centers. For example, areas such as NoDa have become vibrant communities, encompassing a mixture of residential (new and rehabilitated/renovated, single-family and multi-family), office and retail establishments.

In addition to by-right development, the Charlotte-Mecklenburg Planning Department (Planning) has received numerous requests for rezonings in the corridor since 2006. A total of 14 rezoning requests within the study area were approved by the Charlotte City Council from 2006-2008. The majority of these rezoning requests were to change industrial and office/commercial designations to allow for mixed-uses and higher density residential uses; most rezoning requests for the Mixed-Use Development District (MUDD) designation, which is a transit-supportive zoning district.

4.1.4 Vacant and Underutilized Land

Vacant properties and underutilized land are located within the corridor. Underutilized land is defined as land where the land value exceeds the value of improvements on the property. The *Charlotte Centers, Corridors and Wedges Growth Framework*, Draft 2010 indicates that in 2007 only 15 percent of the land within Charlotte's "sphere of influence" was vacant; and that much of the projected new development will occur in the form of redevelopment. In addition, access to properties, available infrastructure and environmental restrictions will also influence the development and redevelopment potential of the corridor.

4.1.5 Land Use Controls, Guidelines and Policies

The City of Charlotte and Mecklenburg County are committed to development principles that enhance the community and provide for sustainable growth. As such, the City of Charlotte and Mecklenburg County have developed and adopted several zoning classifications, planning and policy documents to help guide and manage land use; realizing that integrating transportation and land use is the key to fostering sustainable growth.

Zoning

The Northeast Corridor includes properties that fall within a wide range of zoning districts, reflecting varying types and intensities of residential, commercial, and industrial uses. These vary from low-density districts of a more suburban character to high intensity, transit-supportive districts.

Zoning changes may be necessary to permit the desired form of development consistent with transit and supportive activities. As an implementation strategy for the development of property surrounding the proposed stations (within a ½-mile radius), low-density districts may be correctively rezoned with the appropriate transit-supportive zoning districts as part of the Station Area Planning Process.

The three transit-supportive zoning districts in the currently adopted City of Charlotte Zoning Ordinance are described below.

- The Uptown Mixed Use District (UMUD) is the most intense of Charlotte’s zoning districts and is applied to the Center City Charlotte area. The main purpose of this district is “to strengthen the high-density core of the central city” by establishing minimum standards for design and development. This district has no maximum Floor Area Ratio (FAR) or height restrictions and allows a range of transit-supportive uses.
- The Mixed Use Development District (MUDD) is another transit-supportive district that is similar to UMUD. The MUDD district has no FAR limitation and permits a range of transit-oriented uses. Building heights are generally limited to 120 feet, but can be exceeded under certain conditions.
- The Transit Oriented Development District (TOD) is another transit-supportive zoning district that is potentially applicable to the areas surrounding the proposed stations.

In October 2003, the Charlotte City Council approved a new set of TOD Zoning Districts applicable to areas within approved transit station area plans. The purpose of the TOD Zoning Districts is to encourage the transition of future station areas to more compact urban growth centers, with opportunities for increased choice of transportation modes and a safe and pleasant pedestrian environment. This ordinance requires streetscape improvements, a functional mix of complementary uses and the provision of facilities that support transit use, bicycling, and walking. The three main TOD districts and their general requirements are listed below.

- The Residentially Oriented (TOD-R) zoning district requires proposed development to have at least 80 percent residential use, a minimum density of 20 units per acre for parcels within ¼-mile from a transit station, or a minimum density of 15 units per acre for parcels located between ¼-mile and ½-mile from a transit station.
- The Employment Oriented (TOD-E) zoning district requires at least 60 percent office uses, a minimum density of 0.75 FAR within ¼-mile from a transit station or a minimum density of 0.50 FAR between ¼-mile and ½-mile from a transit station.
- The Mixed-Use Oriented (TOD-M) zoning district requires a blend of high-density residential, high-intensity employment/office, civic, entertainment, and institutional uses along with retail uses. This zoning district requires a minimum density of 0.75 FAR within ¼-mile of a transit station, or a minimum density of 0.50 FAR in areas between ¼-mile and ½-mile of a transit station. TOD-M also requires a minimum density of 20 units per acre for parcels within ¼-mile of a transit station, or a minimum density of 15 units per acre for parcels located between ¼-mile and ½-mile of a transit station.

The City has also implemented a number of overlay districts, including the Pedestrian Overlay District (PED) and the Transit Supportive Overlay (TS), to help encourage transit-supportive development. These overlay districts are designed to allow a mixture of transit-supportive uses that are developed in a pedestrian-friendly manner.

Station Area Planning

CATS and the Charlotte-Mecklenburg Planning Department have developed Station Area Concepts for the Northeast Corridor to identify transit-supportive development opportunities and outline the unique characteristics critical to integrating each station with its surrounding area. Building on the Station Area Concepts developed for the proposed project, as well as other plans (such as the University City Area

Plan), CATS and Planning are preparing detailed Station Area Plans to guide the specific land use changes and infrastructure projects necessary to implement transit-supportive development around each station in the Northeast Corridor. These Station Area Plans will be prepared with area stakeholders and citizens; and the plans will continue to evolve as the proposed LYNX BLE moves through the planning process and into the implementation phase.

The Transit Station Area Principles would be applied to each station and current zoning surrounding these stations would be replaced with transit-supportive zoning. Once developed and adopted, the Station Area Plans would serve as a blueprint to guide growth and development surrounding the stations. Public input is encouraged throughout the process of Station Area Plan adoption. Following is a list of the five steps involved in this process.

1. Develop draft versions of the Station Area Plans.
2. Analyze and revise the Station Area Plans.
3. Finalize the Station Area Plans.
4. Review and adoption of the Station Area Plans by the Charlotte-Mecklenburg Planning Commission.
5. Review and adoption of the Station Area Plans by the Charlotte City Council.

Implementation follows the formal adoption of Station Area Plans. Implementation includes zoning changes within the station areas and capital improvements surrounding the stations. Thus far, the University City Area Plan has been adopted (October 2007) and contains Station Area Plans for the stations in the University City area. Station Area Plans have also been completed for the Sugar Creek Station and Old Concord Road Station and were presented to the public in July 2007 and January 2008. Station Area Plans are being refined for these stations and have not yet been adopted. If the proposed Light Rail Alternative is selected for implementation, Station Area Plans for the remaining stations will be developed following public circulation of the Draft EIS.

Centers, Corridors and Wedges Growth Framework

The primary plan to guide growth in the City of Charlotte and Mecklenburg County is a comprehensive strategy based on the radial development of "Centers" (the focal point of activity and mixed-use development) and "Corridors" (the five major transportation arterials that extend from Center City Charlotte). The *Centers and Corridors Vision Plan* (1994) was updated and is now called *Centers, Corridors and Wedges Growth Framework*, Draft 2010. The updated version of the document builds on the scope of the original document, addressing the changing real estate market, demographics, infrastructure needs and environmental concerns. The updated document includes details on the development of areas surrounding proposed transit stations. It also includes recommendations for areas that exist between the corridors known as "Wedges".

The *Centers, Corridors and Wedges Growth Framework* strategy is designed to increase development density in five proposed transit corridors, as well as a number of key nodes or activity centers, as a means of managing growth and reducing sprawl in the City of Charlotte, Mecklenburg County and the greater region. A key element of this plan is the development of a regional transit system that would improve mobility, encourage balanced growth and support the proposed land use initiatives in each of the five growth corridors. The Northeast Corridor is identified as one of the five high-density corridors that is an appropriate location for significant new growth.

2015 Plan: Planning for Our Future

The centers and corridors concept was reinforced in the *2015 Plan: Planning for Our Future* adopted by City and County elected officials in November 1997. This policy document outlines the desired urban future for the City of Charlotte and Mecklenburg County, focusing on mixed-use and pedestrian-oriented development at urban densities. The document highlights the importance of strong community design in the transformation of the City of Charlotte and Mecklenburg County into a more urban community. This document provided planning strategies and set the stage for the development of the *2025 Integrated Transit/Land Use Plan*.

2025 Integrated Transit/Land Use Plan

The *2025 Integrated Transit/Land Use Plan*, adopted in October 1998, provides extensive technical analysis of the transit and land use concepts provided by the *Centers and Corridors* vision and *2015 Plan*. This plan identifies the Northeast Corridor as a high priority for transit based on mobility needs. The *2025 Integrated Transit/Land Use Plan* also details a land use vision that focuses higher density development in station areas and activity centers where it can be best served by rapid transit. The *2025 Plan* includes general station area land use recommendations and proposes modifications to policies and regulatory tools that can be utilized to implement the region's transit and land use vision. The citizens of Mecklenburg County approved a one half-cent sales tax in 1998 to support the vision and goals of this plan. A key recommendation of the *2025 Integrated Transit/Land Use Plan* is to update the *General Development Policies* to accommodate land uses and encourage design that supports transit.

General Development Policies

The *General Development Policies* provide the planning principles for the Charlotte-Mecklenburg Planning Department and are the basis for development of area-specific plans. The *General Development Policies* revise previous policies that allow the dispersal of multi-family development, and redirects much of this denser development to major activity centers and transit corridors, as outlined in the *Centers, Corridors and Wedges Growth Framework*, Draft 2010. The *General Development Policies* also outline a set of Transit Station Area Principles, to encourage transit-supportive development along five transit corridors and focuses on creating compact neighborhoods with housing, jobs, shopping, community services and recreational opportunities all within ½-mile walking distance of transit stations. The intent is to create well-designed, livable communities where people have transportation choices to travel from home to work, as well as to meet other daily travel needs.

The Transit Station Area Principles provide direction for developing and redeveloping property around transit stations in a way that makes it convenient for many people to use transit. Such policies focus on land uses, mobility and community design. The Transit Station Area Principles require the development of land use and urban design plans for the transit stations along each of the five transit corridors and serve as a guide for development of the Station Area Plans. The following principles apply to the areas within ½-mile walking distance of an identified rapid transit station:

- Land Use and Development - Land uses should include a concentrated mixture of complementary, well-integrated land uses within walking distance of the transit station. This mix of uses should offer a range of living, shopping, working, and recreational options within a compact, walkable area with ground floor uses that attract and generate pedestrian activity. Increased land use intensity should be allowed appropriate to transit-supportive communities. The highest densities of new development should be concentrated closest to transit stations with a transition to lower densities adjacent to existing single-family neighborhoods.
- Mobility - The existing transportation network should be enhanced to promote good walking, bicycle and transit connections. Transit-supportive environments require streets that are designed to encourage use by all travel modes. Fast-moving cars are a safety risk to pedestrians and bicyclists; therefore, transit environments should have a system of connected streets that can deal with traffic in a more efficient manner than a system that relies on arterial roadways. Design speeds, facilities and levels of congestion should respond to the increased level of pedestrian and bicycling activity within transit-supportive areas. The traditional network of streets improves the mobility of all modes of travel by providing multiple travel routes for pedestrians, cyclists and motorists. Parking is also a critical element of transit-supportive areas. The proper location and size of parking facilities are essential in creating a transit-supportive setting. The size and location of parking facilities are sensitive to the quality of the pedestrian environment.
- Community and Urban Design – The Transit Station Area Principles call for urban design to be used to enhance the community identity of station areas and make them attractive, safe and convenient places. Streetscapes are a key element of urban design since streets are the most commonly used public spaces in a city. Streets should be auto-accommodating but not auto-dominated, and the design of the sidewalk is as important as the design of the street, potentially enhancing the local business climate and visual conditions. Public spaces (parks, plazas and open space) serve as focal points for development and design elements such as lights, trees, benches and landscaping should

be included to make the pedestrian feel safe and enjoy the space. In transit-supportive environments it is also important to reinforce the important civic role of the transit station. This objective can be achieved with the inclusion of parks and open space near transit stations as well as throughout transit-supportive areas. In transit-supportive environments, primary access points to buildings should be oriented to pedestrians. At the street level, the design of buildings should incorporate elements that reflect a human scale.

Transportation Action Plan and Urban Street Design Guidelines

The *Transportation Action Plan (TAP)* was adopted in 2006 and focuses on the long range development of streets and other facilities to ensure that the transportation goals identified in the *Centers, Corridors and Wedges Growth Framework*, Draft 2010 are being met. The City of Charlotte *Urban Street Design Guidelines (USDG)* were adopted in 2007 to supplement the TAP by providing a comprehensive approach to the planning and design of streets in Charlotte. The USDG offer guidance on streetscape recommendations for planning and design. The USDG also aid in integrating land use and transportation through context-based design. The TAP and USDG plans both adhere to the policies and recommendations of the Centers and Corridors growth strategy.

Transit Station Area Joint Development Principles and Policy Guidelines

In 2002, the City of Charlotte, Mecklenburg County, the MTC, and the towns of Cornelius, Davidson, Huntersville and Matthews adopted the *Transit Station Area Joint Development Principles and Policy Guidelines*. Adoption of the principles provides a framework and subsequent tool for local governments and CATS to encourage and promote transit-supportive development around transit stations. The principles and policy guidelines include:

- Encouraging complementary public facilities around stations;
- Providing basic public infrastructure available through jurisdiction resources in station areas;
- Supporting the development of a variety of housing types near stations;
- Developing public/private partnerships aimed at promoting transit-supportive development;
- Providing incentives, establishing partnerships with the private sector, promoting demonstration projects and removing barriers to encourage transit-supportive development; and,
- Encouraging the location and retention of a healthy mix of private transit-supportive businesses near transit stations.

Center City 2010 Vision Plan

The *Center City 2010 Vision Plan* was adopted by Charlotte City Council and the Mecklenburg County Board of Commissioners in 2000. This plan was developed by citizens to help guide growth within Center City Charlotte. The plan was adopted as a development policy to extend the efforts of the *2025 Integrated Transit/Land Use Plan*. The plan encourages a mixture of uses and high-density development in the Center City Charlotte area. This plan also recommends light rail to improve transit operations within Center City Charlotte and provide an alternative to automobile travel.

Northeast Area Plan

The *Northeast District Plan*, which provides a general land use framework for future growth and development within the entire northeast quadrant of Charlotte, was adopted in 1997. In 2000, the *Northeast Area Plan* was adopted by the Charlotte City Council and the Mecklenburg Board of County Commissioners, which amends the *Northeast District Plan*. The *Northeast Area Plan* provides a framework for future growth and development within a smaller area located generally between North Tryon Street/US-29 and the Mallard Creek Road/I-485 interchange. The *Northeast Area Plan* calls for integrated lands uses that can be served by a variety of transportation choices, including transit. The plan details how transformation of the northeast area can be designed to accommodate development that supports proposed transit improvements, and serves as a guide for elected officials in making land use and zoning decisions.

University City Area Plan

The Charlotte City Council adopted the *University City Area Plan* in 2007. This plan was prepared by University City Partners (UCP), who coordinates planning, marketing and other activities within the University City Municipal Service District (MSD). The *University City Area Plan* was developed and

adopted to amend the *Northeast District Plan* and provides a framework for future growth and development within the University City MSD, generally bound by North Tryon Street/US-29, Interstate 85 (I-85), University City Blvd./NC-49 and Mallard Creek Church Road. The *University City Area Plan* particularly pertains to the planned development of light rail in the northeast Charlotte area. The central goal of the plan is to promote the corridor and encourage development that will support and benefit from the development of light rail in the Northeast District, of which the University City area serves as the core. The plan proposes transit-oriented future land uses around potential transit stations along North Tryon Street/US-29 and details development scenarios and design guidelines for the area.

4.2 Environmental Consequences

The Northeast Corridor is classified as a growth corridor and the City and the County have determined that it is an appropriate location for intense development, as identified in the *Centers, Corridors and Wedges Growth Framework*, Draft 2010. This corridor has grown over the past decade, and it is anticipated that growth and development would continue with selection of the proposed alternatives described in the following sections.

As noted previously, land use impacts of the proposed project are those which are anticipated to result in direct changes to existing land use. In other words, existing land uses such as those used for industrial warehouses or those encompassing vacant land, could be changed to accommodate the proposed Light Rail Alternative or Light Rail Alternative – Sugar Creek Design Option. The study area for this land use analysis extends ½-mile from each side of the proposed alignment and is illustrated in Figure 4-1. Included is an evaluation of the impacts of the No-Build Alternative, the Light Rail Alternative and the Light Rail Alternative – Sugar Creek Design Option. Secondary impacts including changes to land use and development patterns and changes in travel patterns, as well as cumulative impacts, were evaluated under a separate study and are discussed in Chapter 19.0: Secondary and Cumulative Effects. Construction-related impacts, along with avoidance, minimization, and mitigation measures, are discussed in Chapter 18.0: Construction Impacts.

4.2.1 No-Build Alternative

The No-Build Alternative would consist of a future scenario with no changes to planned transportation services or facilities in the Northeast Corridor. As a result, project-generated changes to study area land uses would not occur under the No-Build Alternative. With the No-Build Alternative, enhanced access to transit associated with the implementation of the proposed Light Rail Alternative would not occur to support future land use, as called for in adopted plans and policies. Therefore, the No-Build Alternative would not be consistent with adopted land use controls, policies and guidelines.

4.2.2 Light Rail Alternative

The proposed Light Rail Alternative would alter existing land uses at proposed station locations and along the alignment where full and partial acquisitions would be undertaken to accommodate the proposed Light Rail Alternative. Sections 4.2.2.1 and 4.2.2.2 describe these land use changes at both the corridor and station level. In addition, Chapter 17.0: Acquisitions and Displacements, provides more detailed information on the number of displacements/relocations.

Existing land use policies and development regulations support the development of the proposed Light Rail Alternative and have been adopted to accommodate its implementation. The potential positive impacts include enhanced development, access and the integration of transportation and land use, to create sustainable growth within the region. In addition, existing and future development would be served by the improved transportation access and travel options that the proposed Light Rail Alternative would provide. Table 4-1 presents a summary of each alternative's consistency with land use policies described in Section 4.1.5.

**Table 4-1
Summary of Potential Impacts on Land Use Policies**

Measure	No-Build Alternative	Light Rail Alternative	Light Rail Alternative – Sugar Creek Design Option
Consistent with existing land uses	Yes	Yes	Yes
Consistent with adopted future land uses	No	Yes	Yes
Consistent with the <i>Centers, Corridors and Wedges Growth Framework, Draft 2010</i>	No	Yes	Yes
Consistent with the <i>2025 Integrated Transit/Land Use Plan</i>	No	Yes	Yes
Consistent with the <i>General Development Policies</i>	No	Yes	Yes
Consistent with the <i>Transportation Action Plan</i>	No	Yes	Yes
Consistent with the <i>Urban Street Design Guidelines</i>	No	Yes	Yes

4.2.2.1 Corridor Level Impacts

The proposed Light Rail Alternative would primarily be constructed along an existing rail corridor and North Tryon Street/US-29. The proposed Light Rail Alternative would first transition through vacant and industrial properties near the northeast intersection of East 16th Street and Parkwood Avenue, just south of the proposed Parkwood Station. The industrial portion of this site is primarily used for storage associated with the NS Intermodal Facility. The alignment would travel north along the western edge of North Brevard Street adjacent to the NS Intermodal Facility.

The proposed Light Rail Alternative would again transition through industrial property between the two existing rail corridors located between East 30th Street and 36th Street. The industrial uses on this site are also used for intermodal and freight storage. In addition, approximately eight properties that are currently located along Cullman Avenue would require partial acquisition in order to shift the freight rail tracks (see Figure 4-5) to accommodate the Charlotte Rail Improvement and Safety Project (CRISP) and to accommodate the proposed light rail alignment. The CRISP project is intended to maintain accommodations for the proposed Southeast High Speed Rail (HSR) corridor, which would utilize the western side of the existing freight tracks. Three of these properties have been acquired by Mecklenburg County as part of a floodplain buy-out program and are now vacant. These properties could potentially be utilized as part of a public park in the future. The remaining properties are currently used as warehouses.

The proposed Light Rail Alternative would leave the existing rail corridor to transition to North Tryon Street/US-29 near Old Concord Road. Direct land use impacts would occur mainly to commercial and warehouse (storage) tracts in this area due to right-of-way needs.

As the proposed Light Rail Alternative travels north along North Tryon Street/US-29 to UNC Charlotte, the alignment would be located in the median. Direct land use impacts would occur along North Tryon Street/US-29 since the existing right-of-way is not wide enough to accommodate the proposed typical section with Light Rail Alternative (See 2.0 Alternatives Considered, Section 2.2.3.4, for a description of the proposed widening). Both sections of North Tryon Street/US-29 encompass primarily commercial properties, which would be subject to partial and full acquisition to meet the needs of the proposed Light Rail Alternative.



Area of potential widening along North Tryon Street/US-29.

When the proposed Light Rail Alternative reaches UNC Charlotte, it would transition east through the campus just north of the Charlotte Research Institute. This alignment is intended to provide service directly to the campus and the proposed UNC Charlotte Station. The alignment would be constructed on vacant land on the campus and a portion of a parking lot.

The proposed alignment would also cross the Toby Creek Greenway, a planned park/recreational trail. The proposed Light Rail

Alternative would bridge over the trail. Land use designations would remain recreational, and the use and enjoyment of the trail would not be affected.

As the proposed alignment exits the UNC Charlotte Campus it would transition across Mallard Creek Church Road and to the south of Kirk Farm Fields Park, requiring the acquisition of one multi-family building and a portion of a second multi-family building. A direct land use change would result.

As the proposed Light Rail Alternative continues north to the I-485/N. Tryon Station, the proposed alignment would cross one planned park/recreational trail, namely the Mallard Creek Greenway Extension. No additional corridor-level impacts would be anticipated to occur.



Area adjacent to Kirk Farm Fields Park where the proposed Light Rail Alternative would be located.

The majority of direct corridor-level land use impacts would affect vacant, commercial, office and industrial properties, with the exception of residential uses at Mallard Creek Apartments. Therefore, the overall land use composition would not change substantially. Some loss of business property and parking facilities would also occur on individual properties, along with direct impacts to a multi-family residential building. No significant adverse land use impacts would be expected from these changes. Land use benefits would also occur through the proposed Light Rail Alternative's support for existing and future development and the anticipated improvements.

4.2.2.2 Station Area Impacts

Most direct land use impacts would occur on parcels around proposed stations, resulting from the conversion of existing land uses needed to accommodate proposed park-and-ride locations. The development of the park-and-ride facilities would be incorporated into the Station Area Plans for each respective station. The proposed stations would also have beneficial land use effects through supporting existing and future development in the station areas and acting as focal points for future growth. Guidelines for this growth will be detailed in the Station Area Plans, which will outline the unique characteristics critical to integrating each station with its surrounding area. Following is a description of anticipated changes to land use within each station area.

9th Street Station

The proposed 9th Street Station platform would be located on East 9th Street between North College Street and North Brevard Street in Center City Charlotte. The proposed station platform would be located within existing rail right-of-way and a park-and-ride facility is not proposed for this station. Direct land use changes would not occur from the implementation of the proposed 9th Street Station, as displacements would not result.

Employees of surrounding offices and residents of the First Ward and Fourth Ward neighborhoods located to the east and west of the proposed station would benefit from increased transit access and mobility. This station would also be compatible with existing surrounding land uses.

Parkwood Station

The proposed Parkwood Station platform would be located near the intersection of Parkwood Avenue and East 20th Street along North Brevard Street, adjacent to the existing rail corridor. In addition, a Vehicle Light Maintenance Facility (VLMF) is also being proposed as part of the Light Rail Alternative, between the proposed Parkwood and 25th Street Stations. The VLMF would be located on the existing NS Intermodal Facility (once NS relocates to the Charlotte Douglas Airport – through a separate project) and would be used for the maintenance, repair, cleaning and inspection of the light rail vehicles. Existing land uses surrounding the proposed station are primarily vacant and industrial properties associated with the intermodal site. Since a park-and-ride facility is not proposed for this station, and no displacements would occur, direct land use changes would not result from the implementation of the proposed Parkwood Station or the VLMF.

The Optimist Park neighborhood is located just south of the proposed Parkwood Station along the eastern side of the alignment. Since the community is adequately buffered by Parkwood Avenue/North Brevard Street, the proposed Parkwood Station and VLMF would be generally compatible with its surrounding land uses. Residents and employees in the area would benefit from increased transit access and mobility, strengthening the area as a residential community and place to do business.

25th Street Station

The proposed 25th Street Station platform would be located adjacent to the existing rail corridor near the North Brevard Street and East 25th Street intersection. A small pocket of residential use is located on the eastern side of North Brevard Street. Other land uses in the area include industrial and vacant properties and public uses (utilities). Since a park-and-ride facility is not proposed for this station and displacements would not occur, direct land use changes would not result from the implementation of the proposed 25th Street Station. A condominium development (Yards at NoDa) is proposed on the northwest corner of North Davidson Street and East 30th Street, approximately three blocks east of the proposed 25th Street Station. Residents and employees in the area would benefit from increased transit access and mobility and the proposed station would be generally compatible with its surrounding land uses.

36th Street Station

The proposed 36th Street Station platform would be located along the southeast side of the existing rail corridor, at 36th Street in the NoDa area. Land uses directly adjacent to the proposed station include industrial and vacant properties. A nearby mill site housing the Johnston and Mecklenburg Mills, located just north of 36th Street, has been converted to apartments and may be rehabilitated/renovated in the future. CATS would continue to coordinate the 36th Street Station design and development, as appropriate.

As part of the proposed Light Rail Alternative, 36th Street would be grade-separated with light rail and freight bridges. Partial parcel acquisitions may be required for the modifications to 36th Street. Residents of the NoDa community and employees in the area would benefit from increased transit access, improved mobility, and reduced freight train horn noise. The proposed station would be compatible with surrounding land uses.

Sugar Creek Station

The proposed Sugar Creek station platform would be located on a bridge structure where Sugar Creek Road would be depressed under the existing freight tracks and proposed light rail tracks. The proposed Sugar Creek Station Park-and-Ride Option 1 would be located along the north side of the existing rail corridor. The proposed park-and-ride would include bus transfer facilities. The parking areas for this park-and-ride option would include three surface parking lots that would be located at the northwest and northeast corners of Sugar Creek Road and Raleigh Street and west of Sugar Creek Road between Raleigh Street and the Light Rail Alternative. Existing land use in the area of the proposed park-and-ride lots consists of industrial, vacant and commercial uses (including large parking lots). Implementation of the proposed station would result in direct conversions from these existing land uses to a park-and-ride lot. The properties that would need to be acquired for development of the park-and-ride lots primarily consist of industrial uses and parking lots. Additional industrial, commercial and vacant properties are available within the general vicinity and no significant change in the overall land use composition of the area would be anticipated.

The proposed Sugar Creek Station Park-and-Ride Option 2 would be located along the south side of the existing rail corridor, just north of North Davidson Street. This proposed station would consist of a five-story parking garage with bus transfer facilities. The platform would remain in the same location as with the proposed Sugar Creek Station Park-and-Ride Option 1. Existing land use in the area of this proposed park-and-ride facility consists of three separate parcels and includes industrial, vacant and commercial uses. These three properties would need to be acquired for development of the proposed garage. Additional industrial, commercial and vacant properties are available within the general vicinity of the proposed station and as with the Sugar Creek Station Park-and-Ride Option 1; no significant change in the overall land use composition of the area would be anticipated.

Single-family residences are located adjacent to the existing rail corridor along Bearwood Avenue and Redwood Avenue to the southeast of both options for proposed Sugar Creek Station. Since the community is already located adjacent to an existing rail corridor and would be well-buffered from the proposed Sugar Creek Station, it is not expected that the proposed station would result in significant adverse land use impacts. Residents and employees in the area would benefit from increased transit access and mobility, and the proposed station would be generally compatible with surrounding land uses.

Old Concord Road Station

The proposed Old Concord Road Station platform would be located just south of the intersection of Old Concord Road and North Tryon Street/US-29. Surrounding land uses are primarily industrial and commercial. The proposed park-and-ride lot with bus transfer facilities would be located just south of Old Concord Road where it intersects with North Tryon Street/US-29. These parcels, which currently consist of commercial, industrial, and vacant land uses, would be converted to station and park-and-ride where acquisitions would occur. Additional industrial, commercial and vacant properties are available within the general vicinity and overall land use composition of the area would not change substantially as a result of implementation of the Old Concord Road Station. The proposed station would be compatible with existing land uses. Employees in the area would benefit from the increased transit access and improved mobility, strengthening the area as a location for business activity.

Tom Hunter Station

The proposed Tom Hunter Station platform would be located within the median of North Tryon Street/US-29 at Tom Hunter Road. Adjacent land uses are industrial and commercial. The proposed park-and-ride would result in direct conversion of commercial properties (vacant gas station, pizza restaurant, hair salon) at the northwest intersection of Tom Hunter Road and North Tryon Street/US-29 to accommodate the parking lot and bus transfer area. Additional commercial and vacant properties are available within the general vicinity.

Single and multi-family residential land uses are directly adjacent to the western side of the proposed park-and-ride lot for this station. The proximity and compatibility of these residential neighborhoods is being considered in the station design provisions, including adequate screening and buffering of these residential properties for the station park-and-ride lot. Residents and employees would benefit from the increased transit access and improved mobility and the proposed station would be compatible with its surrounding land uses.

University City Blvd. Station

The proposed University City Blvd. Station platform would be located within the median of North Tryon Street/US-29, just south of Stetson Drive. The proposed park-and-ride would consist of surface parking area with bus transfer facilities (just north of the platform, southwest of Stetson Drive). The area of development for the proposed University City Blvd. Station is currently vacant; therefore, direct land use conversions would not be required.

As the majority of surrounding property is vacant, the proposed University City Station would be compatible with surrounding land uses. Since the area is mostly undeveloped, significant infrastructure improvements would be required in this station area. It is expected that many of these improvements would occur through new development. The proposed park-and-ride facility includes a road that connects North Tryon Street/US-29 and Ikea Boulevard, and sets up future connections to adjacent properties. Residents and employees would benefit from the increased transit access and improved mobility.

McCullough Station

The proposed McCullough Station platform would be located within the median of North Tryon Street/US-29, just south of McCullough Drive. The proposed station is directly adjacent to commercial and office uses. Residential uses are scattered farther outside of the station area. The existing commercial parcel (vacant restaurant) would be converted for the park-and-ride at this proposed station and additional commercial and vacant properties are available within the vicinity.

Overall, the proposed McCullough Station would be compatible with surrounding land uses. Additional vehicular connections are needed to improve access to all properties in this station area and it is

expected that these improvements would occur through new development. Residents and employees in the area would benefit from the increased transit access and improved mobility.

JW Clay Blvd. Station

The proposed JW Clay Blvd. Station platform would be located within the median of North Tryon Street/US-29, just south of JW Clay Boulevard. The proposed station is directly adjacent to commercial uses, with a greenway on the eastern side of North Tryon Street/US-29. A bus transfer bay that is proposed as part of this station would be located on-street, on the south side of JW Clay Boulevard, adjacent to existing parking lots that serve nearby commercial development

Overall, the proposed station would be compatible with adjacent land uses and would enhance transit access and mobility to and from the University City area. CATS would continue to coordinate the JW Clay Blvd. Station design and development with future development plans, including a potential urban village that may be developed near the JW Clay Boulevard/North Tryon Street/US-29 intersection.

UNC Charlotte Station

The UNC Charlotte Station platform would be located on the campus directly adjacent to Cameron Boulevard and the Laurel Hall Dormitory. No park-and-ride facility is planned for this station. Direct land use changes would not be expected to occur and the station would be compatible with existing and planned future campus uses. UNC Charlotte has incorporated the proposed Light Rail Alternative into its updated Campus Master Plan. Furthermore, employees and students of UNC Charlotte would be better served by the improved transit access and mobility.

Mallard Creek Church Station

The proposed Mallard Creek Church Station platform would be located north of Mallard Creek Church Road and east of Kirk Farm Fields Park. The proposed station location is surrounded primarily by vacant, parkland and industrial uses. Residential uses are located on the southern side of Mallard Creek Church Road. The Mallard Creek Church Station would include a park-and-ride lot with bus facilities located, north of Mallard Creek Church, east of Kirk Farm Fields park, and west of Stone Quarry Road. The station would convert vacant land. This property is owned by UNC Charlotte, and development of this station is being coordinated with the university. This station is included in the Campus Master Plan.

I-485/N. Tryon Station

The proposed I-485/N. Tryon Station platform would be located along the eastern portion of North Tryon Street/US-29. In addition, a five-story parking garage would be located east of North Tryon Street/US-29, just south of the I-485 ramps and Morningstar Place Drive. The area surrounding this station consists of industrial uses, vacant properties and residential development, including the Queens Grant Mobile Home residential properties. Access to this residential area would be redesigned and pedestrian access to the station would be provided with sidewalks as part of the proposed project to allow residents to continue to access their neighborhood. The development of this station is generally consistent with surrounding land uses and would provide residents with increased transit access and mobility.

4.2.3 Light Rail Alternative – Sugar Creek Design Option

The Light Rail Alternative – Sugar Creek Design Option alignment would transition to North Tryon Street/US-29 approximately one-mile southwest of the proposed transition for the Light Rail Alternative. The proposed Light Rail Alternative – Sugar Creek Design Option would have direct impacts on existing land uses, including vacant land and industrial uses adjacent to the Asian Corners Mall, used primarily as storage facilities related to industrial uses. Partial or full acquisition of parcels would be required.

Corridor-level impacts would also be associated with the required widening on North Tryon Street/US-29 that would be needed to accommodate construction of the proposed Light Rail Alternative and the proposed Light Rail Alternative – Sugar Creek Design Option within the median of North Tryon Street/US-29. The potentially affected properties are primarily comprised of commercial uses, and right-of-way needs would largely affect parking areas, and vacant and landscaped areas. The area would benefit from redevelopment opportunities and access improvements.

Sugar Creek Station – Sugar Creek Design Option

The proposed Sugar Creek Station – Sugar Creek Design Option platform would be located at the terminus of Dorton Street, just south of North Tryon Street/US-29. Existing land use in this area is primarily industrial and commercial, with small pockets of vacant parcels.

The proposed park-and-ride lot for this station would be located to the northeast of Sugar Creek Road and Raleigh Street. The property, which is currently developed with commercial and industrial land uses, would be converted to the proposed station and park-and-ride lot.

The proposed Sugar Creek Station – Sugar Creek Design Option would result in displacement of commercial and industrial uses. However, additional industrial, commercial and vacant properties are available within the general vicinity and no significant changes to the overall land use composition of the area would be expected.

Residential uses would be generally well-buffered from the proposed station and proposed park-and-ride lot. These residents, as well as employees in the area, would benefit from increased transit access and improved mobility. The proposed station would be generally compatible with its surrounding land uses.

Old Concord Road Station – Sugar Creek Design Option

The proposed Old Concord Road Station – Sugar Creek Design Option platform would be located in the median of North Tryon Street/US-29, just south of Old Concord Road. Surrounding land uses just outside of the proposed station area are primarily industrial and commercial, with a small pocket of office use.

The proposed park-and-ride lot would be located at the southern intersection of Old Concord Road and North Tryon Street/US-29. Existing parcels would be converted to accommodate the proposed park-and-ride lot and station. Additional commercial, industrial and vacant properties are available within the general vicinity and no significant changes to the overall land use composition of this area would be anticipated. The proposed station would not be incompatible with these existing land uses. Employees in the area would benefit from the increased transit access and improved mobility, strengthening the area as a location for business activity.



Industrial property in area of where the proposed Light Rail Alternative – Sugar Creek Design Option would transition to North Tryon Street/US-29.

4.3 Mitigation

4.3.1 Light Rail Alternative

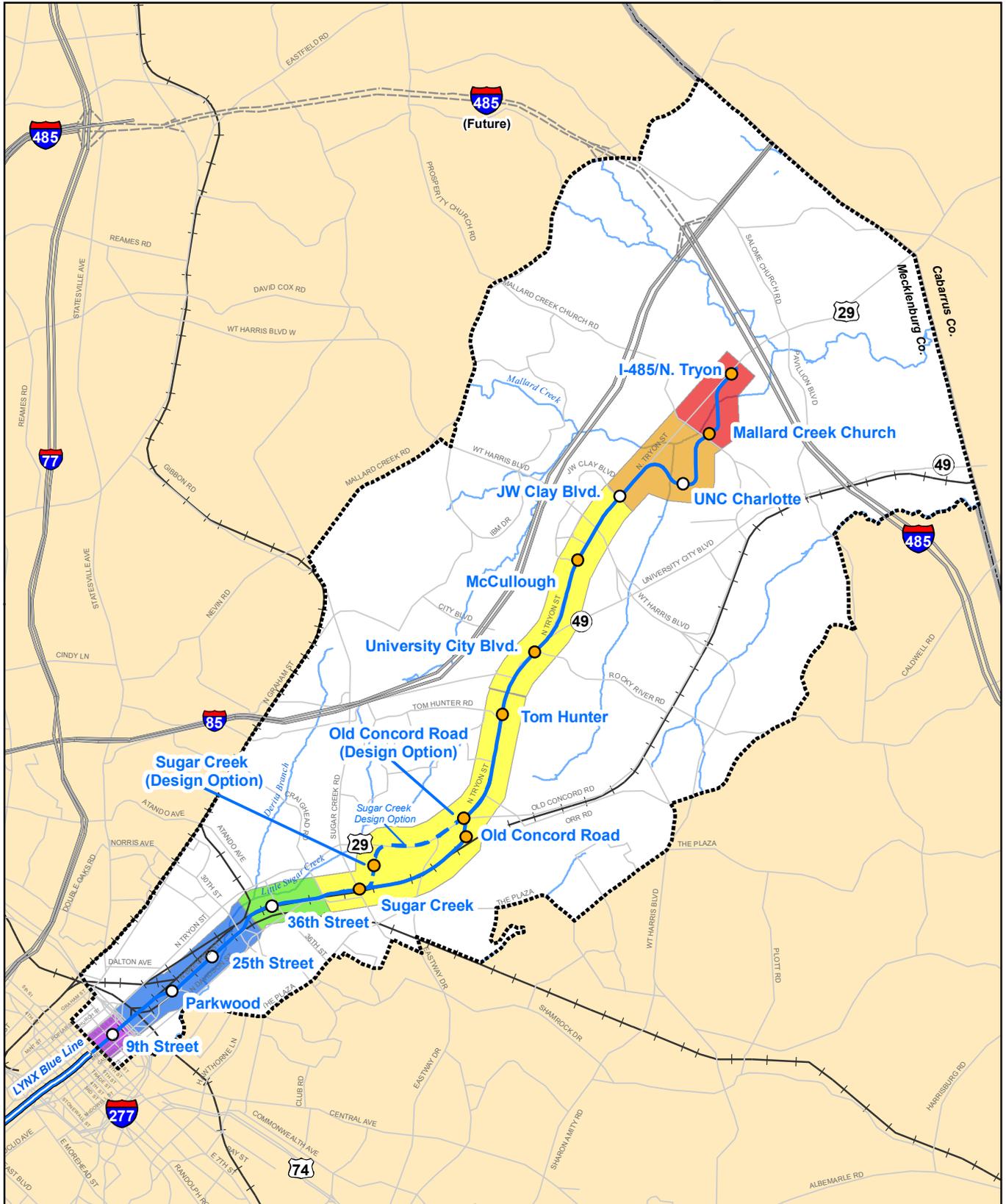
Direct land use changes would result from the proposed Light Rail Alternative. Land use conversions would primarily be required for alignment transitions and the acquisitions associated with the proposed park-and-ride facilities, as well as for widening the North Tryon Street/US-29 right-of-way to accommodate light rail in the median. These changes would not change the overall land use composition of the corridor significantly.

Station Area Plans will be formally adopted and implemented as discussed in Section 4.1.5. In addition, a separate project known as the Northeast Corridor Infrastructure (NECI) program is under development, similar to the South Corridor Infrastructure Program (SCIP). This program would consist of minor infrastructure improvements (e.g., roadway, pedestrian, etc.) to enhance business and residential access at the proposed stations and would be funded through the City’s Capital Improvement Program.

4.3.2 Light Rail Alternative – Sugar Creek Design Option

Direct land use changes would result from the proposed Light Rail Alternative – Sugar Creek Design Option. Impacts resulting from the Light Rail Alternative – Sugar Creek Design Option would be subject to the same mitigation measures described in Section 4.3.1.

Northeast Corridor 1/2 - Mile Land Use Districts

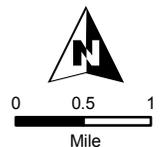


Legend

- Northeast Corridor Limits
- LYNX Blue Line
- Light Rail Transit
- Design Options
- Proposed Stations
- Proposed Stations with Park-and-Ride
- Highway
- Major Roads
- Highway (Future)
- Streams

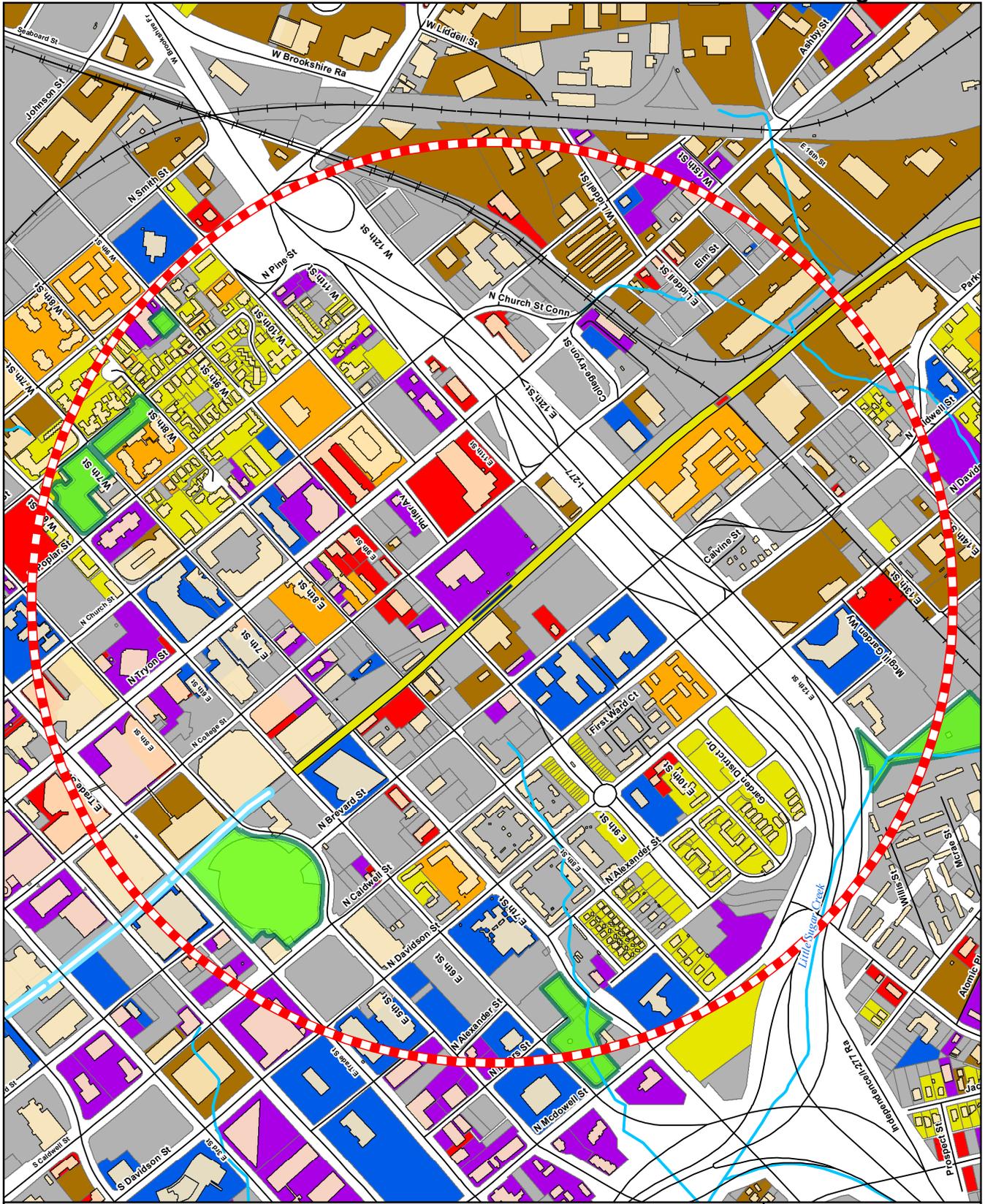
Land Use Districts

- High Intensity Urban Core
- Industrial Communities
- Historic Urban Communities
- Established Suburban Communities
- University
- New Suburban Communities



Data Source:
CATS, City of Charlotte GIS, and Mecklenburg County
GIS, Urban Design Framework, 2009

Figure 4-2
9th Street Station - Existing Land Use



Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2-mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (36%)
	Commercial (5%)
	Single-Family (11%)
	Public/Institution (11%)
	Mobile Home (0%)
	Industrial (17%)
	Multi-Family (8%)
	Office (12%)

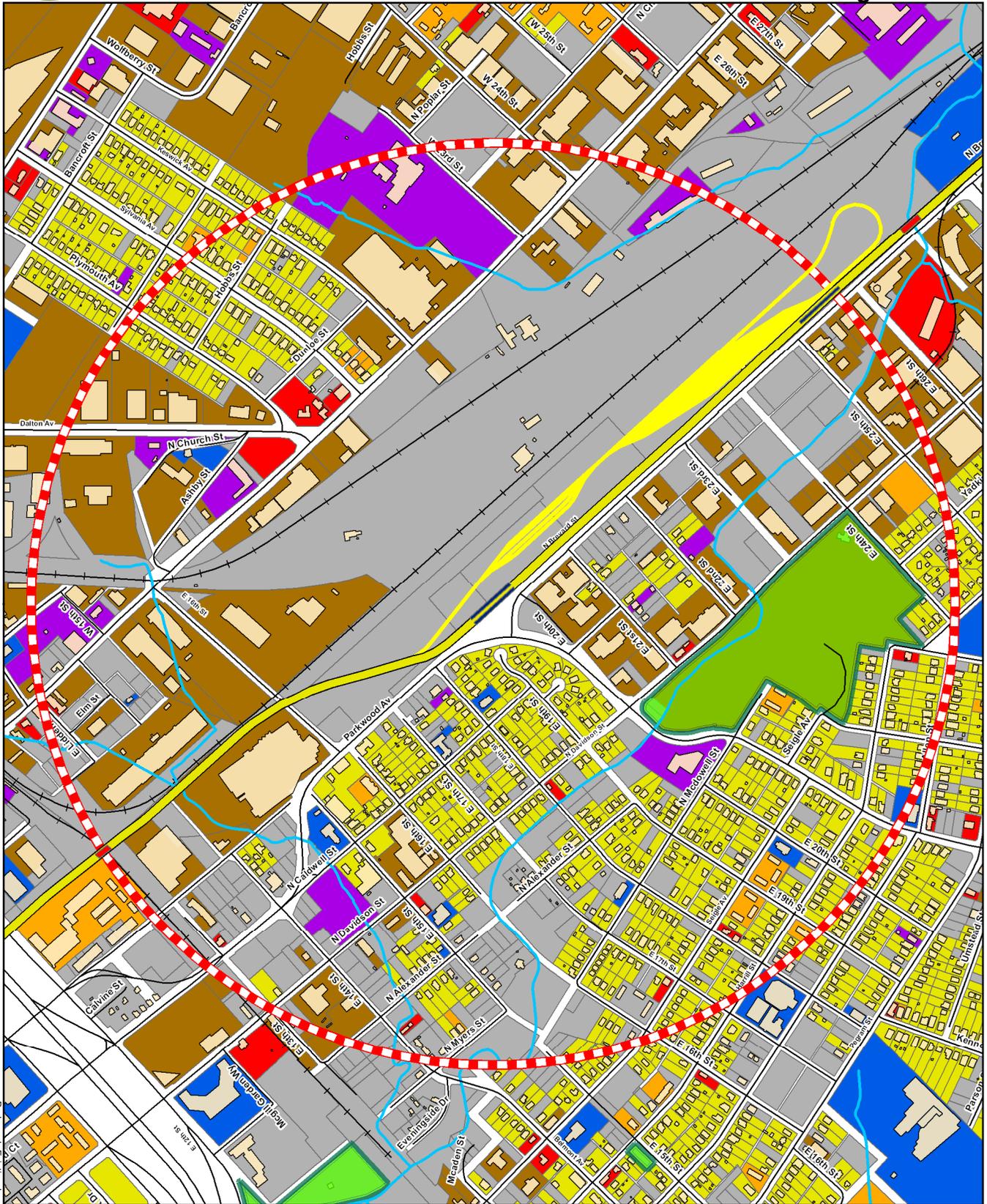
400 200 0 400
Feet

Data Source:
 Charlotte Area Transit System, STV/RWA,
 Mecklenburg County GIS

9th_ST_EIU_BurferRev000.pdf

12-11-08

Parkwood Station - Existing Land Use



Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2-mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (42%)
	Commercial (7%)
	Single-Family (19%)
	Public/Institution (1%)
	Mobile Home (0%)
	Industrial (25%)
	Multi-Family (1%)
	Office (5%)

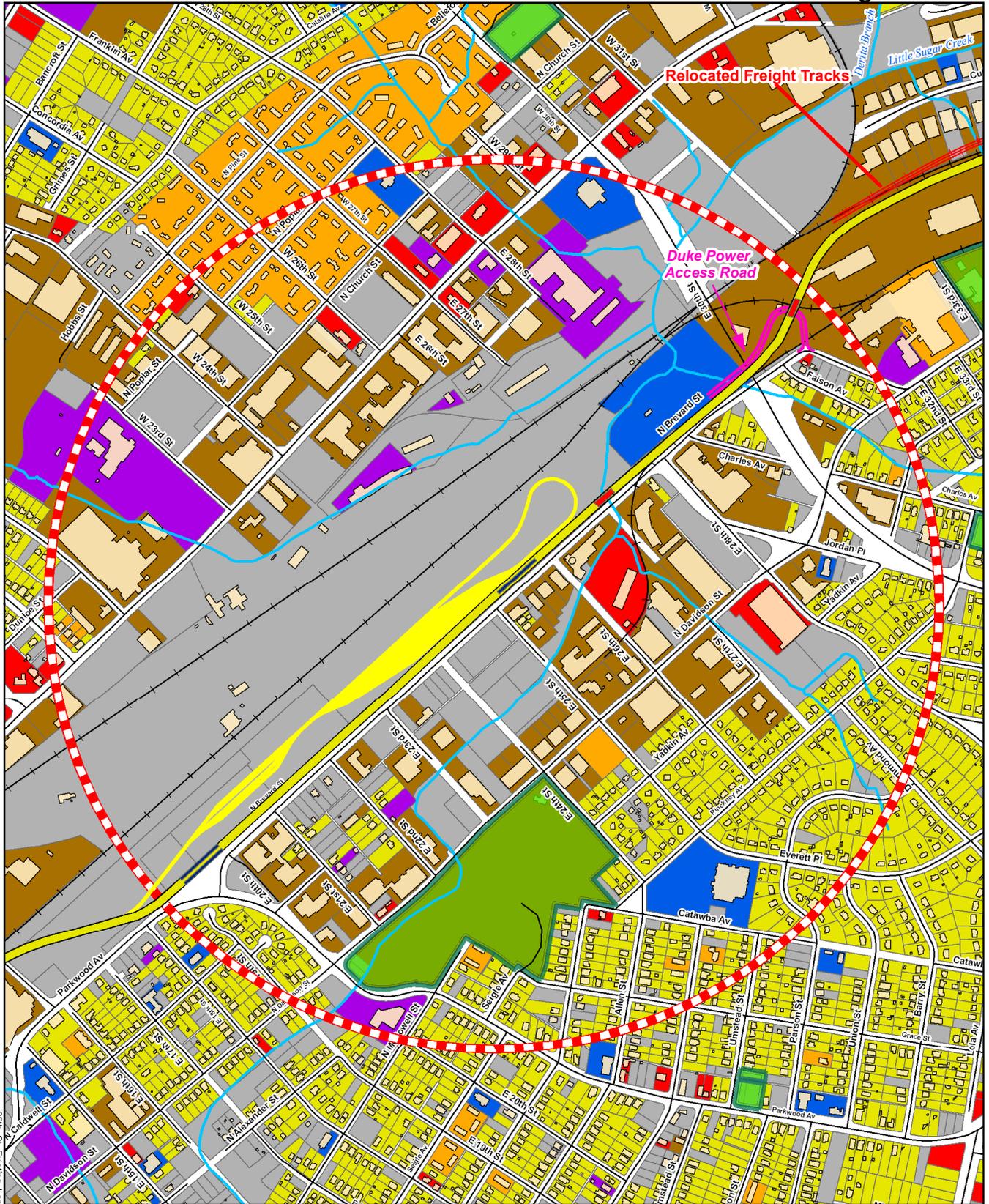
400 200 0 200 400
Feet

Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS

Parkwood_Existing_Landuse_Buffer_Map_CB_112409.mxd

11/24/09

25th Street Station - Existing Land Use



Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2 -mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (36%)
	Commercial (7%)
	Single-Family (14%)
	Public/Institution (4%)
	Mobile Home (0%)
	Industrial (30%)
	Multi-Family (3%)
	Office (6%)

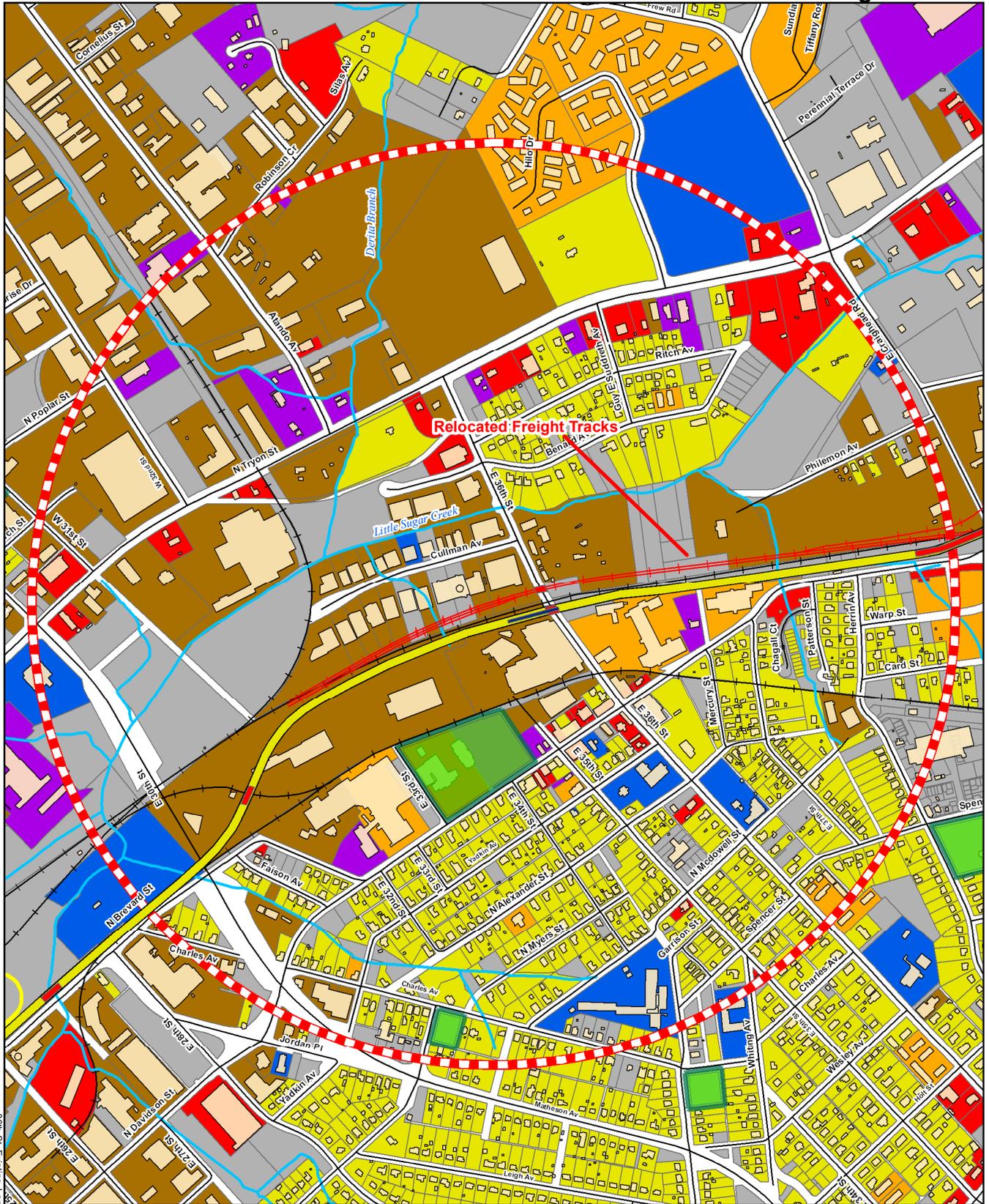
400 200 0 400
Feet

Data Source: Charlotte Area Transit System, STV/RWA, Mecklenburg County GIS

25th_ST_Existing_Landuse_Buffer_Map_CB_112409.mxd

11/24/09

36th Street Station - Existing Land Use



Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2 -mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (19%)
	Commercial (5%)
	Single-Family (25%)
	Public/Institution (5%)
	Mobile Home (0%)
	Industrial (37%)
	Multi-Family (6%)
	Office (3%)

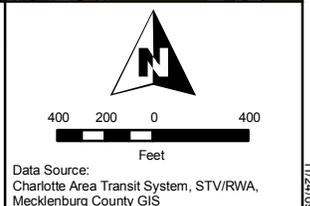
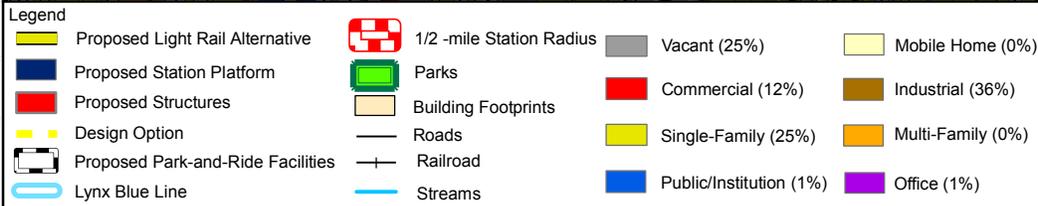
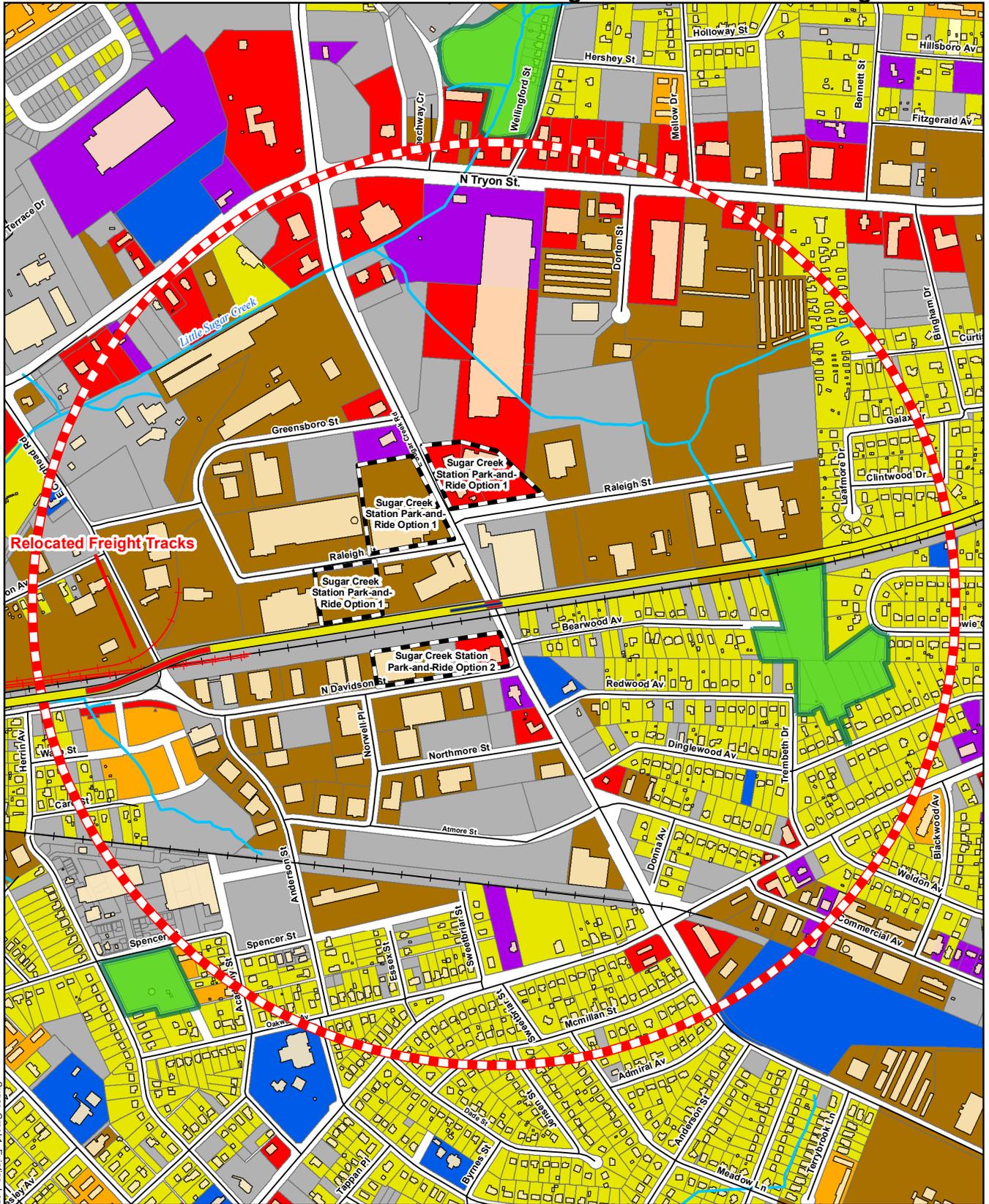
400 200 0 200 400
 Feet

Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS

36th St Existing Landuse Buffer_Map_CB_112409.mxd

11/24/09

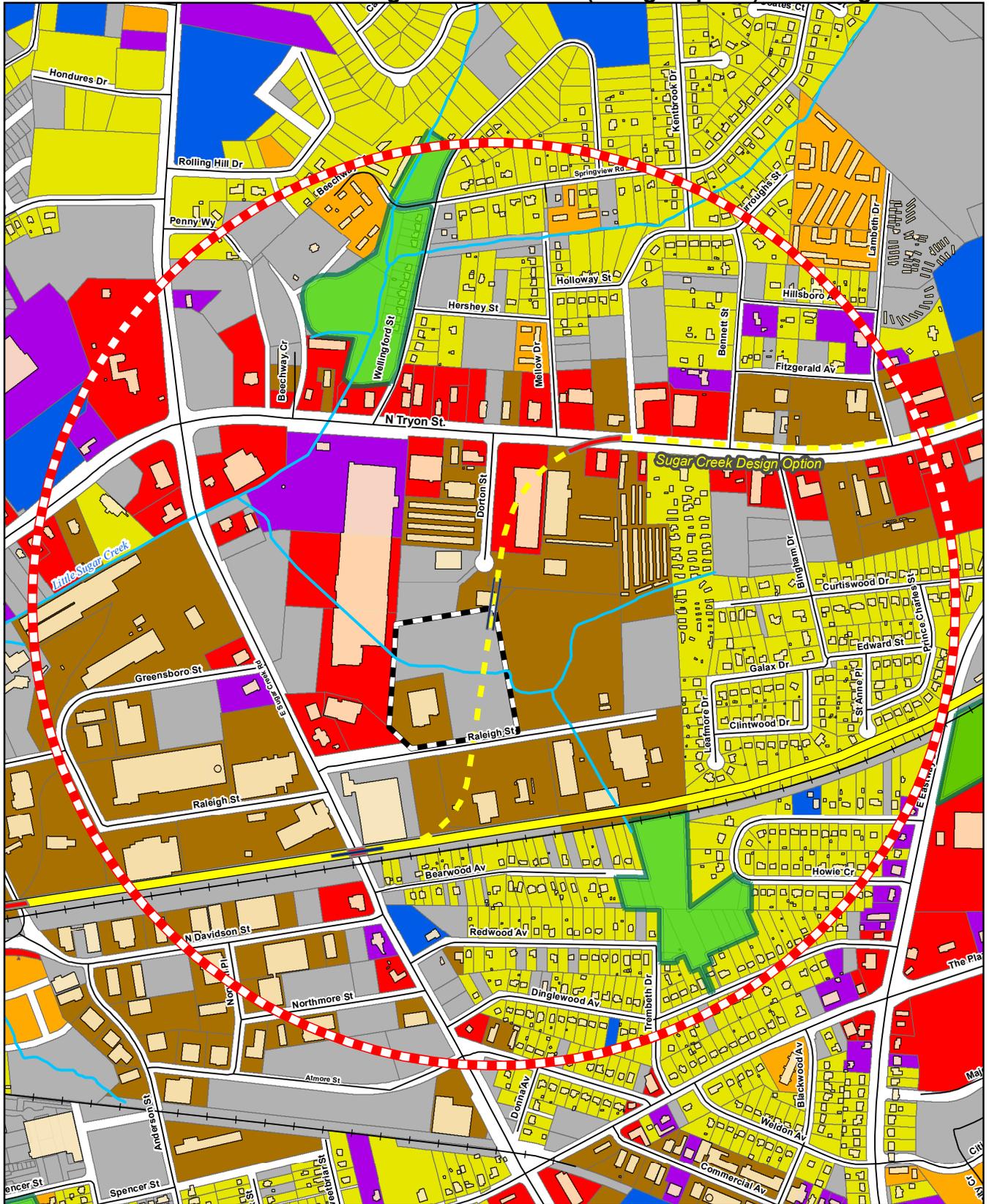
Sugar Creek Station - Existing Land Use



Sugar_Creek_Existing_Landuse_Buffer_Map_CB_112409.mxd

11/24/09

Sugar Creek Station (Design Option) - Existing Land Use

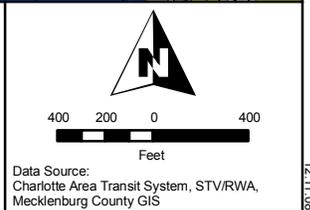
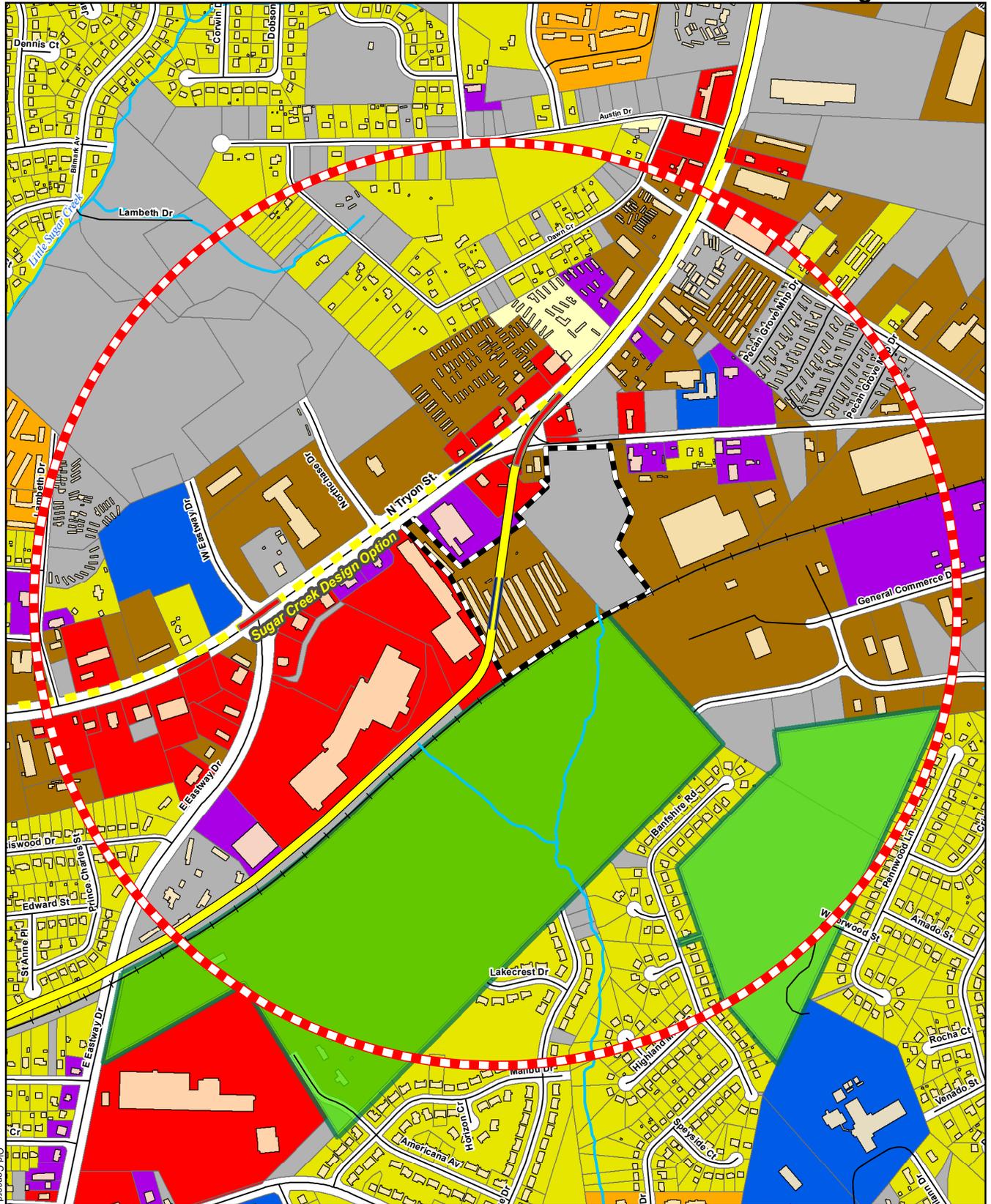


Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2 -mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (23%)
	Commercial (15%)
	Single-Family (27%)
	Public/Institution (2%)
	Mobile Home (1%)
	Industrial (28%)
	Multi-Family (1%)
	Office (3%)

400 200 0 400
Feet

Data Source: Charlotte Area Transit System, STV/RWA, Mecklenburg County GIS

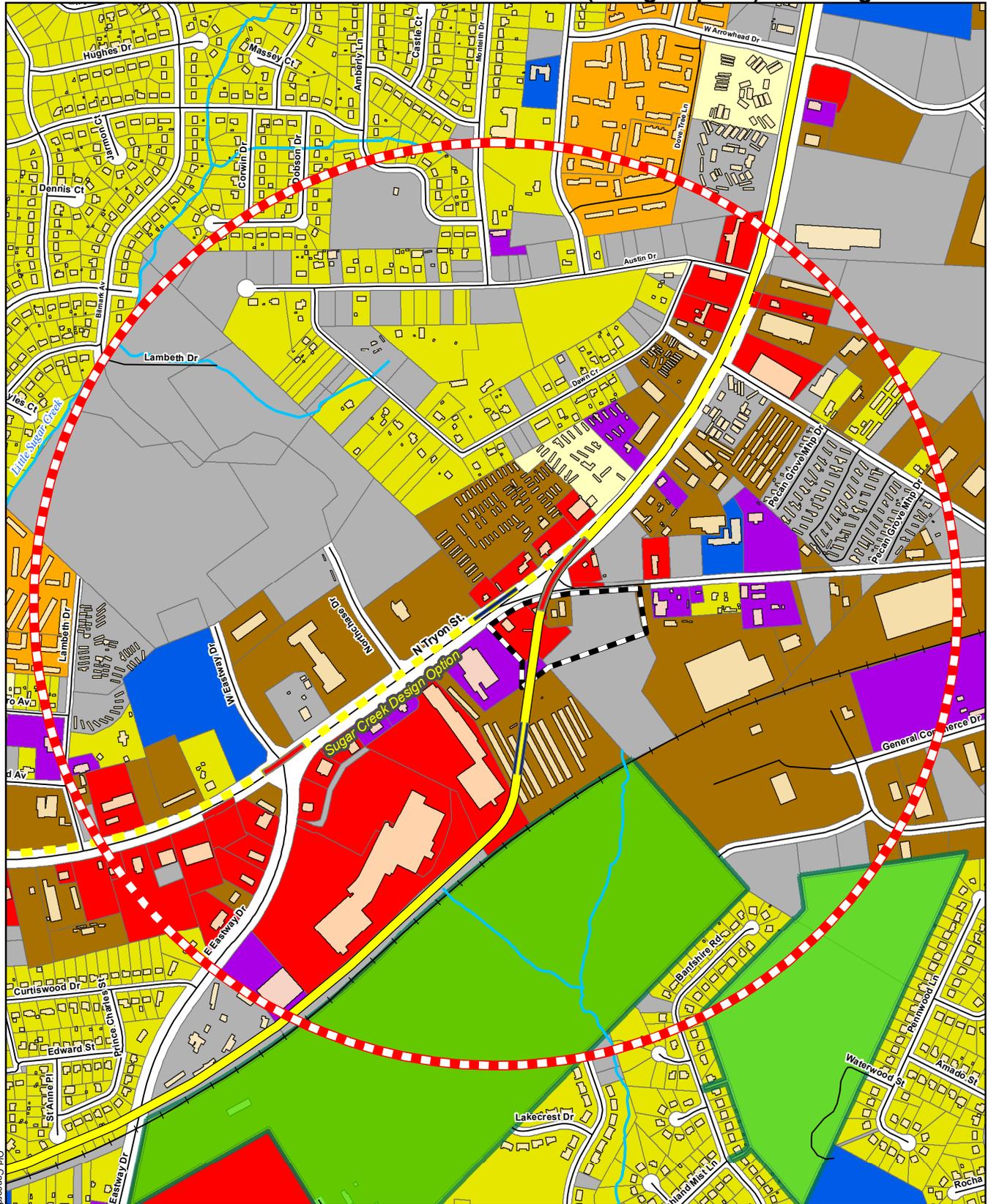
Old Concord Road Station - Existing Land Use



Old Concord Road Station_LPA_ELU_Buffer_Rev.00.pdf

12-11-08

Old Concord Road Station (Design Option) - Existing Land Use

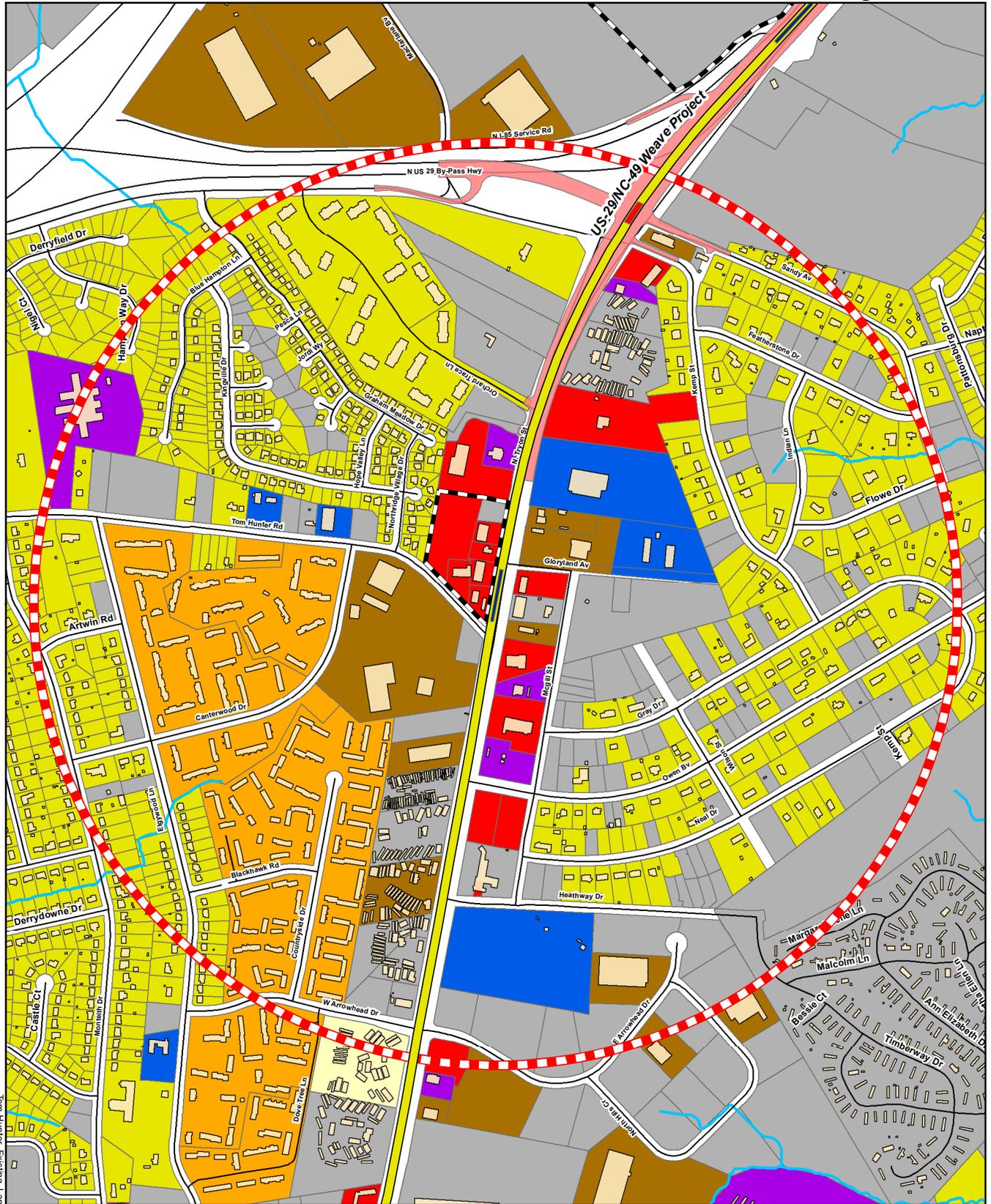


Old Concord Station_DG_ELU_BufferRev.00.pdf

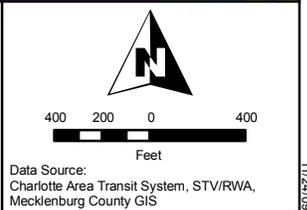
Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2 -mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (30%)
	Commercial (13%)
	Single-Family (14%)
	Public/Institution (1%)
	Mobile Home (4%)
	Industrial (33%)
	Multi-Family (2%)
	Office (5%)

400 200 0 400
Feet

Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS



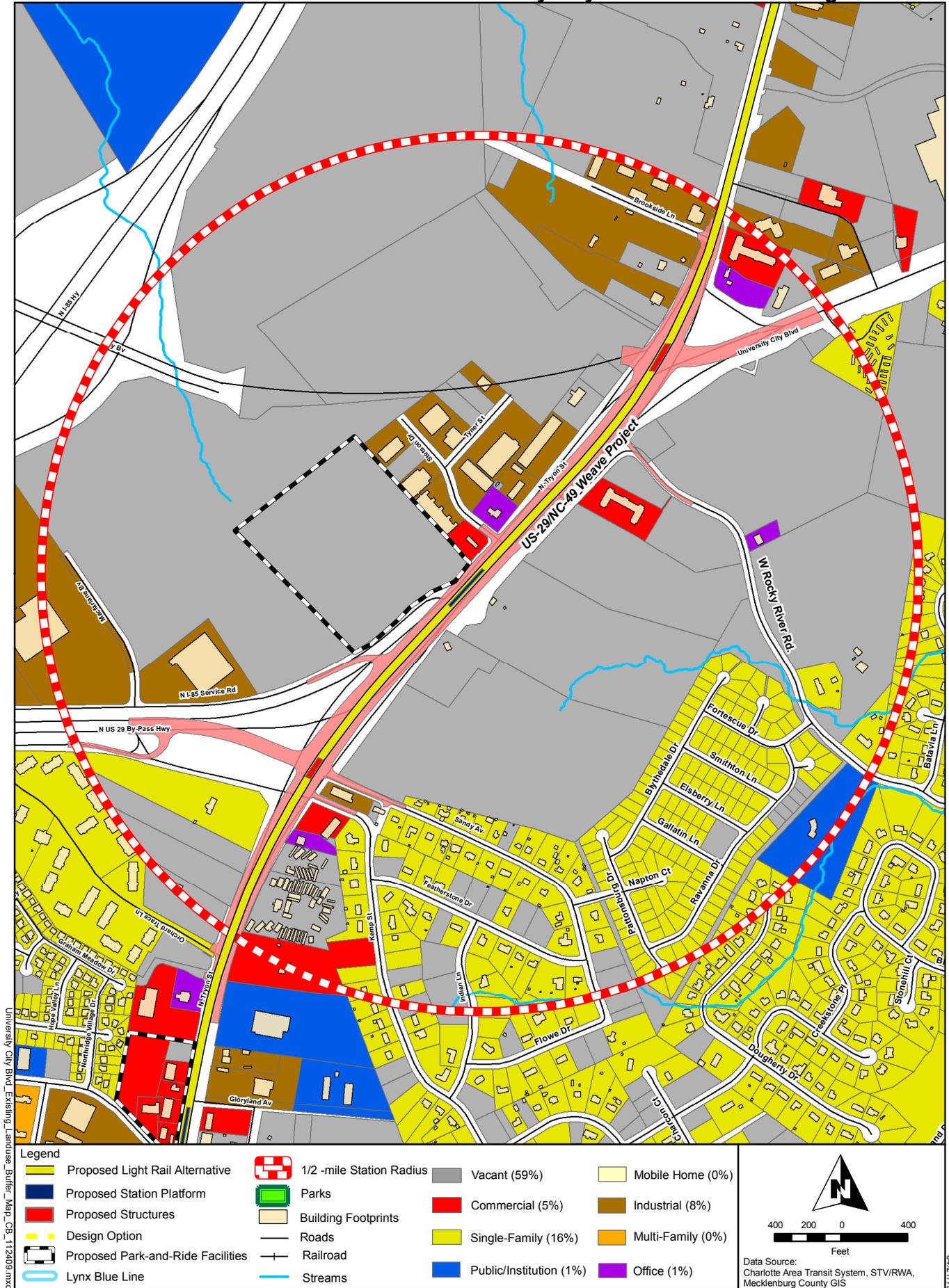
Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2 -mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (26%)
	Commercial (5%)
	Single-Family (37%)
	Public/Institution (5%)
	Industrial (7%)
	Multi-Family (15%)
	Mobile Home (1%)
	Office (4%)



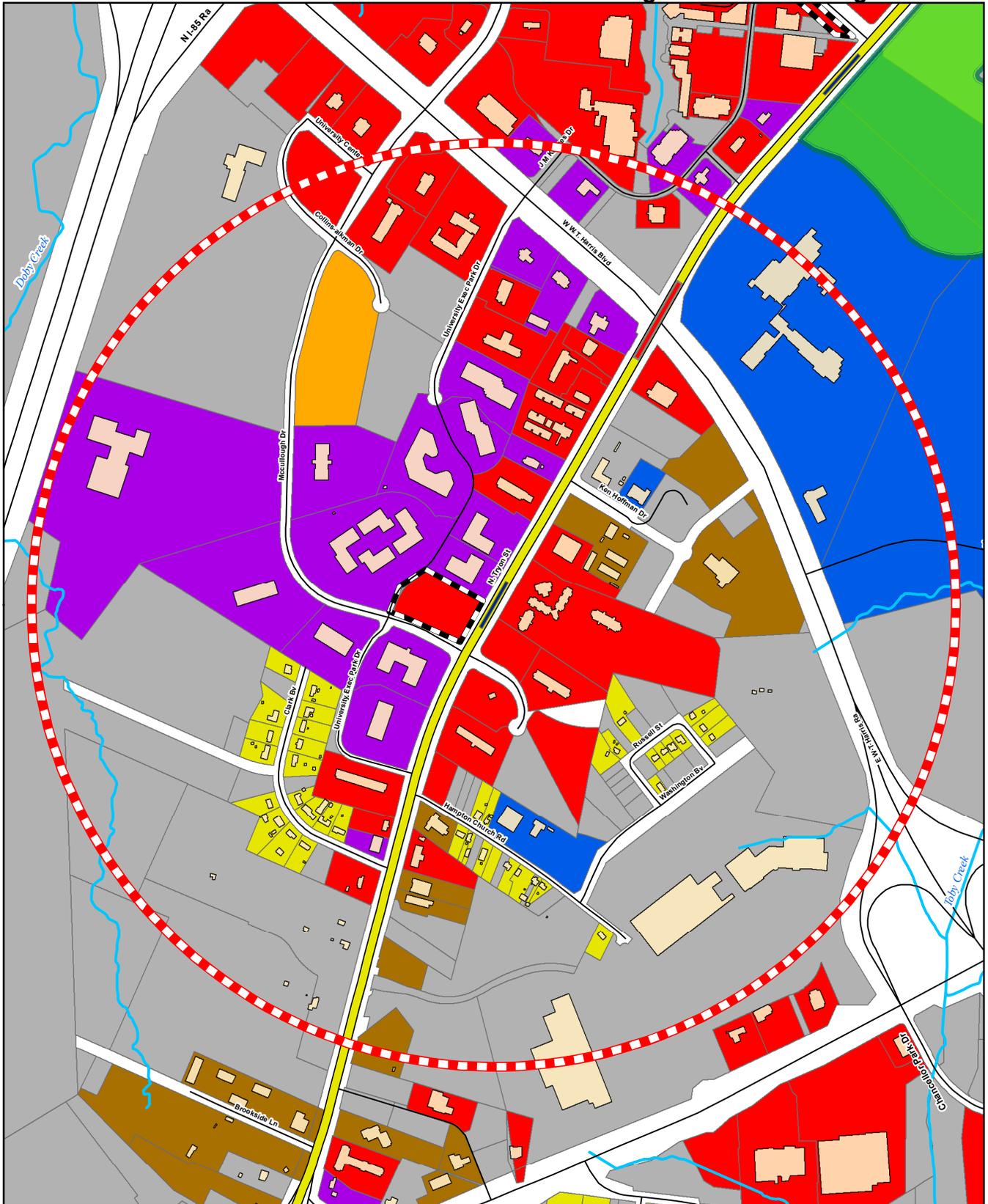
Tom Hunter_Existing_Landuse_Buffer_Map_CB_112409.mxd

11/24/09

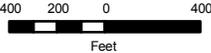
University City Blvd. Station- Existing Land Use



McCullough Station - Existing Land Use



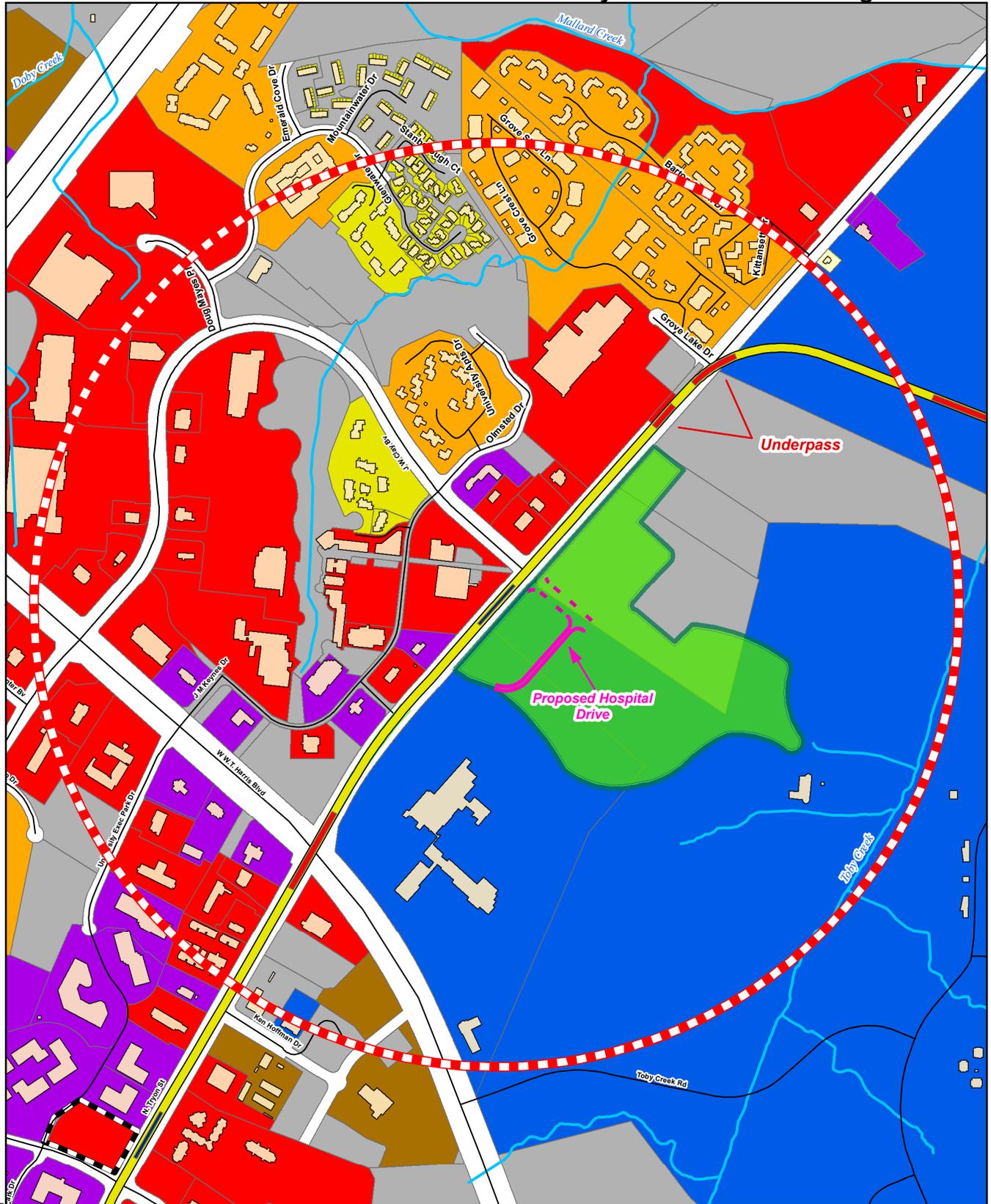
Legend	
Proposed Light Rail Alternative	1/2 -mile Station Radius
Proposed Station Platform	Parks
Proposed Structures	Building Footprints
Design Option	Roads
Proposed Park-and-Ride Facilities	Railroad
Lynx Blue Line	Streams
Vacant (32%)	Commercial (25%)
Mobile Home (0%)	Industrial (4%)
Single-Family (3%)	Multi-Family (2%)
Public/Institution (10%)	Office (24%)



 Data Source:
 Charlotte Area Transit System, STV/RWA,
 Mecklenburg County GIS

McCullough_ETL_Buffer_Rev.00.pdf

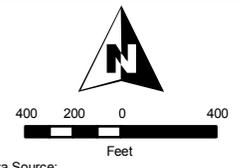
12-11-08

JW Clay Blvd. Station - Existing Land Use



Legend

	Proposed Light Rail Alternative		1/2 Mile Station Radius		Vacant (20%)		Mobile Home (0%)
	Proposed Station Platform		Parks		Commercial (25%)		Industrial (1%)
	Proposed Structures		Building Footprints		Single Family (3%)		Multi-Family (9%)
	Design Option		Roads		Public/Institution (38%)		Office (4%)
	Proposed Park-and-Ride Facilities		Railroad		Streams		
	Lynx Blue Line						

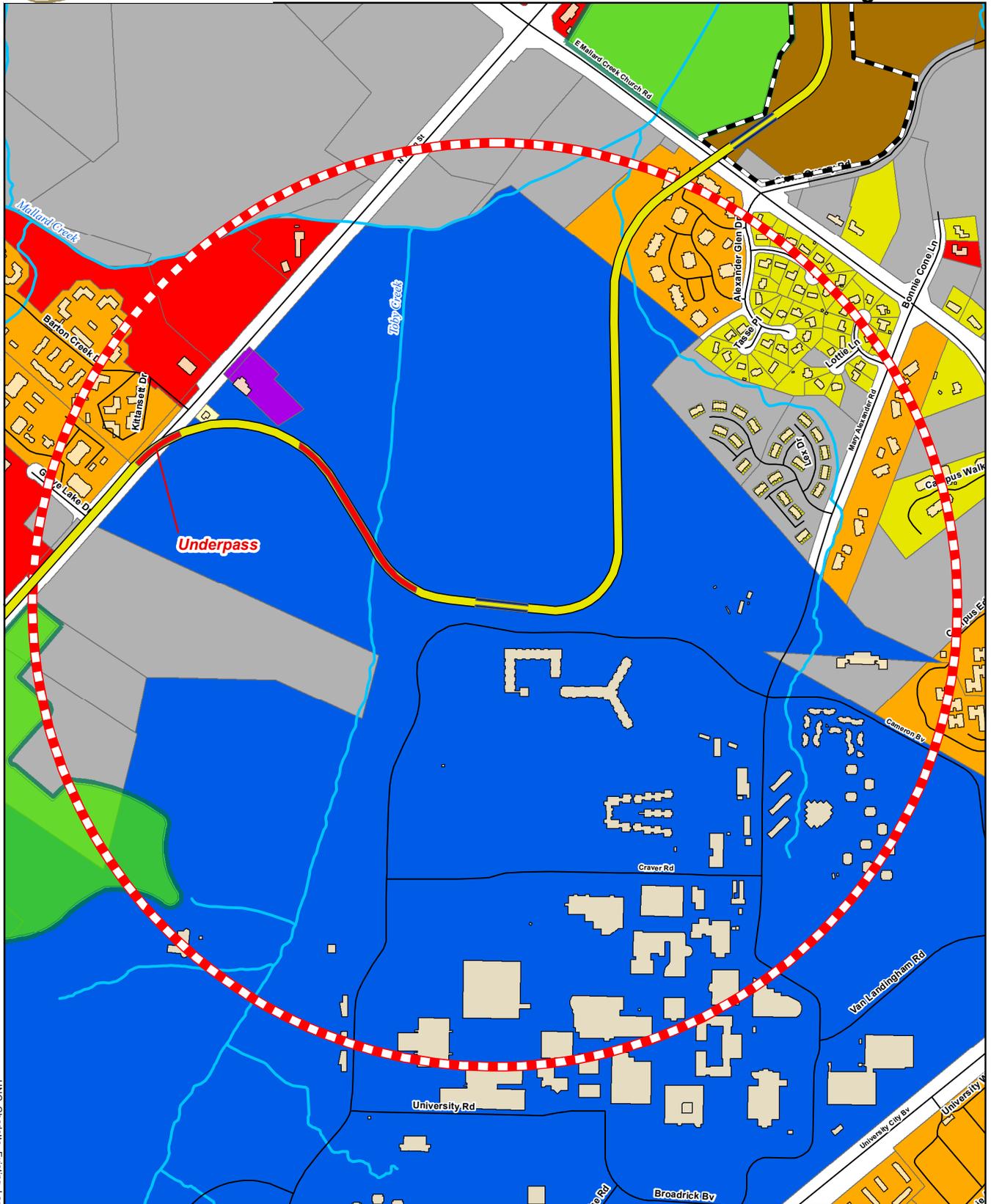


Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS

JW Clay Blvd. ETLU Buffer Rev. 00.pdf

12-11-08

UNC Charlotte Station - Existing Land Use



UNC_Charlotte_Existing_Landuse_Buffer_Map_CB_112409.mxd

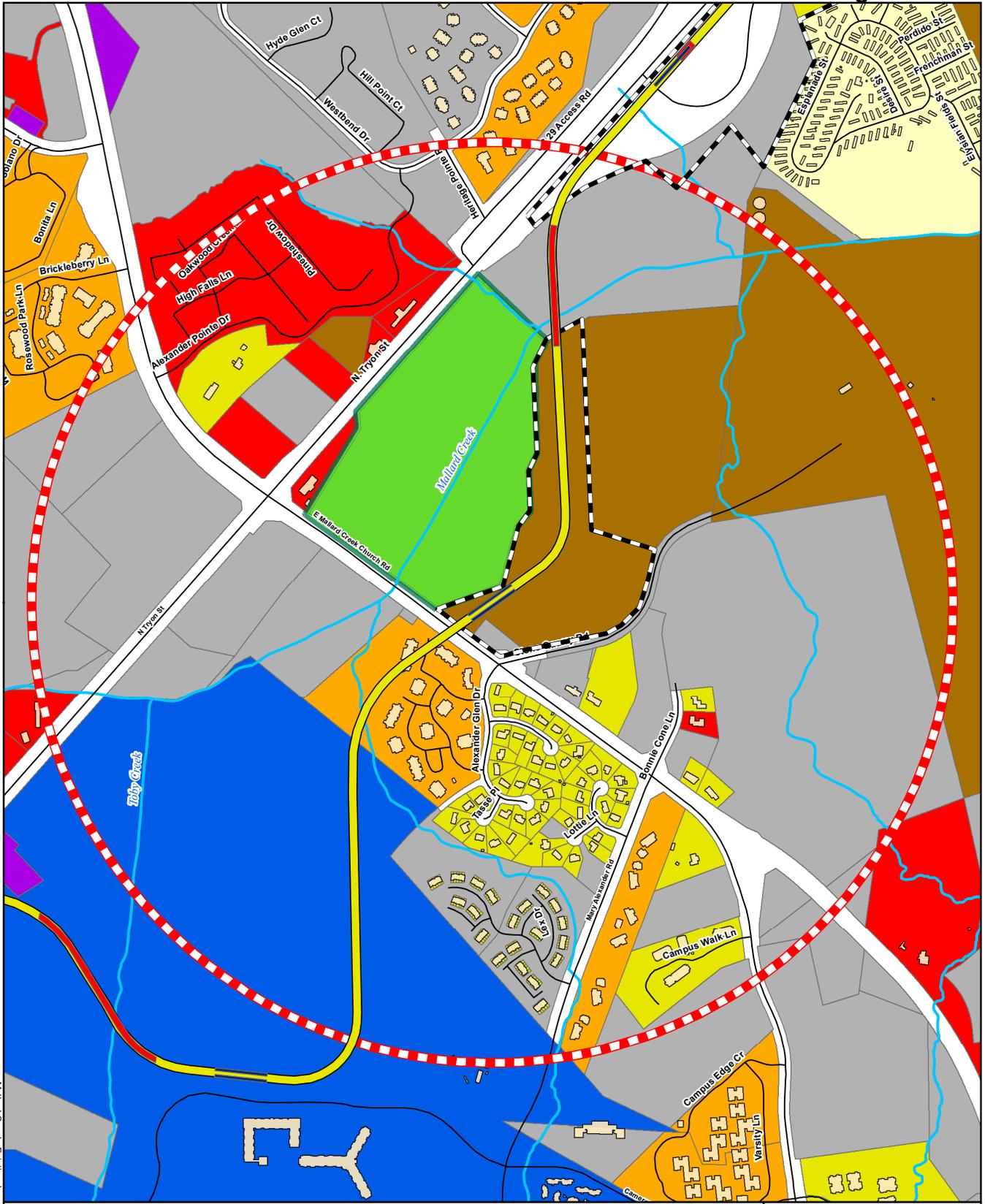
Legend	
Proposed Light Rail Alternative	1/2 -mile Station Radius
Proposed Station Platform	Parks
Proposed Structures	Building Footprints
Design Option	Roads
Proposed Park-and-Ride Facilities	Railroad
Lynx Blue Line	Streams
Vacant (15%)	Mobile Home (0%)
Commercial (3%)	Industrial (17%)
Single-Family (3%)	Multi-Family (6%)
Public/Institution (72%)	Office (1%)

400 200 0 400
Feet

Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS

11/24/09

Mallard Creek Church Station - Existing Land Use



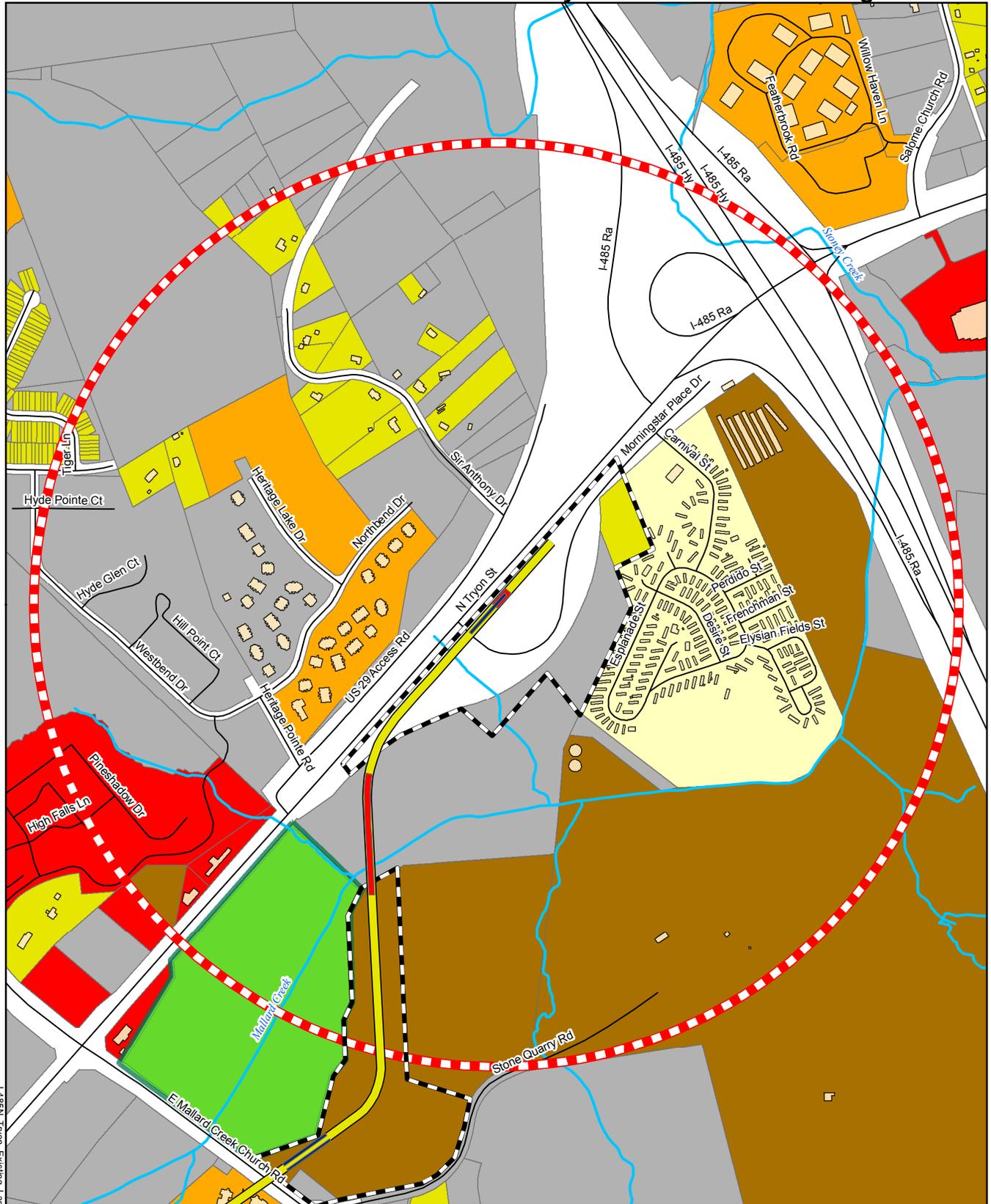
Mallard Creek_Existing_Landuse_Buffer_Map_CB_112409.mxd

Legend	
	Proposed Light Rail Alternative
	Proposed Station Platform
	Proposed Structures
	Design Option
	Proposed Park-and-Ride Facilities
	Lynx Blue Line
	1/2 -mile Station Radius
	Parks
	Building Footprints
	Roads
	Railroad
	Streams
	Vacant (45%)
	Commercial (7%)
	Single-Family (7%)
	Public/Institution (17%)
	Mobile Home (0%)
	Industrial (18%)
	Multi-Family (6%)
	Office (0%)

400 200 0 200 400
Feet

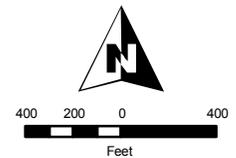
Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS

I-85 \ N.Tryon Street Station - Existing Land Use



Legend

- | | | | |
|-----------------------------------|--------------------------|-------------------------|-------------------|
| Proposed Light Rail Alternative | 1/2 -mile Station Radius | Vacant (39%) | Mobile Home (11%) |
| Proposed Station Platform | Parks | Commercial (4%) | Industrial (29%) |
| Proposed Structures | Building Footprints | Single-Family (11%) | Multi-Family (6%) |
| Design Option | Roads | Public/Institution (0%) | Office (0%) |
| Proposed Park-and-Ride Facilities | Railroad | | |
| Lynx Blue Line | Streams | | |



Data Source:
Charlotte Area Transit System, STV/RWA,
Mecklenburg County GIS

I-85\N_Tryon_Existing_Landuse_Buffer_Map_CB_112409.mxd

11/24/09