Multi-Modal Transportation Station

Environmental Assessment and Section 4(f) Evaluation

City of Lexington, North Carolina

August 2016

APPROVED:

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Date

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Prepared by URS Corporation,
an AECOM Company

Multi-Modal Transportation Station

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PREPARED BY:

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Date

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City of Lexington

Environmental Assessment
for the
Multi-Modal Transportation Station
Lexington, Davidson County, North Carolina

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Commitments Developed Through Project Development and Design

The City of Lexington (COL) will take a proactive approach to implement sediment and erosion control Best Management Practices (BMPs) through project development and design. Sediment and erosion control BMPs will be implemented in accordance with the North Carolina Department of Transportation's (NCDOT) *Best Management Practices for Protection of Surface Waters* (1997). The plan will be prepared in accordance with the requirements of the North Carolina Sedimentation Pollution Control Act (15A NCAC 48.0101-0130).

The COL will conduct a detailed vibration analysis during final Project design. If the detailed analysis continues to show significant vibration impacts, specific mitigation measures will be designed into the Project.

The COL will develop a solid waste resource reclamation and recycling program prior to construction activities.

The COL will conduct a formal jurisdictional determination of the Project Study Area,[1] and the COL will obtain the required federal and state water protection permits.

The COL will coordinate with the Federal Emergency Management Agency (FEMA) to ensure compliance with floodplain regulations.

The COL, as part of its Brownfields Agreement, is committed to develop a Living Environmental Management Plan with physical redevelopment of the Lexington Home Brands property.

Prior to Project construction, the COL will undertake a pre-demolition/pre-renovation survey of buildings and undertake the necessary abatement or removal of asbestos-containing material (ACM) and lead-based paint (LBP) on site.

[1] The Project Study Area consists of the Project Limits and Station Area Plan shown in Figure 1-2, unless otherwise indicated.

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Commitments Developed Through Project Development and Design

For the eligible historic resources in the Project area, the COL will enter into a Memorandum of Agreement (MOA) with the Federal Railroad Administration, the NCDOT Rail Division and the State Historic Preservation Office (SHPO) documenting that the Project will result in adverse impacts to the existing streetscapes and existing tunnel structure within the SHPO-proposed Lexington Industrial Historic District. The COL will undertake a recordation plan to document the tunnel structure and streetscapes, as outlined in the MOA. The COL will preserve the north/west portion of the tunnel structure, including the headwall arch opening, and incorporate the preserved portion of the tunnel structure into an area of community space and implement a public interpretive installation.

The COL will continue to evaluate the Project property impacts as the Project moves into design. Should the Project require property acquisitions, the COL will follow Federal and North Carolina requirements, including the Uniform Act Relocation assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Article 9 of Chapter 136 of the General Statutes of North Carolina also governs property acquisitions by municipal and state governments.

During Project construction, the COL will ensure the construction contract specifications require the contractors to adhere to appropriate Federal, state, and local noise abatement and control requirements.

Executive Summary

The Lexington Multi-modal Transportation Station (MMTS), referenced as the "Project" in this document, will be located in the City of Lexington, Davidson County, North Carolina and is intended to re-establish passenger rail service in Lexington and multi-modal access for all citizens within the Piedmont Triad region.

The City of Lexington (COL) is the primary Project sponsor. Joining the COL as Project partners are Davidson County, the Tourism Recreation Investment Partnership for Davidson County Foundation (TRIP), Piedmont Triad Regional Council (PTRC), Piedmont Authority for Regional Transportation (PART), the North Carolina Department of Transportation (NCDOT) Rail Division, the National Railroad Passenger Corporation (Amtrak), and the Federal Railroad Administration (FRA). All partners will be involved in development of the Project, whether by financial support or through in-kind participation with technical expertise.

The Project site is in the center of the Lexington Depot District. The Depot District is defined by up to 35 blocks within and adjacent to Uptown Lexington, and includes the Lexington Home Brands (LHB) Plant 1 furniture manufacturing facility (now owned by COL), the Lexington Farmers Market, portions of Uptown Lexington, existing residential neighborhoods, and several blocks of underutilized industrial properties.

As part of the Project, the COL prepared a Station Area Plan (SAP) for the Depot District, which provides a reference and context for the COL to plan for the implementation of new passenger service and provide access and transportation choices for residents and visitors to the region, and was developed as a conceptual proposal for the adaptive reuse and development of the former industrial site at the LHB Plant 1 property. Within the Depot District, the proposed Lexington MMTS serves as a central component of the SAP. The SAP Site Boundary is approximately 25.5 acres and includes the Lexington MMTS building, a passenger platform, passenger concourse, adjacent railroad track modifications, transit vehicle boarding bays, and Complete Street[2] improvements for designated primary access streets.

The Project limits for the Lexington MMTS (and the limits of this EA) consist of the components needed for the construction and operation of a new intercity passenger rail and transit center, including the Lexington MMTS at East 3rd Avenue and Railroad Street, Complete Street improvements to allow for vehicular, transit and pedestrian access to the Lexington MMTS, platforms and canopies along the North Carolina Railroad Company/Norfolk Southern (NCRR/NS) railroad corridor, and track work extending approximately 5,700 feet.

The purpose of the Project is to develop a multi-modal facility to serve the community's transportation needs and induce redevelopment within the Depot District to further revitalize the City's uptown area. As a multi-modal facility, the Project will serve passenger rail, local and regional transit services, taxi, as well as bicycle and pedestrian networks. As a community resource, the Project will create an anchor for redevelopment and economic revitalization of the Depot District by transforming a vacant and dormant warehouse district into a viable mixed-use activity center.

[2] NCDOT Complete Street Policies and Guidelines, adopted 2009. http://completestreetsnc.org/

The Project will also meet the following needs.

- Improve intercity rail service for the Lexington region and the Raleigh to Charlotte portion of the Southeast high speed rail corridor.
- Establish a new central location for direct transfers between other transit and transportation services within the COL and region.
- Create connections to employment and government services.
- Improve job creation and economic competitiveness.

The COL, together with insight from Project Stakeholders, analyzed various alternatives for a station location within the Depot District, size and configuration of platforms, passenger platform access, station layout, and station building programming. The COL evaluated two locations of the Lexington MMTS and platforms, with multiple alternatives for the layout of the track and platforms, and multiple options for the layout of the Lexington MMTS building.

The Build Alternative for the Lexington MMTS (and thus the limits for this Environmental Assessment) occupies approximately 18.5 acres located within the greater SAP Site Boundary and overlaps most of the SAP including the area of track work and portions of primary access streets necessary to serve the Lexington MMTS.

Site preparation for the Lexington MMTS Building will include the selective demolition and shoring of existing buildings currently occupying the required limits of construction. The Lexington MMTS Site will be along South Railroad Street between East 3rd Avenue and the existing Tunnel Street. East 3rd Avenue will include surface parking, transit and taxi connections, and the station entrance. The lower level will access the below-grade passenger concourse connecting the station and the platforms. COL expects that this proposed site configuration will facilitate the ordered site integration, construction, and functional operation of the multilevel Lexington MMTS building. The Project will also include surface and on-street parking.

The passenger concourse will be designed and constructed to facilitate a continuous underground, passenger and baggage access and connection between the Lexington MMTS building (passenger waiting area and station office/baggage room) and the boarding platform. Although baggage service will not be provided with initial Lexington MMTS operations, the baggage concourse will be designed and constructed to meet the functional requirements according to expected future service and demand.

The existing vehicular Tunnel Street and structure will be abandoned for use as a vehicular access below the NCRR railroad right-of-way (ROW). A new, open (non-gated) pedestrian tunnel structure (underpass) connection crossing below the NCRR railroad ROW, providing safe public access for pedestrians and cyclists only, will be designed and constructed to replace current use of the existing vehicular Tunnel Street and structure.

Two low-level side passenger platforms will be constructed in a dual side load configuration 700 feet long to provide adequate frontage for expected passenger train lengths and 16 feet wide to provide safe circulation area for passenger queuing, boarding, and alighting while also accommodating baggage handling equipment. The platforms will be constructed at a height of eight inches above the top of rail as defined by current ADA regulations. Canopies will be constructed over both platforms to provide weather protection and circulation clearance for passengers, passenger accessibility equipment, and

future baggage equipment.

Common railroad practice for construction of passenger stations prefers placement of station platforms on tangent track for the full length of the trains serving the station. The existing track configuration at the site of the Lexington MMTS includes two tracks along a significant curve, which does not provide a tangent sufficient to serve the full length of the *Carolinian* or *Piedmont* trains that will serve the station. To remediate the curve and provide a corridor width sufficient to support a future 4-track railroad with two side platforms, the track configuration must be repositioned through the Project area. The existing tracks will be reconstructed to flank and allow passenger trains to dwell along either passenger platform, while allowing freight trains to pass safely on the opposite track. The reconstructed tracks through the Project will extend beyond the platform and tie into the existing alignment approximately one-half mile to the north and one-quarter mile to the south.

Improvements adjacent to the existing Center Street Bridge crossing the NCRR railroad ROW will be implemented as required to facilitate construction of the realigned tracks, and will include site re-grading and/or construction of retaining and/or crash walls as determined in future design phases. In recognition of growing freight traffic on the NCRR corridor, the Project will allow for the addition of a 3rd and 4th track in the future.

As permitted by NCRR, improvements within and along the railroad corridor within the SAP near the Lexington MMTS will be implemented to enhance beauty and safety. Fencing and low landscaping will be provided near the outer edge of both sides of the ROW fronting the dual side platforms and additional inter-track fencing will be provided between the tracks fronting the platform to help prevent unauthorized and unsafe pedestrian access and crossing of the NCRR corridor.

South Railroad Street will be realigned with a new street plan and safer, accessible intersections between East 2nd Avenue and East 3rd Avenue. The realignment will be designed in accordance with Complete Streets principles.

Elk Street will be realigned between East 1st Avenue Extension and East 5th Avenue Extension to accommodate the new passenger platform and associated track alignment and the associated NCRR railroad ROW expansion as required for additional tracks. The proposed realignment of Elk Street will be constructed to complete a continuous street connection between East 1st Avenue Extension and East 5th Avenue Extension.

Portions of designated Primary Access Streets (including street and sidewalk areas) will be enhanced with improvements in accordance with Complete Streets principles.

This Environmental Assessment (EA) has been prepared in accordance with FRA's Procedures for Considering Environmental Impacts (64 Fed. Reg. 28545). The level of environmental analysis summarized in this document is consistent with the expected magnitude of impact for the Project. The following table provides an outline of the anticipated environmental consequences related to implementing the Build Alternative.

Section of EA	Summary of Impacts	Proposed Mitigation
3.1 Air Quality	No. Impact. The Build Alternative is not a Project of air quality concern. The estimated 29 rail trips per day (58 trips per day) are currently being taken by automobiles or buses. The additional bus trips into downtown Lexington would be completed elsewhere in the region. The Build Alternative will not increase the number of trains traveling within the rail corridor.	Not applicable.
3.2 Water Quality	Minor Impact. The water quality Study Area is already disturbed from years of development and human use. Impacts to water resources could include stormwater runoff, disruption of the substrate, increased sedimentation and siltation, and temporary decreases of dissolved oxygen during construction. Most impacts would be temporary in nature, occurring only during Project construction. Impacts would be limited to the immediate area of construction. Stormwater runoff rates would increase slightly due to the increase in impervious surface area. Sedimentation may also cause an impact to water systems crossed. Sedimentation of the stream channel causes changes in flow rate and stream course, which may lead to increased stream bank scour and erosion. Sedimentation also leads to increased turbidity of the water column. Removal of the riparian vegetation could result in decreases in dissolved oxygen and temperature instability of the stream.	The COL will minimize impacts through implementation of a stringent erosion control schedule and use of best management practices (BMPs). Measures to control non-point source water quality impacts as described in NCDOT's *Best Management Practices for Protection of Surface Waters* (1997) will be incorporated. The plan will be prepared in accordance with the requirements of the North Carolina Sedimentation Pollution Control Act (15A NCAC 48.0101-0130).

Section of EA	Summary of Impacts	Proposed Mitigation
3.3 Noise and Vibration	No Noise Impact. Freight traffic is the dominant source of noise in the Study Area. The increased frequencies between the existing condition and the No Build condition is projected to increase noise levels up to four decibels over existing noise. Both freight and passenger traffic frequencies are expected to remain constant in the No Build and Build conditions. As a result, noise levels increase and decrease up to two decibels to account for the shift in track alignments closer to or farther from receptors. As a three decibel increase is barely audible, the Build alternative would not have a significant impact on noise. Major Vibration Impact. Vibration levels from the shift in track would increase 2 to 3 VdB over the No-Build alternative during freight train passbys. The shift in track alignment will increase passenger train speed by 15 mph from 60 to 80 mph would increase vibration levels by 4 to 7 VdB over the No Build alternative. Both the shift in rail tracks and the increased speed exceed the FTA impact criteria and therefore, have the potential to result in a significant impact.	Mitigation measures that are typically incorporated into rail projects to reduce excessive vibration include changes to the track support system. Floating slabs, resiliently supported ties, high resilience fasteners, and ballast mats have all been used in subways to reduce ground-borne vibration. Applications on at-grade track are less common. Due the low-level of geotechnical and track design information used in the analysis, the COL will prepare a detailed vibration analysis during final design. If the detailed analysis continues to show significant impacts, the COL will incorporate specific mitigation measures into the Project.
3.4 Solid Waste Disposal	Minor Impact. Several existing buildings within the Project area will be demolished entirely or in part. Recoverable materials will be identified prior to building demolition as part of a comprehensive resource reclamation program. Material sorting for recycling will be implemented before demolition. Solid waste will be properly disposed of in accordance with state and federal statutes.	Building demolition and clearing of lots will be conducted according to a solid waste resource reclamation and recycling program developed by the COL prior to construction activities.

Section of EA	Summary of Impacts	Proposed Mitigation
3.5 Ecological Systems	Minor Impact. Construction of the Build Alternative would impact terrestrial resources associated with improving access roads and construction within the railroad ROW. These impacts would be minor given the previously disturbed character of the Study Area.	A landscape plan will be implemented to provide vegetation along street improvements. Vegetation along the railroad will be allowed to regenerate naturally.
3.6 Impacts to Wetland Areas	Minor Impact. There are no wetlands mapped in the Study Area. A portion of the Study Area is mapped with hydric soil, which is somewhat poorly drained and has a seasonal high water table. One jurisdictional stream was observed within the Study Area. Construction of the Build Alternative could require extending existing culverts.	At the federal level under the Clean Water Act (CWA) and US Army Corps of Engineer (USACE) regulations, as a condition of permit approval, the USACE is obligated to require mitigation for any unavoidable impacts to wetlands and streams. The COL will conduct a formal jurisdictional determination of the entire Study Area, and the COL will be responsible for obtaining required federal and state water protection permits.
3.7 Impacts on Endangered Species or Wildlife	No impact. The Build Alternative will not impact listed threatened or endangered species.	Not applicable.
3.8 Flood Hazard and Floodplain Management	Minor Impact. The Study Area has one area mapped with both a 100-year and 500-year floodplain. Construction of the Build Alternative could potentially have direct impacts to floodplain resources in the Study Area. Railroad improvements may require widening existing embankments, and extending existing culverts.	Prior to any construction activities, the COL will coordinate with the Federal Emergency Management Agency (FEMA) to ensure compliance with FEMA regulations, or ensure that others undertaking construction do so.
3.9 Coastal Management	No Impact. The Study Area is not located within a coastal county.	Not applicable.
3.10 Energy Use	Minor Impact. The Build Alternative would increase short-term energy use during construction and long-term energy use during facility operation. The Build Alternative would reduce regional energy use by providing a transportation mode alternative (passenger rail) that does not existing in Lexington.	Construction-related impacts will be short-term and cease once construction is finished. Design of the facility will employ BMPs for the efficient use of energy for operation and equipment.

Section of EA	Summary of Impacts	Proposed Mitigation
3.11 Natural Resources: Use of Water, Mineral or Timber	No Impact. There will be no extraction of water, minerals, or timber as a result of the proposed alternatives.	Not applicable.
3.12 Aesthetic and Design Quality	Positive Impact. The Build Alternative will create a positive impact for public art by providing new opportunities for public art features via the COL community art program, as overseen by Lexington's Appearance Commission. Design of the Lexington MMTS will mirror the historic qualities of the Depot District. The Build Alternative will also create minor visual impacts, particularly along the NS railroad corridor by realigning trackage, constructing retaining walls and platforms, and realigning Elk Street.	Not applicable.
3.13 Transportation	Positive Impact. The passenger rail service in the Build Alternative will produce approximately 58 automobile trips per day, and will direct some additional bus route service to downtown Lexington. The existing street network and street improvements under the Build Alternative will have the capacity to handle the additional vehicular traffic. The Project will improve transit performance by centralizing a new multimodal hub that will provide better connections. The Project will have no impacts on freight traffic, either trucking or rail.	Not applicable.
3.14 Barriers to the Elderly and Handicapped	Positive Impact. The Lexington MMTS will be built in compliance with Americans with Disabilities Act (ADA), including the station, platforms, platform access, and street improvements. Due to railroad operating conditions, the station platform will not include a high-level platform; however, access to the train will be provided from the low-level platform by mobile lift when required. The Lexington MMTS will also provide more transit and rail access to all residents of Lexington, including the elderly and disabled.	Not applicable.

Section of EA	Summary of Impacts	Proposed Mitigation
3.15 Land Use, Existing and Planned	Positive Impact. The COL intends to redevelop the former LHB property into a new mixed use, transit oriented development anchored by the new Lexington MMTS. The Project is consistent with current land use planning and activities within the Depot District. The COL expects that the Lexington MMTS will be an asset and provide transportation access to nearby amenities including community and government services, employment and educational resources, historic sites, and other tourist attractions.	Not applicable.
3.16 Socioeconomic Environment	Positive Impact. The Build Alternative will create a positive impact for economic resources in the Study Area by spurring redevelopment of the Depot District. The Project will create new employment opportunities through construction of the Build Alternative.	Not applicable.
3.17 Environmental Justice	Positive Impact. The Build Alternative is expected to have a net positive impact on all populations, including minority and low-income populations, by increasing mobility. No disproportionally negative environmental impacts are identified for low-income or minority populations within the Study Area.	Not applicable.
3.18 Public Health	Positive Impact. The Build Alternative will result in positive impacts on public health and safety. Construction of the Lexington MMTS, including the new pedestrian tunnel access and Complete Street improvements, will improve public safety by upgrading out-of-date facilities and reducing the potential for pedestrian/train and pedestrian/vehicular conflicts.	Not applicable.
3.19 Public Safety (Hazardous Materials)	Minor Impact. Based upon a database review of potential hazardous waste sites near the Project site, the Lexington MMTS does not appear to have been significantly environmentally impacted by previous operations on the subject property. Based upon a survey of one building in the Study Area, there is some	Once final design plans are developed, a plan will be formulated and developed to manage potentially contaminated soils and groundwater. Prior to construction activities, additional contamination investigations will be conducted. The COL has

Section of EA	Summary of Impacts	Proposed Mitigation
	presence of asbestos-containing material (ACM) and lead-based paint (LBP) on site.	recently completed Phase I and Phase II investigations of the LHB Plant. Moreover, the COL, as part of its Brownfields Agreement, is committed to develop a Living Environmental Management Plan with physical redevelopment of the property. Prior to demolition or rehabilitation of buildings, the COL will undertake a pre-demolition/ pre-renovation survey of the building and undertake the necessary abatement or removal of ACM and LBP.
3.20 Recreational Opportunities	No Impact. There are no existing parks or recreation areas in the Project area. The Build Alternative will not adversely impact parks or recreation areas.	Not applicable.
3.21 Historic, Archaeological Architectural or Cultural Significance	Adverse Effect. The Build Alternative will not result in an adverse effect to any individually eligible or listed resource. The Build Alternative will adversely affect two resources identified by the State Historic Preservation Office (SHPO) as contributing resources within the SHPO-proposed Lexington Industrial Historic District: the existing tunnel structure connecting Railroad Street and Elk Street under the NCRR ROW, and the existing Streetscapes within the proposed historic district. There are no identified archaeological resources within the Study Area.	The COL will enter into a Memorandum of Agreement (MOA) with FRA, the NCDOT Rail Division and SHPO documenting that the Project will result in adverse impacts to the contributing resources and documenting mitigating strategies to these resources (described below). Tunnel structure: The COL will preserve the north/west portion of the tunnel structure, including the headwall arch opening and adjacent length of the tunnel space. The remaining south/east portion of the tunnel structure will be closed to public access and/or filled in place as required to implement the Project. The COL will incorporate the preserved portion of the tunnel structure into an area of the Project as community space and implement a public interpretive Installation. The

Section of EA	Summary of Impacts	Proposed Mitigation
		Project will also incorporate a new, open pedestrian tunnel below the NCRR ROW, providing safe public access for pedestrians and cyclists only. Streetscapes: Under the terms of the MOA, the COL will record the existing conditions of segments of the adjacent streetscapes within the Lexington Industrial Historic District.
Section 4(f) Resources (Chapter 5)	Uses. The Build Alternative will use portions of two Section 4(f) resources within the SHPO-proposed Lexington Industrial Historic District, as described in 3.21 Cultural Resources, above.	FRA has determined that there is no feasible and prudent alternative to the use of these two historic resources and will request concurrence from the U.S. Department of the Interior. The COL will enter into an MOA with FRA, the NCDOT Rail Division and SHPO documenting that the Project will result in adverse impacts to the Section 4(f) resources, as described in 3.21 Cultural Resources, above.
3.22 Acquisition and Displacements	Minor Impact. The Build Alternative will require partial acquisition of four privately-owned parcels. The Build Alternative may require construction easements or minor takings to two additional privately-owned parcels. The remaining portions of the Project will be constructed on property owned by the COL, Davidson County, or within the NCRR ROW.	The COL will continue to evaluate the property impacts as the Project moves into more detailed design. Should the Project require property acquisitions, the COL and others will follow Federal and North Carolina requirements, including the Uniform Act Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Article 9 of Chapter 136 of the General Statutes of North Carolina also governs property acquisitions by municipal and state governments.

Section of EA	Summary of Impacts	Proposed Mitigation
3.23 Construction Period Impacts	Minor Impact. The Build Alternative will result in temporary construction impacts, which may include temporary impacts to transportation (traffic) routes, solid waste accumulation, use of energy resources, and noise and vibration.	Impacts from construction of the Build Alternative will be temporary. The COL will ensure that the construction contract specifications require that the contractor adhere to appropriate federal, state, and local noise abatement and control requirements. Additionally, the COL will ensure the contract mandates the use of BMPs for sediment and erosion to minimize water quality impacts during construction. Proper traffic control will be used for rail, vehicular and pedestrian traffic to minimize impacts on businesses and residences.
3.24 Secondary and Cumulative Impacts	Minor Secondary Impacts. The Build Alternative will encourage redevelopment of underutilized properties in the Depot District, which should have a positive impact on the local economy through increased property tax and sales tax revenues. The Project will also increase employment opportunities, increase mobility, and improve access to community facilities. Minor Cumulative Impacts. The Build Alternative will encourage greater use of local and regional transit by constructing a facility that will be a central connecting point to PART and DCTS buses. The Project will also be a community anchor that can be a focal point for public events. The Project will also augment the NCDOT's Piedmont Improvement Program (PIP), which is composed of several construction Projects and service enhancements that will enable additional passenger train frequencies and will make train travel safer, more efficient and more reliable.	Not applicable.

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1.0 PURPOSE AND NEED

1.1 Introduction

The Lexington Multi-modal Transportation Station (MMTS), referenced as the "Project" in this document, will be located in the City of Lexington, Davidson County, North Carolina (see **Figure 1-1)** and is intended to re-establish passenger rail service along with providing multi-modal access for all citizens within the Piedmont Triad region.

1.1.1 Project Parties

Several Project parties, described in detail below, have been involved with the initiation and development of the Project.

Project Partners

The City of Lexington (COL), Davidson County, Tourism Recreation Investment Partnership for Davidson County Foundation (TRIP), Piedmont Triad Regional Council (PTRC), Piedmont Authority for Regional Transportation (PART), North Carolina Department of Transportation (NCDOT) Rail Division, National Railroad Passenger Corporation (Amtrak), and Federal Railroad Administration (FRA) are long-term "Project Partners" on this and other regional transportation projects. All partners will be involved in development of the Project, whether by financial support or through in-kind participation with technical expertise.

FRA

FRA awarded funding through a Transportation Investment Generating Economic Recovery (TIGER) II Planning Grant to the COL to prepare a station area plan (SAP) and complete preliminary engineering and environmental review for the Lexington MMTS Project. The FRA is the lead Federal agency for this Environmental Assessment (EA) under the National Environmental Policy Act (NEPA), and this EA was prepared in accordance with NEPA, the Council on Environmental Quality's NEPA implementation regulations[3], FRA's Procedures for Considering Environmental Impacts[4], and other applicable statutes and regulations, including the National Historic Preservation Act[5] and Section 4(f) of the U.S. Department of Transportation Act.[6]

COL and LRC

The COL is the primary Project sponsor and lead State agency for the Project, and is responsible for administering the grant. The Lexington Redevelopment Commission (LRC) was established by the COL City Council to promote a comprehensive program for identifying and addressing redevelopment of blighted areas in the city, in particular, the Depot District, including the City-owned former Lexington

[3] See 40 C.F.R. Parts 1500-1508.
[4] See 64 Fed. Reg. 28545.
[5] See16 USC 470 et. seq.
[6] See 49 U.S.C. Section 303.

Home Brands (LHB) Plant 1 property, and to provide oversight on the Project as identified by the TIGER II Planning Grant. During the course of planning and conceptual design for the Project, the LRC conducted Regular Meetings (open to the public) typically once a month, at which the Consultant Team presented Project updates. The LRC then reported progress regularly to the Mayor and City Council. Pending future funding, the COL will continue to work towards completing final design for the Project.

SAP Team

The COL established the Station Area Plan (SAP) Team to provide technical advice to the Consultant Team and LRC throughout the project design process. The SAP Team includes representatives with a wide range of transit and land development expertise from the following agencies: COL Office of Business and Community Development, Public Works/Engineering Department, and Finance Department; Davidson County Planning and Transportation Departments; TRIP; PTRC; PART; and, NCDOT Rail Division. The SAP Team will continue to provide technical support to the Consultant Team during future design stages and construction of the Project.

Consultant Team

Under the TIGER II Planning Grant, the Consultant Team provided multidisciplinary expertise on the Project including master planning, transit planning, architectural design, preliminary engineering, and environmental planning related to the NEPA process.

Project Stakeholders

The COL, together with the SAP Team and its Consultant Team developed the technical aspects of the Lexington MMTS Project in coordination with several parties who are "Project Stakeholders," including the FRA, NCDOT Rail Division, North Carolina Railroad Company (NCRR), Norfolk Southern Railway (NS), and Amtrak.

1.1.2 Project Overview

Beginning in 2000, several city, county, and regional plans and initiatives have been spearheaded by and collaborated among the Project Partners related to supporting the re-introduction of passenger rail service in Lexington with a new MMTS, along with the redevelopment of the encompassing Lexington Depot District (described in section 1.3).

On March 28, 2006, Richard Thomas, then Mayor of the COL, wrote a letter to Amtrak requesting that Amtrak consider adding Lexington as a permanent station stop along the Raleigh-to-Charlotte passenger railroad corridor. Amtrak responded on April 17, 2006 with a letter acknowledging the request and confirming that Amtrak had begun the process of evaluating Lexington as a potential stop (see Appendix B). Subsequently, Amtrak confirmed an estimated Lexington ridership of 10,300 passengers annually. These ridership results prompted a decision by Amtrak and NCDOT Rail Division to approve re-establishing permanent passenger rail service in Lexington with a new passenger train stop and fill a regional gap in service along the Raleigh-to-Charlotte corridor. In March 2015, Amtrak released the results of a Route & Service Evaluation for the Lexington Station, which increased the estimated ridership to 10,700 passengers annually and projected a positive financial impact of $220,150 annually.

The SAP provides a reference and context for the COL to plan for the implementation of new passenger service and provide access and transportation choices for residents and visitors to the region, and was developed as a conceptual proposal for the adaptive reuse and development of the former industrial site at the LHB Plant 1 property. The SAP Site Boundary is approximately 25.5 acres and includes the

Lexington MMTS building, a passenger platform, passenger concourse, adjacent railroad track modifications, transit vehicle boarding bays, and Complete Street improvements for designated primary access streets. The SAP Site Boundaries are defined by the following parameters:

1. On the west side of the railroad corridor:

- the Lexington MMTS building located on the corner of East 3rd Avenue, South Railroad Street, and Tunnel Street;
- the Lexington MMTS building site improvements including transit plazas and parking areas stretching along South Railroad Street and the railroad corridor between East 3rd Avenue and East 2nd Avenue;
- by the primary access streets, East 2nd Avenue and East 3rd Avenue, extending from South Railroad Street to South Main Street; and,
- by the primary access streets, South Railroad Street, extending from East 4th Avenue to East Center Street; and,

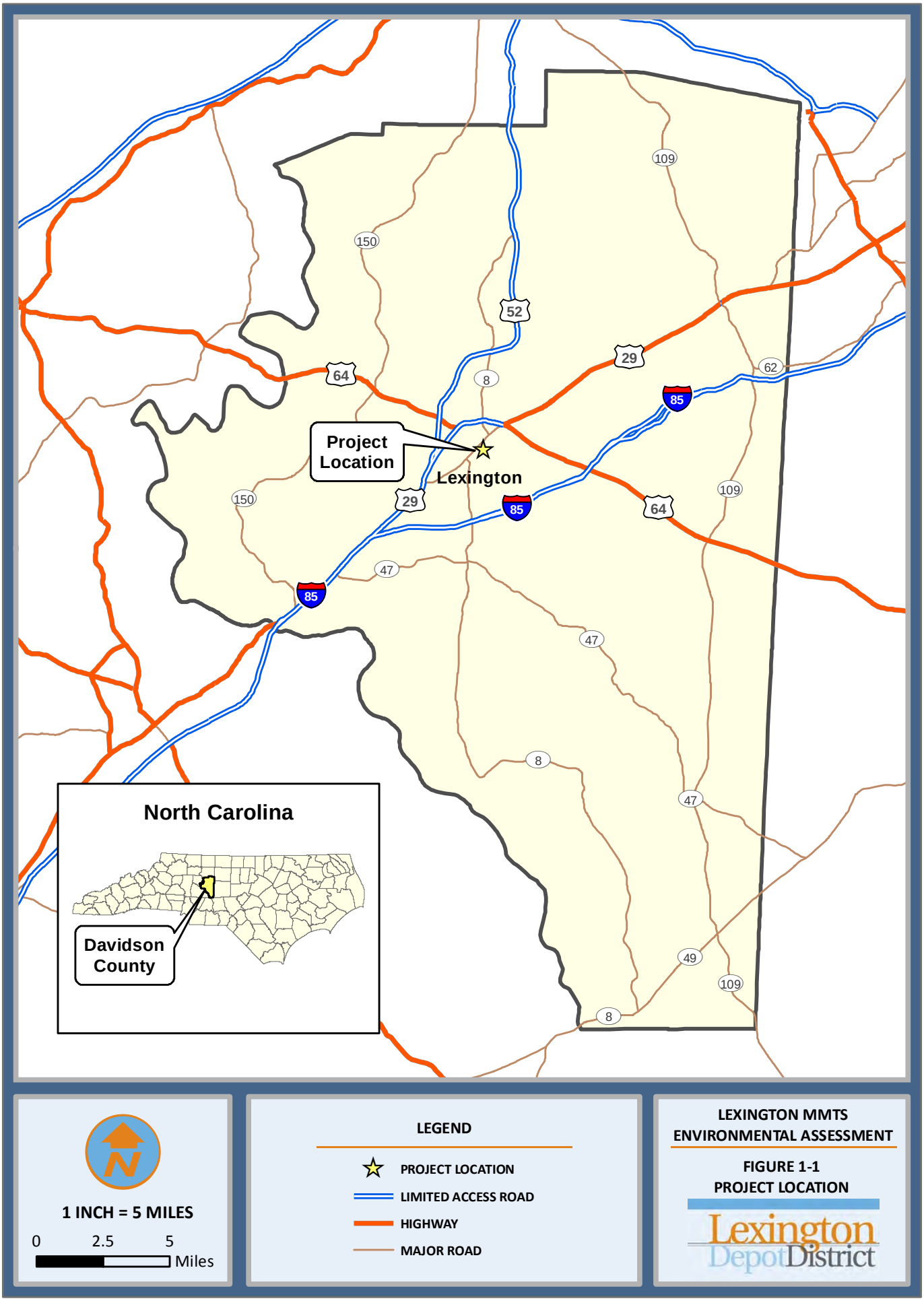
2. On the east side of the railroad corridor:

- the proposed realignment of Elk Street frontage between East 1st Avenue Ext. and East 5th Avenue Ext.; and,

3. Within the NCRR right-of-way (ROW):

- the track work extending approximately 5,700 feet from the Lexington MMTS (approximately 11,400 LF in total track work).

The Project Limits for the Lexington MMTS (and thus the limits for this EA) are approximately 18.5 acres located within the greater SAP Site Boundary and overlaps most of the SAP including the area of track work and portions of primary access streets necessary to serve the Lexington MMTS. More information on the SAP Site Boundary and the Project Limits can be found in sections 1.2 and 1.3, and is shown in **Figure 1-2**. Unless otherwise indicated, the Study Area for this Project is the Project Limits and SAP boundaries shown in Figure 1-2.


Project Location
Lexington
North Carolina
Davidson County
1 INCH = 5 MILES
0 2.5 5
Miles
LEGEND
PROJECT LOCATION
LIMITED ACCESS ROAD
HIGHWAY
MAJOR ROAD
LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT
FIGURE 1-1
PROJECT LOCATION
Lexington Depot District

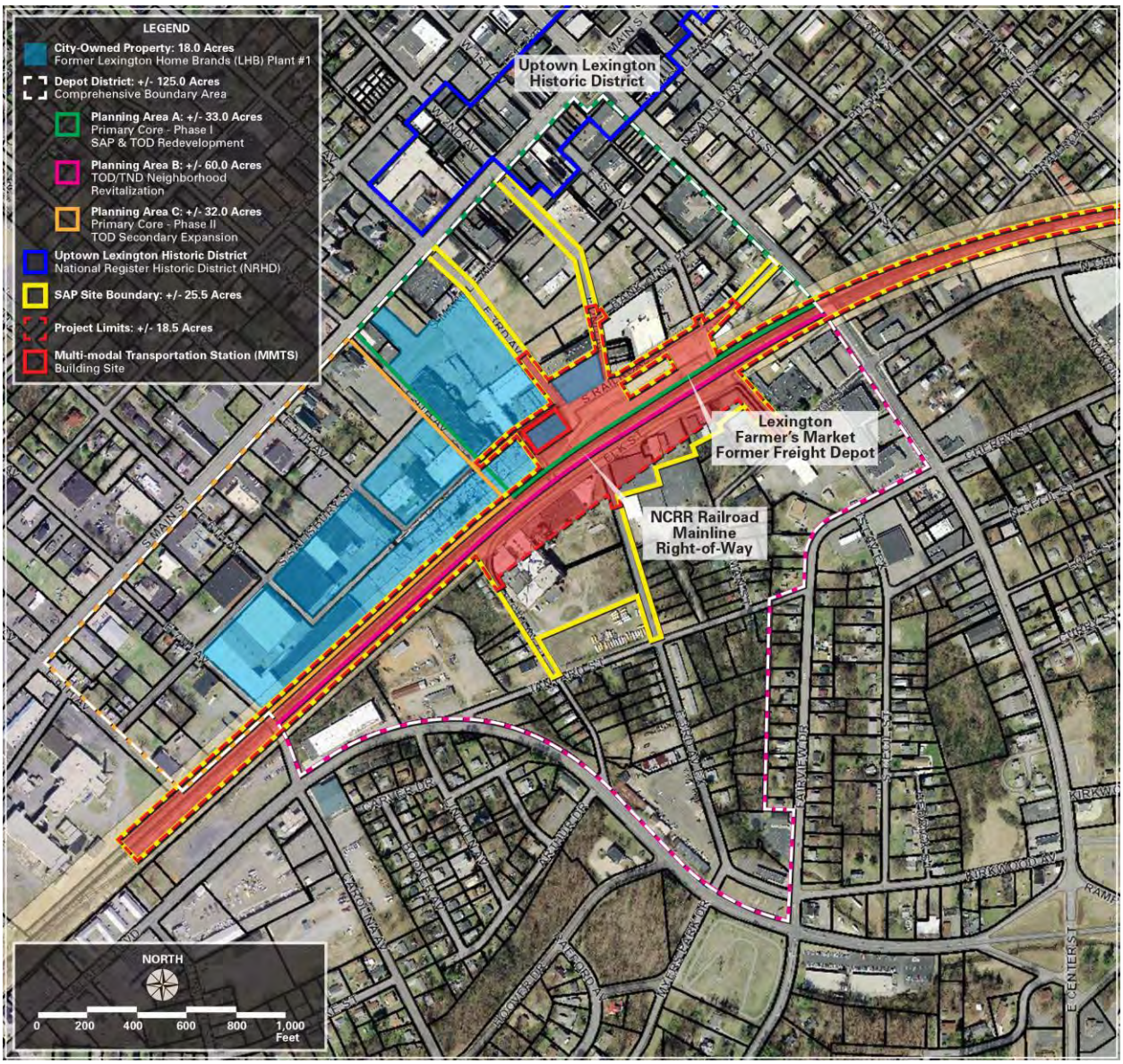


Figure 1-2: Station Area Plan (SAP) and Project Limits

The COL with its partners are currently seeking Federal funding through a variety of programs to construct the Project within the Lexington Depot District. The COL can provide 20 acres of real property. Redevelopment of the Depot District surrounding the SAP may be initiated and advanced by the COL through a variety of plans including the formulation of public private partnerships and strategies for Tax Increment Financing. The COL envisions the Lexington MMTS as a passenger rail stop as well as the hub for bus, taxi, bicycle, and pedestrian networks. Construction and operation of the Project, along with transit-oriented redevelopment of the surrounding Depot District, will advance Lexington's livability and sustainability goals.

1.2 Project History

In 2010, the COL was awarded a grant under USDOT's TIGER Program to assist funding the planning and design for a new Lexington MMTS and associated passenger platform, concourse and track infrastructure focused upon two interlocking goals (COL 2010):

- the re-introduction of passenger rail service to Lexington in concert with activities to improve and expand passenger rail service between Raleigh and Charlotte, and
- the redevelopment of the area that encompasses the former LHB Plant #1 (LHB) furniture manufacturing facility, now owned by the COL, and within the area now known as the Depot District.

Accordingly, in November 2011, the COL hired a Consulting Team to coordinate master planning and urban design for the SAP including Primary Access Street improvements following Complete Streets policies, and architectural design for the Lexington MMTS Building, Passenger Platform and Concourse. The consultant contract also included preparation of preliminary engineering for the passenger platform and associated track work and to complete the NEPA process.

Subsequently, for each fiscal year since 2012, a top goal established by the COL continues to be the "Planning, design, and redevelopment of Depot District including restoration of passenger rail service in new multi-modal transportation station on City owned Plant 1 property [LHB]" (COL 2013). The COL and its partners continue support for the re-introduction of passenger rail service with creation of the Lexington MMTS, with the belief that it will:

- benefit the local and regional community as a new multimodal means of transportation connecting the COL, Davidson County, and the Yadkin Valley - Piedmont Triad Region together and with other major metropolitan areas, and
- serve as catalyst for redevelopment of the Depot District and continued growth in Uptown Lexington.

The current TIGER Planning Grant provides funding for preliminary engineering and Schematic Design of the Project including key SAP transportation components located within the larger Depot District Redevelopment Plan:

- Lexington MMTS facility and site where passenger rail service, local and regional bus service, taxi service, bicycle and pedestrian systems converge;
- Passenger rail loading platform(s), concourse, and adjacent track improvements; and,
- Complete street improvements for designated primary access streets.

The NCDOT Rail Division has recommended the location of the study site within the Depot District for the passenger rail station, and the community has expanded the scope of that station to serve as a multi-modal transportation hub.

1.3 Project Location and Description

The Project is located in the City of Lexington in Davidson County, North Carolina (see **Figure 1-1**). The Project site is situated in the center of the Lexington Depot District. The Depot District is approximately

125 acres with planning areas designated by the COL for transit-oriented development (TOD) and Traditional Neighborhood Development (TND) revitalization.

The **Depot District** is directly connected to the designated National Register-listed Uptown Lexington Historic District within Uptown Lexington, and is situated as a significant gateway to experience Uptown's unique and locally owned shops, restaurants, and art galleries. The 2009 renovation of a former freight depot into the Farmer's Market adjacent to the Project site has been designated as one of the most successful North Carolina farmer's market projects by the North Carolina Tobacco Trust Fund Commission, and continues to bring significant activity to the Depot District. The COL envisions the Depot District as a mixed-use extension of Uptown Lexington and surrounding neighborhoods that can provide a gathering place for visitors and residents alike within a multi-modal environment.

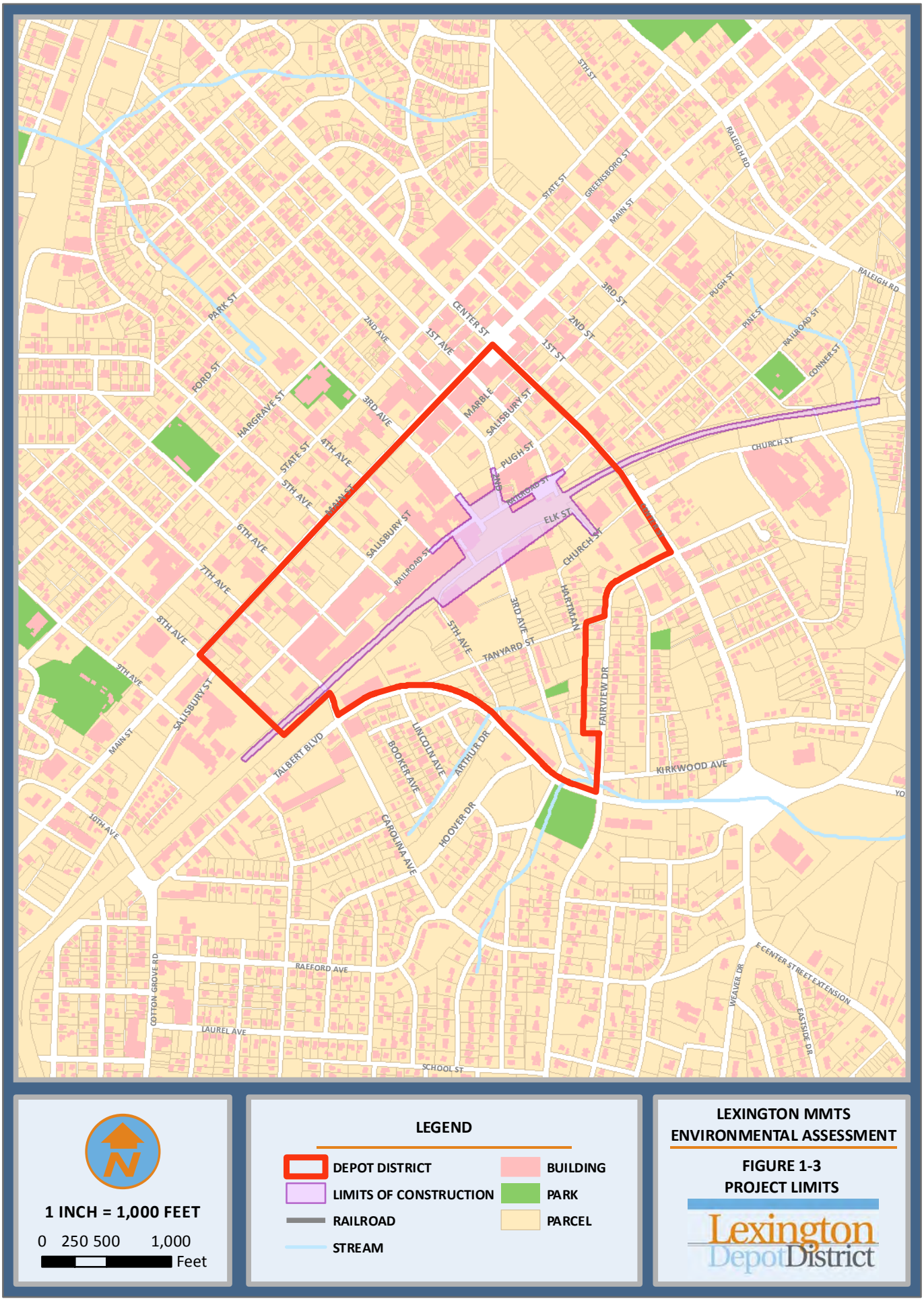
The Depot District is defined by up to 35 blocks within and adjacent to Uptown Lexington, and includes the LHB Plant 1 furniture manufacturing facility (now owned by COL), the Lexington Farmers Market, portions of Uptown Lexington, existing residential neighborhoods, and several blocks of underutilized industrial properties. Included in the Depot District is the proposed Lexington MMTS, which served as a central component of the SAP developed as part of the TIGER grant (described in section 1.1).

The Depot District overlaps a section of the NCRR ROW and is bound on the north by East Center Street, on the east by South Talbert Boulevard, on the south by East 8th Avenue, and on the west by South Main Street as shown in **Figure 1-2**.

The Project limits for the **Lexington MMTS** (and the limits of this EA) consist of the components needed for the construction and operation of a new intercity passenger rail and transit center, including:

- the Lexington MMTS at 3rd Avenue and Railroad Street,
- complete Street improvements along portions of Railroad and Elk Streets, and 3rd, 2nd, and 5th Avenues, to allow for vehicular, transit and pedestrian access to the Lexington MMTS,
- platforms and canopies along the NCRR/NS railroad corridor, and
- track work extending approximately 5,700 feet.

Construction of the Project is expected to encourage and complement surrounding redevelopment and attract substantial private investment to the area, resulting in continued leveraging of local, state and federal dollars. The surrounding 125-acre Depot District is positioned for several privately financed development opportunities consistent with the community's directives for a vibrant mixture of affordable housing, locally-grown retail, innovative light manufacturing and new startup space, food and entertainment, and anchored by an amphitheater for cultural productions and live music. Adherence to the SAP along with the future Depot District Master Plan will ensure architectural standards, innovative green methods, accessibility compliant with the Americans with Disabilities Act (ADA) of 1990, walkability, and bicycle friendly streetscapes. According to a benefit-cost analysis prepared by the COL for the 2014 TIGER II Grant application, property values within the adjacent Uptown District are $1.2 million per acre; therefore, final build-out of potential private development within the Depot District is conservatively estimated to bring values in excess of $80 million. **Figure 1-3** shows the boundaries of the Depot District and the Project Limits.



1 INCH = 1,000 FEET

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Feet

LEGEND

- DEPOT DISTRICT
- LIMITS OF CONSTRUCTION
- RAILROAD
- STREAM
- BUILDING
- PARK
- PARCEL

LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT

FIGURE 1-3
PROJECT LIMITS

Lexington Depot District

1.4 Project Purpose and Need

1.4.1 Purpose of the Lexington MMTS

The purpose of the Project is to develop a multi-modal facility to serve the community's transportation needs and induce redevelopment within the Depot District to further revitalize the City's uptown area. As a multi-modal facility, the Project will serve passenger rail, local and regional transit services, taxi, bicycle, and pedestrian networks. As a community resource, the Project will create an anchor for redevelopment and economic revitalization of the Depot District by transforming a vacant and dormant warehouse district into a viable mixed-use activity center.

1.4.2 Need for the Lexington MMTS

The Project will also meet the following needs.

Intercity Rail Service: Along the Raleigh to Charlotte portion of the Southeast high speed rail corridor, there are passenger rail stations approximately every 20 miles , except for the 40 mile section between the High Point and Salisbury station; adding a station in Lexington will fill in this missing gap along the corridor. NCDOT has recommended adding a stop in Lexington as part of the recently adopted Comprehensive State Rail Plan, and projections from Amtrak indicate that adding the station in Lexington will have a net positive impact in ridership and revenue for the *Piedmont* and *Carolinian* services. As noted above, Amtrak estimates that a station in Lexington will generate 10,700 passenger trips per year, indicating a strong need for passenger rail service. Adding an intercity passenger rail station in Lexington will make passenger rail service available to more than 513,000 residents living in the region. The transportation investment will provide alternatives for travel to Charlotte and Raleigh, North Carolina, as well as all other destinations along the *Carolinian* and *Piedmont* Amtrak passenger rail routes.

Transportation Hub: The Davidson County/City of Lexington Comprehensive Transportation Plan includes the goals of adding passenger rail service as well as expanded and connected regional transit, bicycle and pedestrian networks. The Project will establish a new central location for direct transfers between other transit and transportation services within the COL and region including DCTS and PART bus routes, taxi service and bicycle and pedestrian networks, as well as serving as a potential end-point for van pool services. PART service will also provide residents in Winston-Salem (216,000 population, 20 miles to the north) a means to access passenger rail service in Lexington, thereby likely increasing Amtrak ridership.

Connections to Employment and Services: The transportation need for the area comes from a disconnected transportation network preventing citizens from reaching much needed jobs and education opportunities within the region, and deterring prospective new residents from relocating to Lexington. Currently, a cycle of high unemployment compounded by the lack of connected transportation services has contributed to economic decline within the City and continual population loss. Only 50% of Lexington residents both live and work within the city. The City must find ways to enable residents to commute to jobs and return home in Lexington via safe, affordable, and readily accessible services. Over 5,400 jobs in Lexington have been lost since 2000 *(NC Bureau of Labor Statistics)* and the City's population decreased from 19,953 to 18,931 over the last ten years *(US Census).* With a poverty rate of 26.4%, and 13.3% of citizens not having access to cars, connecting people to jobs, education, and goods and services through public transportation choice is a critical need (*US Census, American Community Survey 2005-2009 Average).* A centralized transit and rail hub that serves regional transit, as well as that connects to a growing pedestrian and bicycle network will help

with this job access. Additionally, recent transit planning efforts by COL have identified that homeless veterans in the region are unable to access the Veteran's Administration Medical Facility in Salisbury, 19 miles southwest of Lexington. Improved rail and transit services to Salisbury would help solve this problem.

Job Creation and Economic Competitiveness: The Lexington area has been designated as an Economically Distressed Area by the federal government and as an Urban Progress Zone by the state. According to ridership estimates from Amtrak and NCDOT, the Project is expected to generate 27 hours of travel time savings for existing Lexington area Amtrak customers in the first year, since those riders will no longer need to drive to High Point, Salisbury or elsewhere to ride Amtrak. Regardless of the annual Lexington Barbeque Festival, and two National-Register historic districts in Lexington, Davidson County ranks last in tourism spending in the Raleigh to Charlotte corridor. The Project will also support the local tourism industry by creating a transportation hub within walking distance of Uptown Lexington; the new station also will help attract riders to the annual Lexington Barbecue festival. The Project is expected to eventually create three full-time positions at the station plus 317 jobs for design and construction. Moreover, the Project is expected to create secondary growth in tourism employment from the additional visitors. The Project is a major component of the redevelopment of the Depot District, which consists of several vacant buildings adjacent to Uptown Lexington.

1.5 Applicable Regulations and Permits

The following statutes, guidance and orders apply to the proposed action and were considered during the preparation of the Environmental Assessment (EA):

- The National Environmental Policy Act of 1969, as amended
- Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations [59 Federal Register (FR) 7629]
- Order 6640.23 USDOT Order on Environmental Justice Actions to Address Environmental Justice in Minority and Low-income Populations (62 FR 18377)
- Executive Order (EO) 11988, Floodplain Management
- Section 106 of the National Historic Preservation Act of 1966, as amended
- Section 4(f) of the US Department of Transportation Act of 1966, as amended
- The Americans with Disabilities Act (ADA) of 1990, as amended
- North Carolina General Statute 121-12, Protection of Properties in the National Register
- The Federal Railroad Administration's Procedures for Considering Environmental Impacts (64 FR 28545)

2.0 ALTERNATIVES

The COL and SAP Team, together with input from Project Stakeholders, analyzed various alternatives on station location within the Depot District, size and configuration of platforms, passenger platform access, station layout, and station building programming. This chapter describes the evaluation of these alternatives and the development of the Build Alternative that is evaluated in this EA. Section 2.1 describes the overall SAP development; section 2.2 describes the various alternatives evaluated; and section 2.3 describes the Build Alternative that was carried forward.

The COL and SAP Team evaluated two locations of the Lexington MMTS and platforms, with multiple alternatives for the layout of the track and platforms, and layout of the Lexington MMTS building. Alternative A includes a southern platform orientation, while Alternative B includes a northern platform orientation. Both Alternatives A and B consider a low-level island platform configuration, with a high-level island platform introduced in Alternative B-V.4. A third Alternative C evolved as the "Build Alternative," which was based on the location of Alternative B, but with a modification to Version B-V.1 with a dual low-level side platform configuration. The alternatives considered are listed below.

- Alternative A: Southern Orientation with Island Platform
    - Alternative A, Version 1 (A-V.1) – Southern Platform Location, Low-level Island Platform, Lexington MMTS at East 5th Avenue
    - Alternative A, Version 2 (A-V.2) - Southern Platform Location, Low-level Island Platform, Lexington MMTS near East 3th Avenue

- Alternative B: Northern Orientation with Island Platform
    - Alternative B, Version 1 (B-V.1) – Northern Platform Location, Low-level Island Platform, Lexington MMTS at East 3rd Avenue
    - Alternative B, Version 2 (B-V.2) – Northern Platform Location, Low-level Island Platform, Reduced Size Lexington MMTS at East 3rd Avenue
    - Alternative B, Version 3 (B-V.3) – Northern Platform Location, Low-level Island Platform, Reduced Size Lexington MMTS between East 3rd Avenue and East 4th Avenue
    - Alternative B, Version 4 (B-V.4) – Northern Platform Location, High-level Island Platform, Reduced Size Lexington MMTS between East 3rd Avenue and East 4th Avenue

- Alternative C: Northern Orientation with Dual Side Platforms
    - **Build Alternative** – Northern Platform Location, Dual Low-level Side Platforms, Lexington MMTS at East 3rd Avenue

More information on the evaluation of these Alternatives A, B and C (including figures of each alternative) is provided in section 2.2.

2.1 Station Area Plan (SAP) Key Components

The Project is defined by a SAP, as discussed in Chapter 1, which was established through the following method:

- the assessment of a previous conceptual engineering plans prepared by the NCDOT Rail Division for passenger platform and track alignment, and subsequent conceptual engineering plans prepared by the COL and Project stakeholders supporting the design of alternative options;
- the identification and development of specific SAP key components defining the functional criteria and programming associated with the SAP site, Lexington MMTS building, passenger platform and concourse, track alignment, and primary access streets;
- the recommendation to continue evaluation of SAP location Alternative B as determined through comparative analysis and public input;
- the conceptual engineering and evaluation of track and platform configurations; and,
- the established and ongoing collaboration, consideration, and coordination with all Project partners and stakeholders including the COL, LRC, SAP Team, Consultant Team, State and Federal agencies (FRA and NCDOT Rail Divisions), and railroads (NCRR, NS, and Amtrak).

The combined results of these activities established the foundation for SAP Conceptual Design including passenger platform and track conceptual engineering, SAP site conceptual planning, and Lexington MMTS building conceptual design. More detail on these steps is described in section 2.2 below.

With combined guidance from the FRA *Station Area Planning for High-Speed and Intercity Passenger Rail* and the *Amtrak Station Program and Planning Guidelines*, and an extensive review of the components composing other rail stations across North Carolina, the Consultant Team developed a typical SAP composed of twelve Key Components and associated program. These twelve SAP Key Components are listed below, including how they relate the proposed Lexington MMTS. **Figure 2-1** illustrates these typical SAP Key Components.

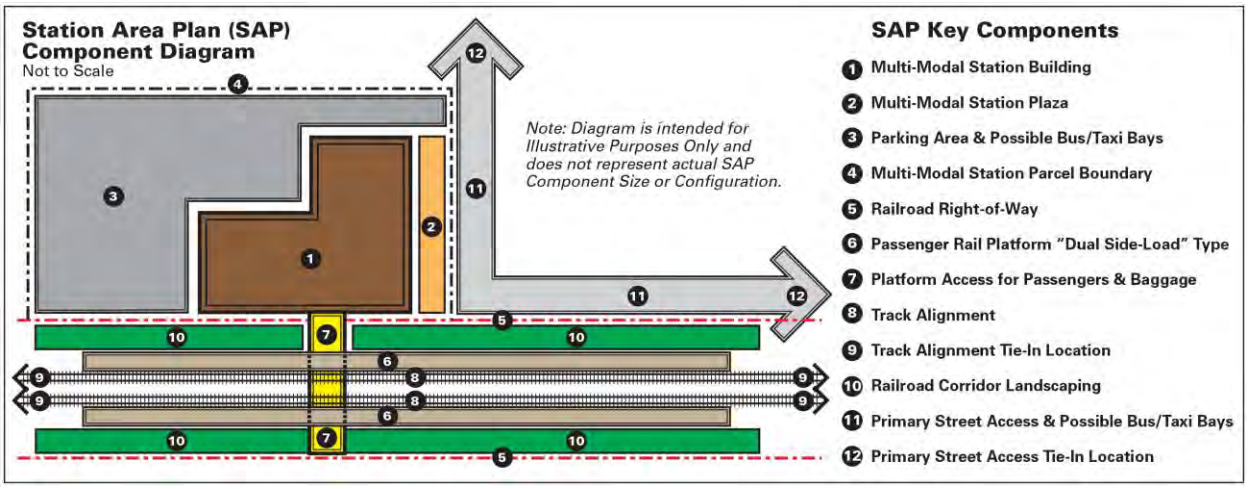


Figure 2-1: Station Area Plan (SAP) Components

1. Lexington MMTS Building
The primary station facility for train passengers and facilitating connections to other transit modes including pedestrian, bicycle, automobile, taxi cab, and bus.

2. Lexington MMTS Plaza
The public open space(s) serving as the transition or threshold between the Inside Lexington MMTS Building and surrounding uses.

3. Parking Area
The primary parking location(s) for station passengers, visitors, and employees.

4. Lexington MMTS Parcel
The site boundary area outside of the rail ROW containing the station facility and associated open space(s) and parking area(s).

5. Railroad ROW
The NCRR corridor providing freight rail service by NS and passenger rail service by Amtrak.

6. Passenger Rail Platform
The train boarding area for passengers and baggage.

7. Platform Access
The connection for passengers and baggage access between the station and the platform.

8. Track Alignment
The repositioning and installation of new tracks as required within the railroad ROW with respect to the passenger platform location along with existing and future freight and high-speed passenger rail traffic.

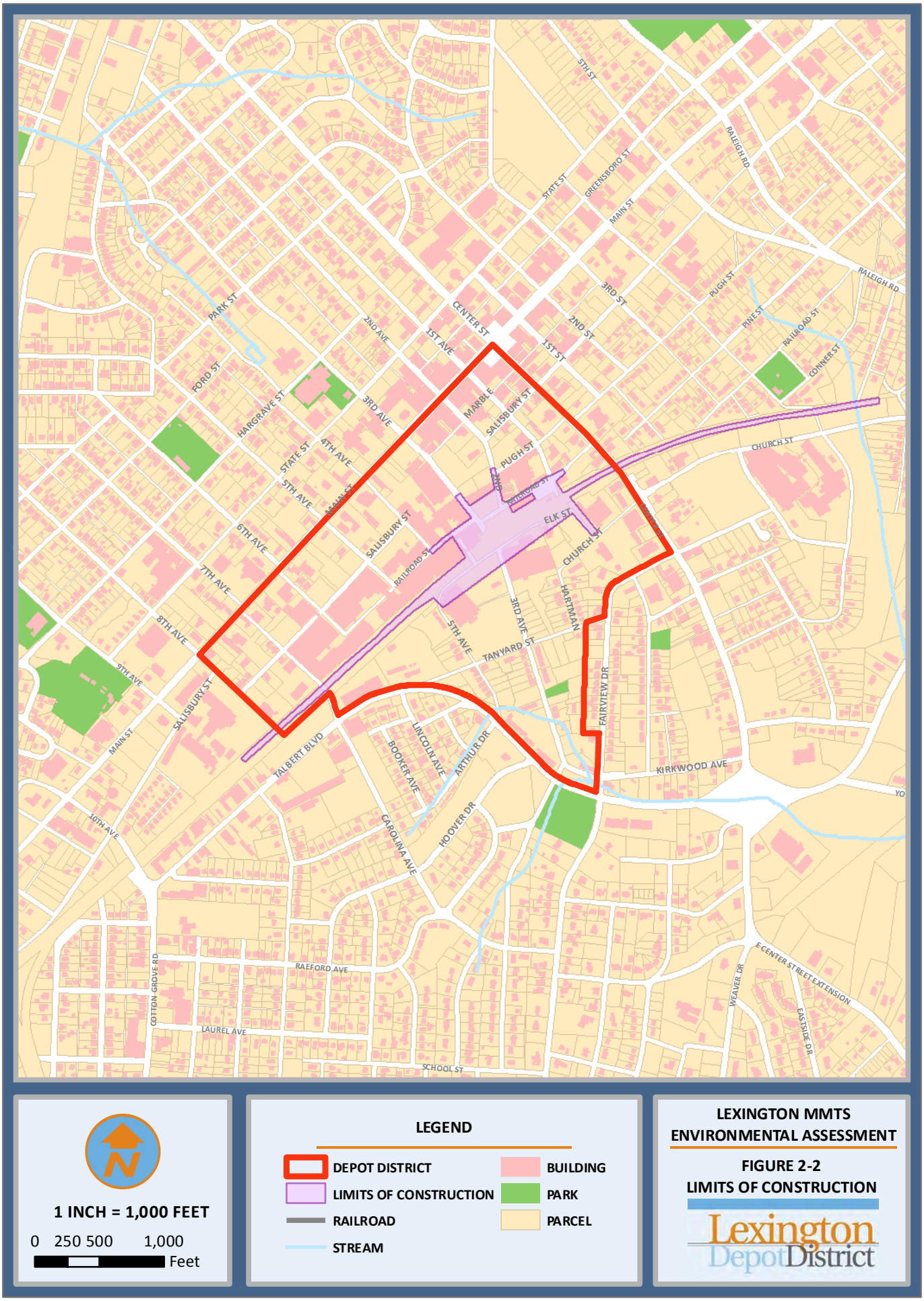
9. Track Alignment Tie-In
The intersection and transition location of new track alignment and tie-in with existing track alignment.

10. Railroad Corridor Landscaping
The components required, inside and outside of the ROW, to enhance beautification and safety along the railroad corridor near the station.

11. Primary Street Access
The primary streets providing access between the station and the local arterial street network – South Main Street and East Center Street.

12. Primary Street Access Tie-In
The primary street intersections at the local arterial street network – South Main Street and East Center Street.

As these SAP components were developed, evaluated and refined, the COL and Consultant Team determined the Project limits of construction, as shown in **Figure 2-2**.



1 INCH = 1,000 FEET

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Feet

LEGEND

- DEPOT DISTRICT
- LIMITS OF CONSTRUCTION
- RAILROAD
- STREAM
- BUILDING
- PARK
- PARCEL

LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT

FIGURE 2-2
LIMITS OF CONSTRUCTION

Lexington Depot District

2.2 Alternatives Considered and Eliminated From Further Analysis

Throughout the planning process, coordination among the Consultant Team (listed in Appendix A), SAP team, COL staff, NCDOT staff, and the LRC have identified, evaluated, and concluded an ongoing series of decisions affecting the Project. These decisions include:

A. Passenger Platform and SAP Site Location;
B. Passenger Platform Configuration (Type, Size, and Height), and Associated Track Alignment;
C. Railroad Track and Passenger Platform Phasing;
D. Passenger Platform Access;
E. Lexington MMTS Building Location, Size, and Joint Commercial Development (JCD) Program Strategy; and,
F. Lexington MMTS Building Programming and Space Planning.

Figure 2-3 shows the progression of how the COL evaluated the alternative components, and notes which part of Section 2.2 describes the alternative evaluation for that component. Text in red describes the alternatives selected to move forward. A more detailed description of the alternative components and their evaluation are included in Appendix G.

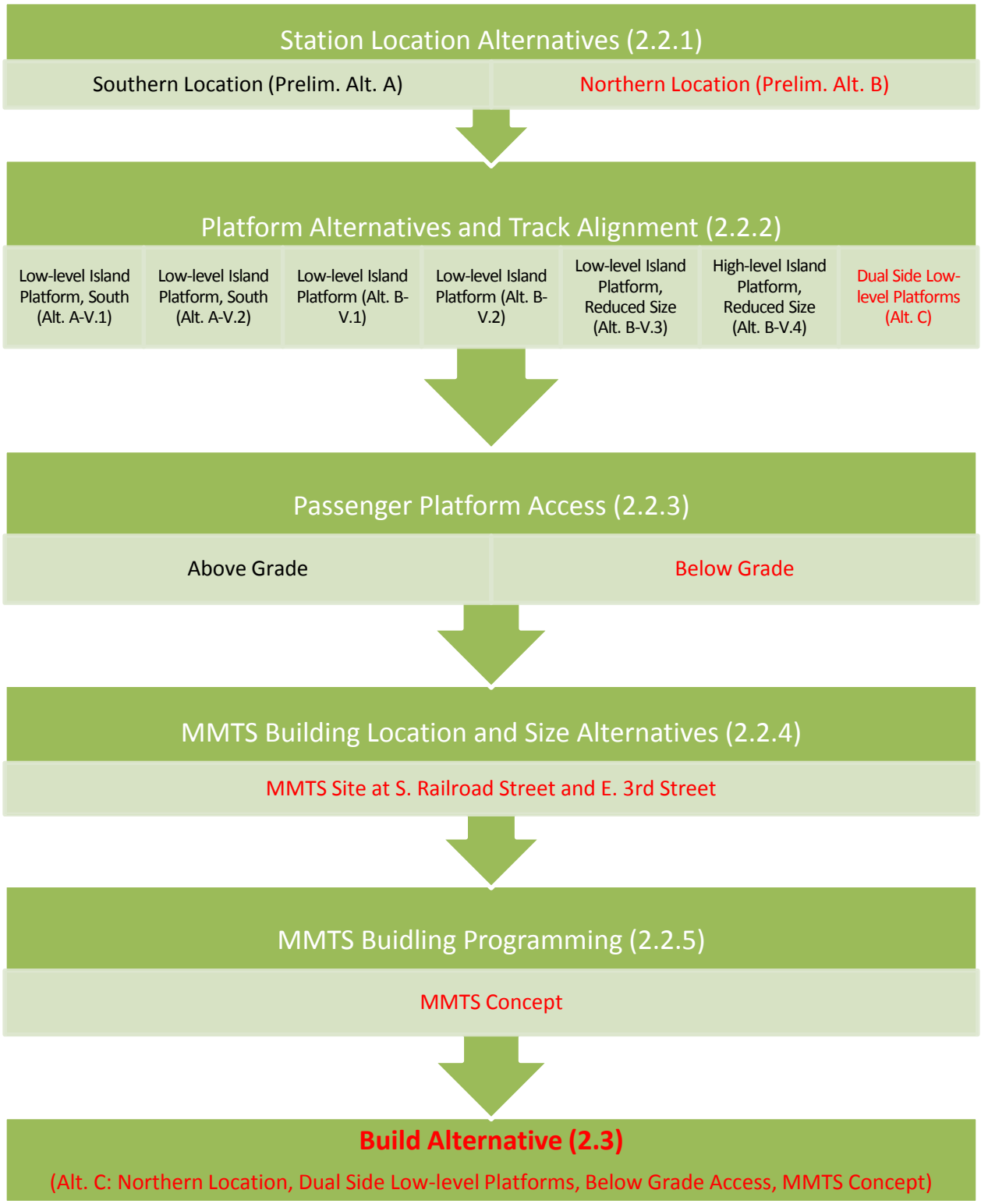


Figure 2-3: Evaluation and Development of Alternative Station Components

2.2.1 A. Passenger Platform and SAP Site Location

The COL first evaluated the two Passenger Platform and Station Location Preliminary Alternatives A and B developed by the NCDOT Rail Division, including how these Preliminary Alternatives A and B would work with the SAP Key Components. **Figure 2-4** shows the general location of these two Preliminary Alternatives. The typical SAP Key Components provide a template for the layout and approximate land area required for the SAP. The Consultant Team positioned the SAP template relative to the island platform locations identified in Preliminary Alternative A and Alternative B to facilitate an SAP Location Comparative Analysis. The Consultant Team together with the COL and the SAP Team evaluated the results of this analysis, and shared the results with the community during public workshops and outreach events.[7]

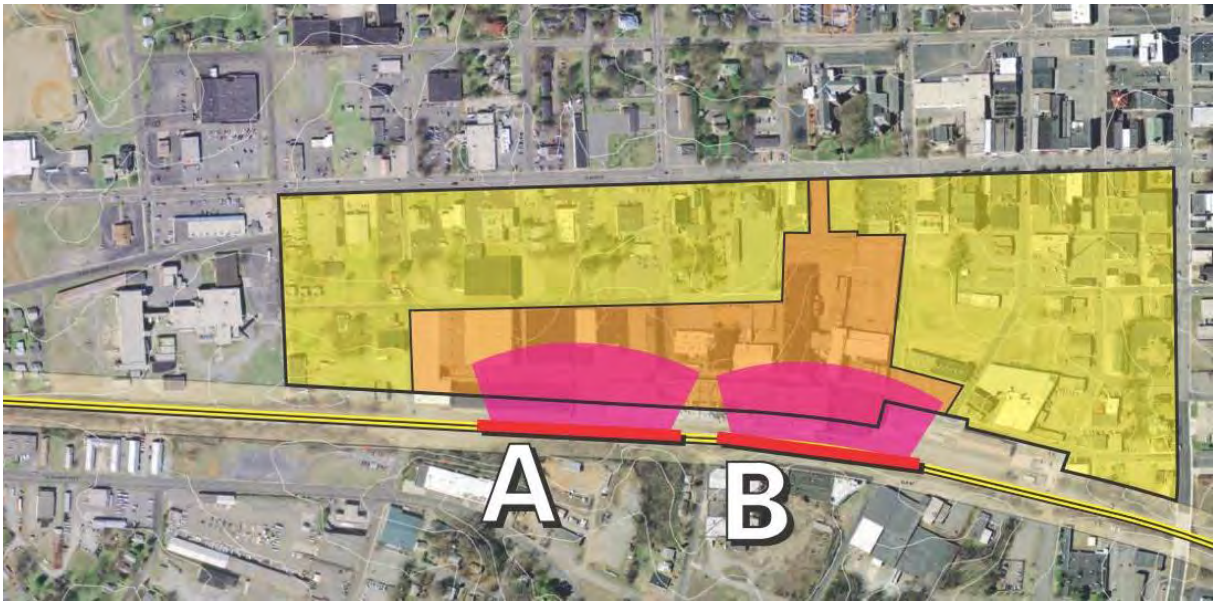


Figure 2-4: Station Location Preliminary Alternatives A and B

The SAP Location Comparative Analysis included the following indicators:

- Topography;
- Street Grid and Infrastructure;
- Access and Connections;
- Walkability / Sidewalks and Intersections;
- Walking Distance and Time;
- Visibility;

[7] For more information on public outreach for the Project, see Chapter 4.

- Historic / Cultural Resources;
- Existing LHB Plant Buildings;
- Available 'Open' Land Area;
- Land Ownership and Development Phasing;
- Growth Pattern; and,
- Lexington Traffic Separation Study (TSS).

Together, the COL, SAP Team and Consultant Team examined the results of the SAP Assessment and Comparative Analysis, along with public inputs obtained from community workshops, surveys, and outreach events. After review and discussion through several workshops, the COL and the Teams concluded that SAP Location Alternative B best met the Purpose and Need for the Project. Specifically, the location of Alternative B facilitates the greatest overall benefit to the local and regional community, maximizes the potential for redevelopment of the Depot District, and best meets the goals for a multimodal SAP and Lexington MMTS facility. Alternative B is also well positioned to take advantage of integration with existing street access and connections and existing utility infrastructure.

Alternative A is further away from downtown Lexington, and would be further removed from the proposed transit and pedestrian connections in the Depot District. The existing streets providing primary access to Alternative A are only between 21 and 24 feet wide with limited and/or no sidewalks, which would hinder multimodal access. Alternative A is also further removed from the available parcels that the COL and LRC have identified for redevelopment. Finally, the Alternative A site could also result in the demolition of a greater number of potentially eligible historic resources.

Accordingly, the COL presented **SAP Alternative B** to the LRC as the recommended SAP Location, and upon subsequent review and discussion, the LRC strongly endorsed Alternative B as the logical location for passenger rail platform (see Appendix B for LRC Resolution). Ultimately, the location of Alternative B was adapted as the location of Alternative C in the Build Alternative.

2.2.2. B. Passenger Platform Configuration (Type, Size, and Height), and Associated Track Alignment

Conceptual engineering for the passenger platform and track alignment established basic functional criteria and was advanced to determine how close the passenger platform could be positioned relative to the desired SAP Location Alternative B near the corner of East 3rd Avenue and South Railroad Street.

General Design and Alignment Options – Island Platform

The Consultant Team and the NCDOT Rail Division developed the following general design and alignment criteria for the Project:

- The track should have the best overall design possible to meet the state's service goals for the Raleigh-Charlotte corridor and Southeast Corridor (Washington, DC-Charlotte).
- The track should meet industry standards for acceptable superelevation on curves.
- The corridor should accommodate up to two additional mainline tracks in the future, per NCRR and NCDOT long-term passenger and freight goals for the corridor.
- The track should accommodate NCDOT requirements as outlined in the recently completed Traffic Separation Study (TSS), and meet the railroad signal requirements of NS and NCDOT.
- The platform should accommodate the lengths of the *Carolinian* and *Piedmont* trains.

- The platform should be located as close as possible to the center of Uptown Lexington to help support transportation and redevelopment goals.
- The platform should accommodate both baggage and passenger access from the station; all vertical circulation components for passenger and baggage should meet applicable ADA requirements.

Passenger Platform and Track Design and Alignment Options

The Consultant Team prepared multiple platform, track and station design configurations to support the analysis of the two locations in Alternatives A and B. The preliminary analysis for both Alternatives A and B included a low-level island platform, oriented to the south or north relative to each alternative. Additionally, the preliminary analysis considered variations to the placement and configuration of the Lexington MMTS building and platform in each alternative. Alternative A considered two potential locations for a full size Lexington MMTS at East 5th and 3rd Avenues (versions A-V.1 and A-V.2), and Alternative B considered two potential locations for a full or reduced size Lexington MMTS at East 3rd Avenue (versions B-V.1 and B-V.2). Based on the preliminary analysis, both Alternatives A and B appeared as feasible; however, the location of Alternative B with a reduced size Lexington MMTS building evolved as the desired option due to its relationship with the SAP and proximity to Uptown Lexington.

Upon receiving endorsement of Alternative B from the LRC, the Consultant Team further refined the analysis of a reduced size Lexington MMTS on a northern alignment, with a low-level island platform (version B-V.3) and a high-level island platform (version B-V.4) between East 3rd and 4th Avenues.

Ultimately, Alternative B (Versions B-V.3 and B-V.4) evolved into Alternative C as the preferred "Build Alternative" with a reduced size Lexington MMTS between East 3rd and 4th Avenues, but with a dual low-level side platform configuration. The reduced size Lexington MMTS resulted in reduced project cost and impacts to the LHB properties, and the platform configuration reflected NS preference for low-level side platforms over island platforms serving their mainline tracks.

- Preliminary Alternatives:
    - Alternative A: Southern Platform Location, Low-level Island Platform
        - Version 1 (A-V.1): Full size Lexington MMTS building at East 5th Avenue (**Figure 2-5**)
        - Version 2 (A-V.2): Full size Lexington MMTS building at between East 3rd and East 4th Avenues (**Figure 2-6**)
    - Alternative B: Northern Platform Location, Low-level Island Platform
        - Version 1 (B-V.1): Full size Lexington MMTS building at East 3rd Avenue (**Figure 2-7**)
        - Version 2 (B-V.2): Reduced Size Lexington MMTS building at East 3rd Avenue (**Figure 2-8**)

- Refined Alternatives:
    - Alternative B: Northern Platform Location, Low/High-level Island Platform
        - Version 3 (B-V.3): Low-level Island Platform, Reduced Size Lexington MMTS building at East 3rd Avenue (**Figure 2-9**)

        - Version 4 (B-V.4): High-level Island Platform, Reduced Size Lexington MMTS building at East 3rd (**Figure 2-10**)

- Build Alternative:
    - Alternative C – Northern Platform Location, Dual Low-level Side Platforms, Reduced Size Lexington MMTS building between at East 3rd Avenue (**Figure 2-11**)

Figures 2-5 through 2-11 show the conceptual diagrams for each alternative.

The platform and station in Alternatives B and C best met the Project purpose and need, specifically, being located closest to Uptown Lexington to allow for easier transit connections and redevelopment of the Depot District. Therefore, the remaining evaluation criteria were based upon geometric and operational considerations. More detail on the timeline of this evaluation process can be found in Appendix G. **Table 2-1** shows the advantages and disadvantages of the alternatives.

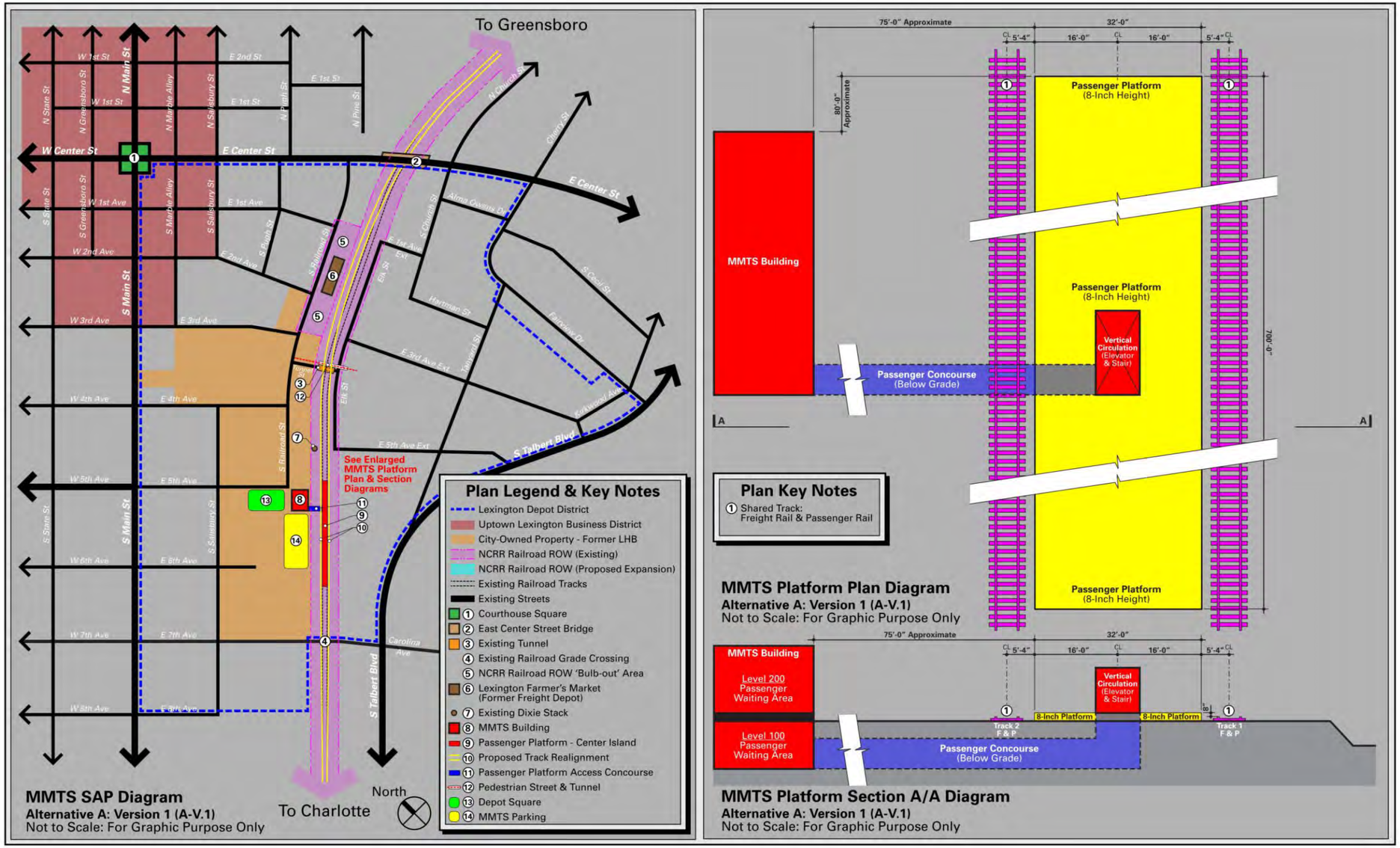


Figure 2-5: Alternative A.V-1 – Southern Low-Level Island Platform, MMTS at E. 5th Avenue

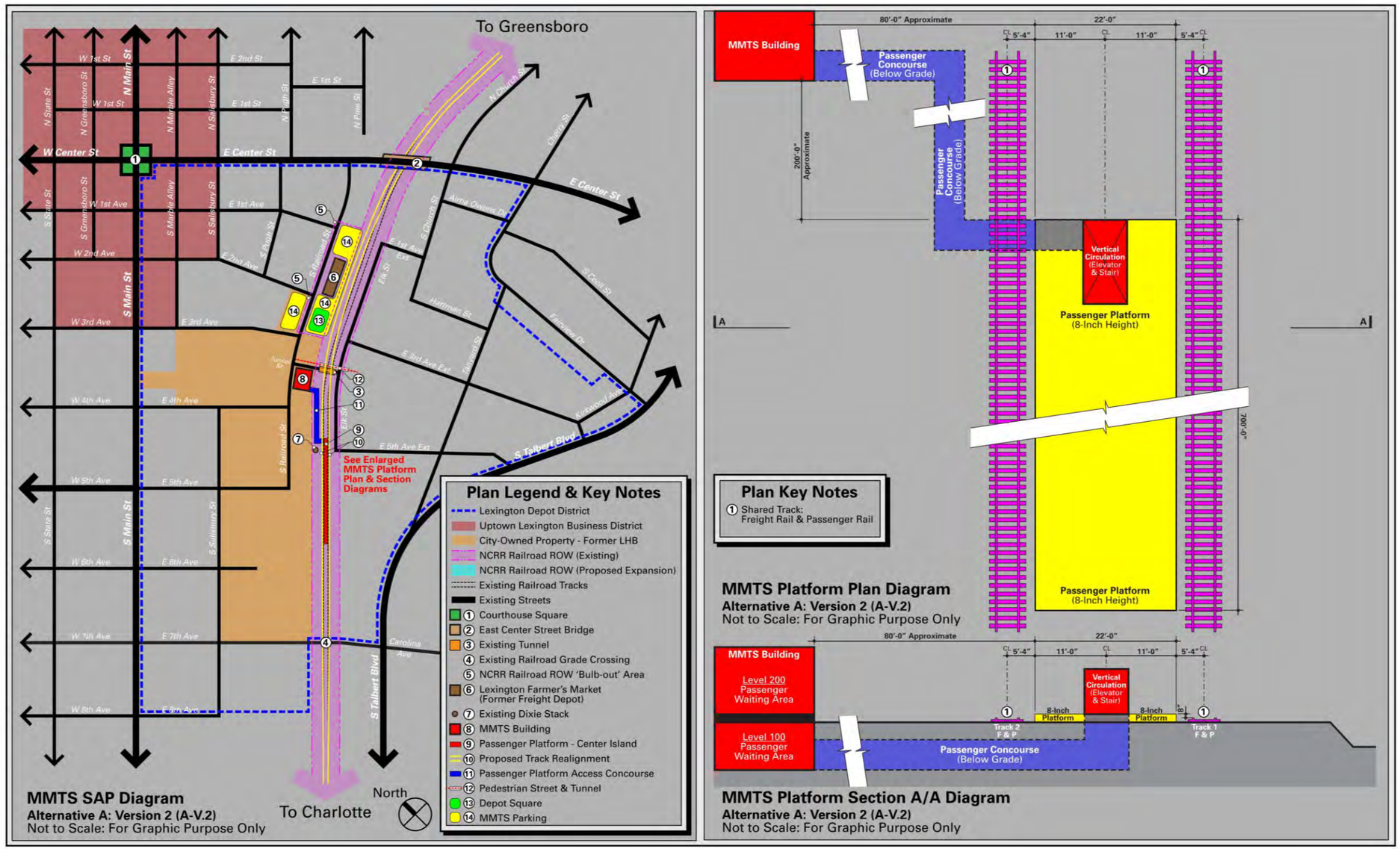


Figure 2-6: Alternative A.V-2 – Southern Low-Level Island Platform, MMTS between E. 3rd and 4th Avenues

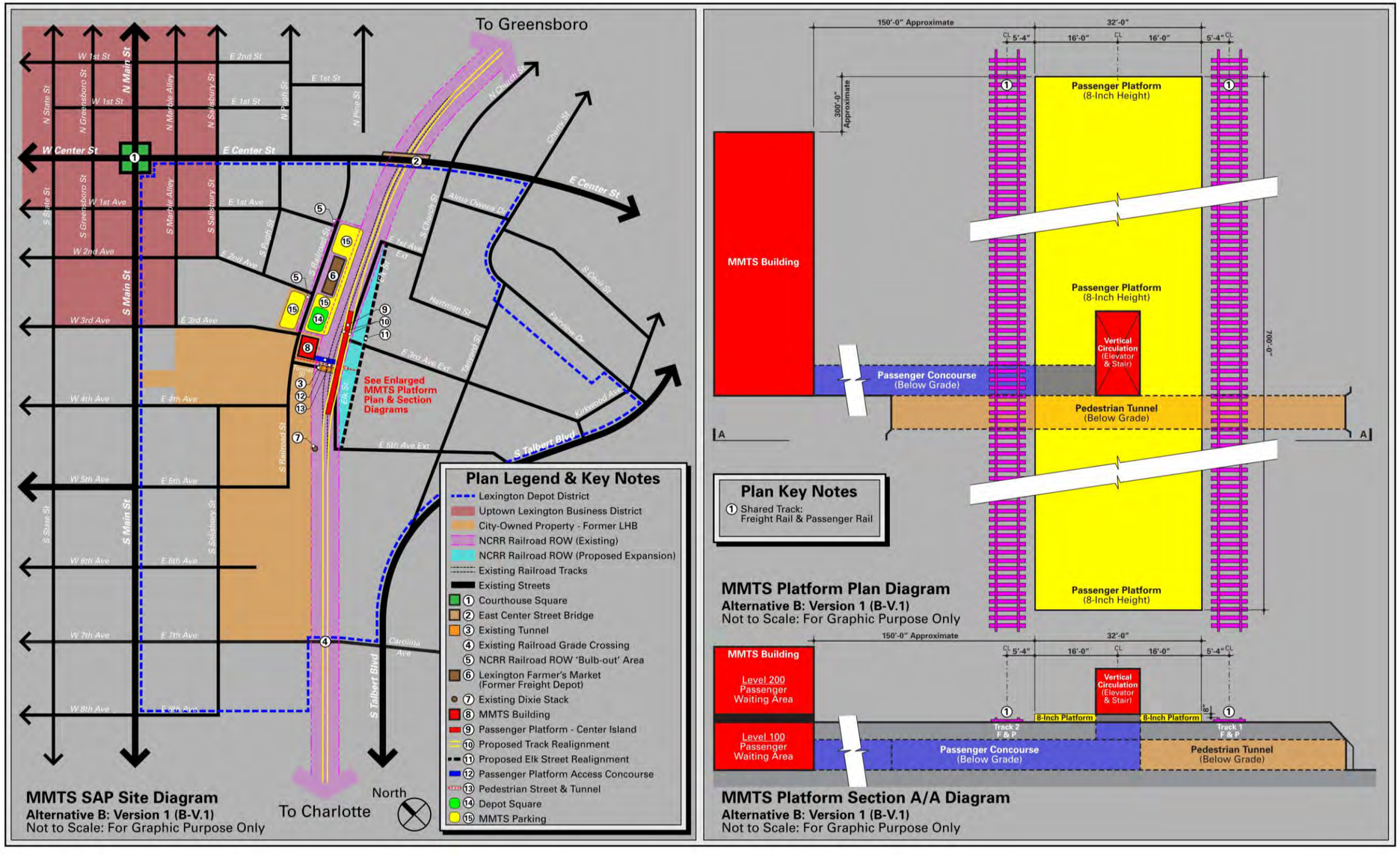


Figure 2-7: Alternative B-V.1– Northern Low-Level Island Platform, MMTS at E. 5th Avenue

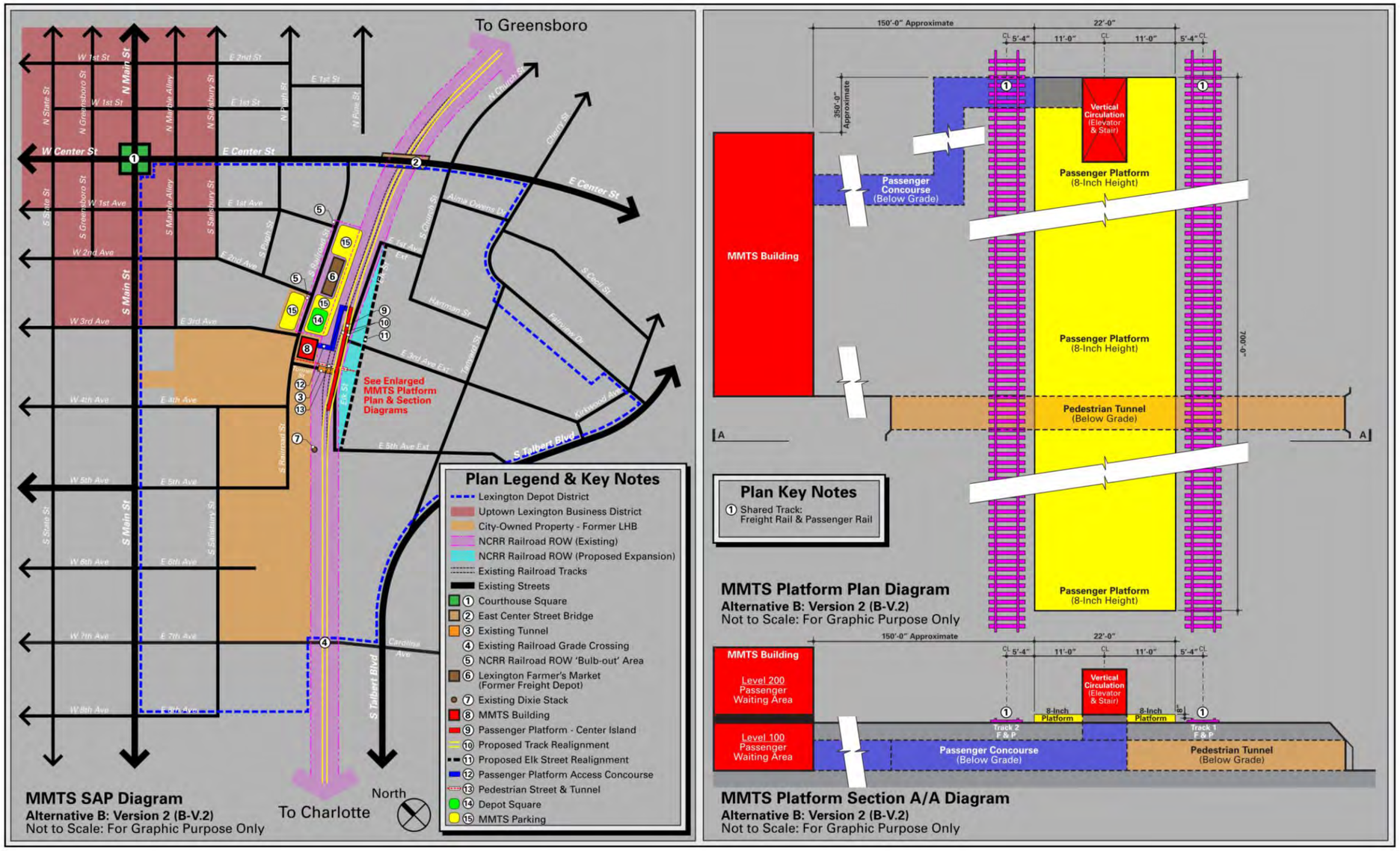


Figure 2-8: Alternative B-V.2 - Northern Low-Level Island Platform, MMTS at E. 3rd Avenue

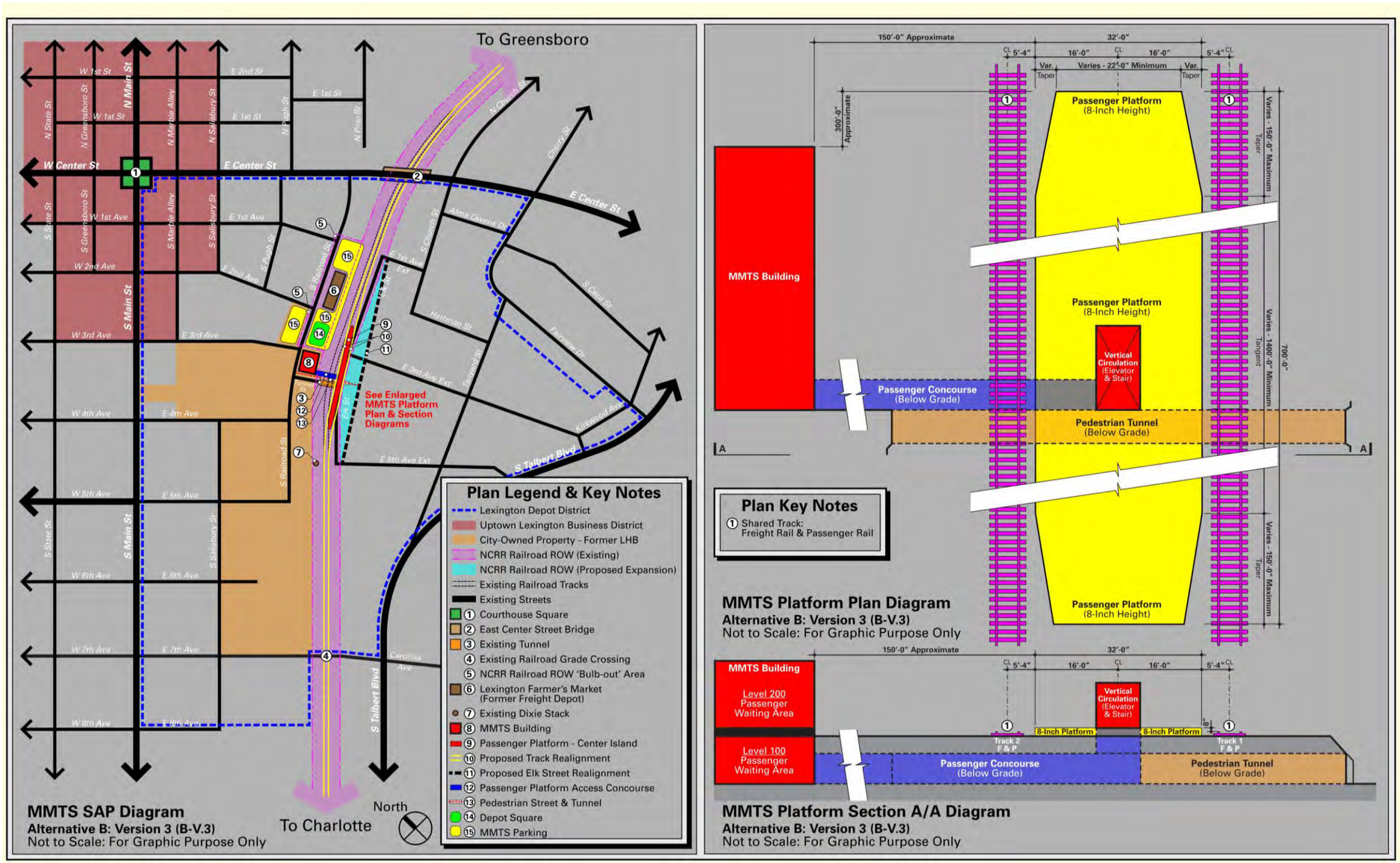


Figure 2-9: Alternative B-V.3 - Northern Low-Level Island Platform, Reduced MMTS at E. 3rd Avenue

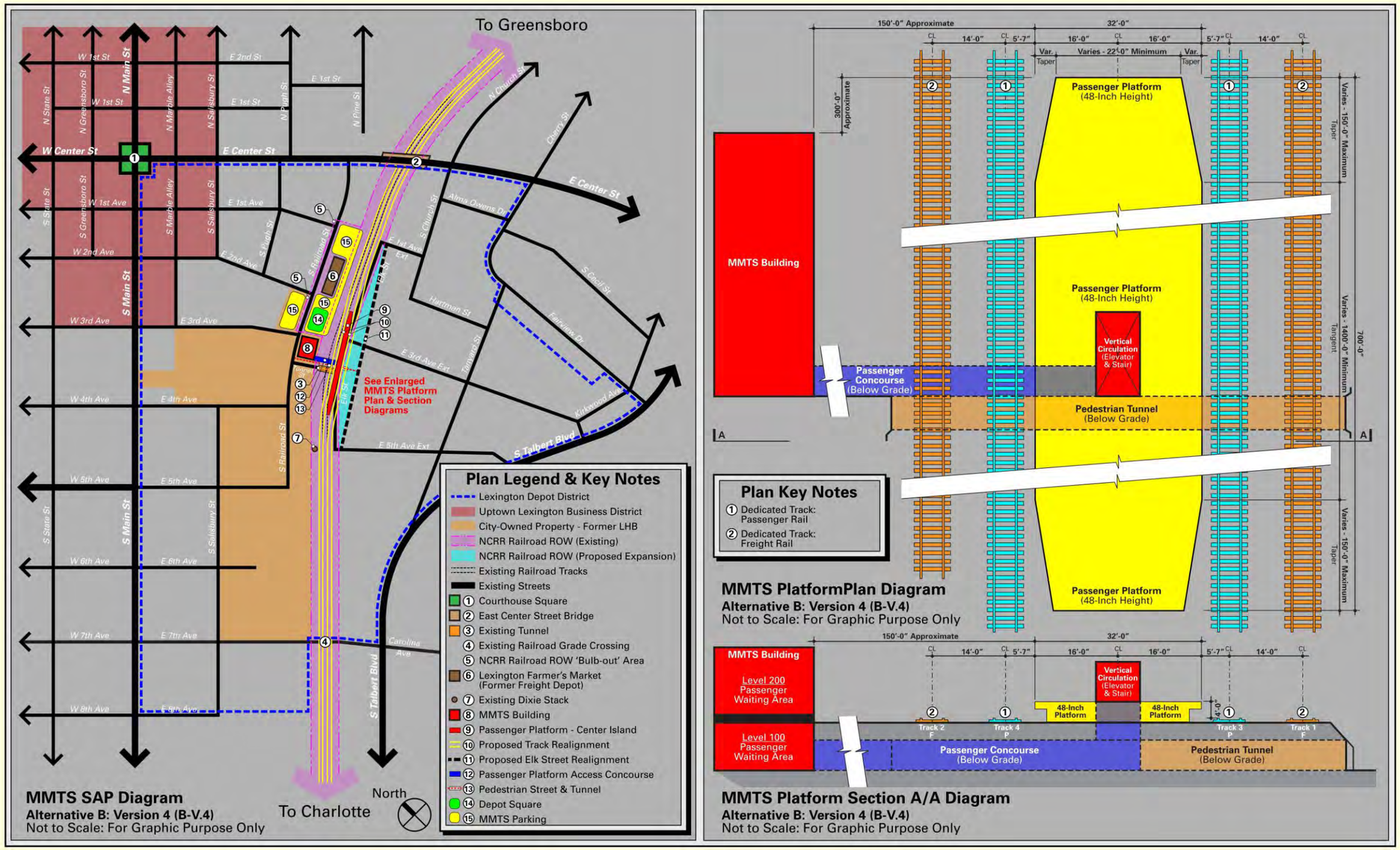


Figure 2-10: Alternative B-V.4 - Northern High-Level Island Platform, Reduced MMTS at E. 3rd Avenue

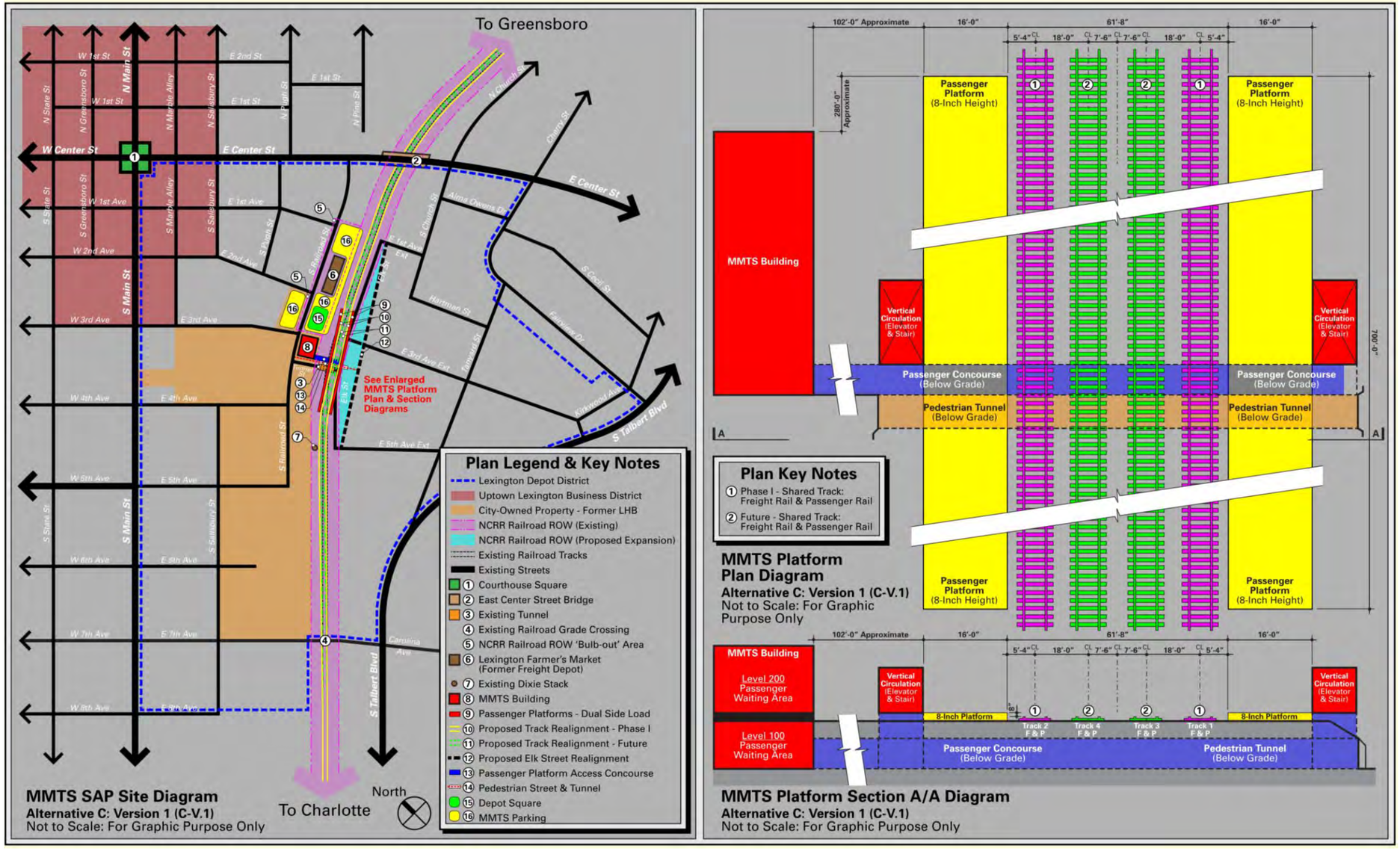


Figure 2-11: Alternative C - Northern Low-Level Side Platforms, Reduced MMTS at E. 3rd Avenue

Table 2-1: Passenger Platform & Track: Geometric and Operational Comparative Analysis

Platform Location & Track Alignment Geometric & Operational Considerations	Platform Location & Track Alignment Alternatives						
ADVANTAGES	**A-V.1**	**A-V.2**	**B-V.1**	**B-V.2**	**B-V.3**	**B-V.4**	**C**
	(Fig. 2-5)	**(Fig. 2-6)**	**(Fig. 2-7)**	**(Fig. 2-8)**	**(Fig. 2-9)**	**(Fig. 2-10)**	**(Fig. 2-11)**
1. Maximum 4-track cross-section under the existing Center Street Bridge.	X	X		X	X	X	X
2. Platform position is directly across from the desired Multi-Modal Station facility location at the intersection of E. 3rd Avenue and S. Railroad Street.			X	X	X	X	X
3. Direct line of sight between station and platform.			X	X	X	X	X
4. Shorter horizontal travel distance by passengers between station and platform.			X	X	X	X	X
5. Platform width will permit vertical circulation components to be located anywhere along passenger platform.	X		X		X	X	X
6. Platform location and track alignment are positioned in the center of the existing ROW.	X	X					
7. Only limited grading is expected in the vicinity of the platform.	X	X					
8. Platform location and track alignment are expected to have less impact on potential reuse of existing buildings.			X	X	X	X	X
9. Fewer impacts to existing freight and passenger train operations during platform and track construction are expected.			X	X	X	X	X
10. Simplifies construction (coordination and expense) for proposed future NCDOT corridor underpass Project at West 5th Avenue.			X	X	X	X	X
11. Meets updated NS design requirements							X
12. Minimizes impacts to Section 4(f) resources			X	X	X	X	X

Table 2-1 (Continued)

Platform Location & Track Alignment Geometric & Operational Considerations	Platform Location & Track Alignment Alternatives						
DISADVANTAGES	**A-V.1**	**A-V.2**	**B-V.1**	**B-V.2**	**B-V.3**	**B-V.4**	**C**
	(Fig. 2-5)	**(Fig. 2-6)**	**(Fig. 2-7)**	**(Fig. 2-8)**	**(Fig. 2-9)**	**(Fig. 2-10)**	**(Fig. 2-11)**
1. Maximum 3-track cross-section under the existing Center Street Bridge.			**X**				
2. Platform position is remote from the desired Multi-Modal Station facility location at the intersection of E. 3rd Avenue and S. Railroad Street.	**X**	**X**					
3. Limited line of sight between station and platform.	**X**	**X**					
4. Longer horizontal travel distance by passengers between station and platform.	**X**	**X**					
5. Platform width will permit vertical circulation components to be located on **ONLY** one or both ends of passenger platform.		**X**		**X**			
6. Greater impacts to existing freight and passenger train operations during platform and track construction are expected.	**X**	**X**					
7. Platform location and track alignment are expected to have greater impact on potential reuse of existing buildings.	**X**	**X**					
8. Demolition (in part or whole) of multiple structures on the north/west side of the corridor is expected.	**X**	**X**					
9. Demolition (in part or whole) of multiple structures on the south/east side of the corridor is expected.			**X**	**X**	**X**	**X**	**X**
10. Removal/abandonment or realignment of Elk Street along the south/east frontage of corridor is expected.			**X**	**X**	**X**	**X**	**X**
11. Re-grading is expected east of the Center Street Bridge for the realignment of the two existing tracks.	**X**	**X**	**X**	**X**	**X**	**X**	**X**

Platform Location & Track Alignment Geometric & Operational Considerations	Platform Location & Track Alignment Alternatives						
DISADVANTAGES	**A-V.1**	**A-V.2**	**B-V.1**	**B-V.2**	**B-V.3**	**B-V.4**	**C**
	(Fig. 2-5)	**(Fig. 2-6)**	**(Fig. 2-7)**	**(Fig. 2-8)**	**(Fig. 2-9)**	**(Fig. 2-10)**	**(Fig. 2-11)**
12. Excavation and construction of retaining walls under the Center Street Bridge will be necessary for the addition of a third and fourth track in the future.	**X**	**X**	**X***	**X**	**X**	**X**	**X**
13. Significant additional ROW is required.			**X**	**X**	**X**	**X**	**X**
14. New track alignment is located on extreme topography; a combination of structural fill and/or retaining walls is expected to construct the platform and adjacent track alignment.			**X**	**X**	**X**	**X**	**X**
15. Complicates construction (coordination and expense) for proposed future Lexington TSS underpass Project at East 5th Avenue.	**X**	**X**					
16. Has greater impacts Section 4(f) Resources	**X**	**X**					

*Installation of a future fourth track will require bridge reconstruction

As seen in **Table 2-1**, three Alternatives – B-V.3, B-V.4, and C – had the most advantages and fewest disadvantages. The SAP Team then determined that a high-level platform option (Alternative B-V.4) would not be feasible, given the clearance requirements for freight operations. Finally, in a meeting with the COL and the Consultant Team on September 11 2014, NS stated they would not support design for an island platform configuration (all Alternatives in A and B), but instead would support a dual low-level side platform configuration (Alternative C).

Accordingly, the Consultant Team in coordination with the NCDOT Rail Division and FRA developed general specifications to prepare conceptual engineering for **Alternative C** with dual low-level side platforms as a modification to Alternative B-V.3. Alternative C was then progressed to the **Build Alternative** as described in section 2.3.

2.2.3 C. Railroad Track and Passenger Platform Phasing

Near Term Two-Track: Temporary Configuration

Once the SAP Team determined that platform Alternative C was the most feasible and met the purpose of and need for the Project, the Consultant Team developed concept plans for the railroad tracks and passenger platform configuration. NCDOT Rail Division expects NS will prefer the near term two-track plan to be implemented with the realignment of the two mainline tracks on the "inside" configured

together with adjacent temporary platforms and with vertical circulation positioned according to the future permanent platform and third and fourth track locations.

Future Four-Track: Permanent Configuration

The Future four-track permanent plan is a separate project by others that would require demolition and relocation of the temporary platforms to install a third and fourth track configured together with the construction of two new adjacent permanent platforms. Although this strategy may be more expensive with the construction and demolition of two platforms, NCDOT Rail Division explained that NS' expected preference stems from the ability to maintain mainline freight operations without interruption or track crossings during construction. Alternative C provides flexibility for construction phasing with installation of the low-level side platforms either in the temporary or permanent alignment, subject to agreement with NS and completion of preliminary engineering.

2.2.4 D. Passenger Platform Access

After evaluating the SAP Alternatives (section 2.2.1) platforms alternatives (section 2.2.2), the SAP Team evaluated passenger platform access options. The implementation and configuration of controlled passenger platform access will allow the Lexington MMTS building to meet increasing security requirements for rail travel and will provide safe and separated access for both passengers and baggage handlers. Although baggage service will not be provided with initial Lexington MMTS operations, the baggage concourse will be designed and constructed to meet the requirements according to expected future service and demand; in the interim, the baggage tunnel will be used for routing utilities, general maintenance access to the platform, and potential equipment storage.

Passenger access between the station and the platform was considered in two ways: an overhead bridge and a below-grade concourse. Both options would require vertical circulation components including elevator and steps or escalator located at the platform and in the station to accommodate expected passenger loads.

Overhead Bridge

An overhead bridge would require a minimum of two freight elevators, one in the station and one at the platform, both designed to accommodate baggage transport vehicle and trailer(s). Additionally, the overhead bridge option would require a minimum 24-feet clearance from the top of rail to the bottom of the bridge to accommodate freight rail operations.

Below-Grade Concourse

As an existing site element, the street tunnel crossing the corridor below the tracks is included as part of the Project. This tunnel structure lies beneath the location of the proposed passenger platforms and is expected to be closed and filled partially in place due to unknown structural integrity and public safety concerns. To replace the access currently provided by this existing tunnel, the below-grade concourse platform access option includes both an underground passenger concourse intended to serve passenger and baggage access between the Lexington MMTS building and the platforms, and an adjacent general public pedestrian access across the corridor below the tracks.

Considering clearance requirements of an overhead option and the opportunity for reduced construction and maintenance costs provided by creating a below-grade option, NCDOT Rail Division has expressed a preference for below-grade passenger platform access. NCDOT Rail Division advised that a Below-Grade Concourse is the most practical method for providing passenger platform access.

Accordingly, a Below-Grade Concourse was carried forward in the Project design.

2.2.5 E. Lexington MMTS Building Location, Size, and JCD Program Strategy

The Amtrak Station Manual provides general guidance on the services and amenities to be provided within the Lexington MMTS Building Basic Station Program and the surrounding SAP Site area. Considering initial Lexington Station annual ridership is expected to achieve at least 10,000 annual passengers, the NCDOT Rail Division indicated the station building should be planned and designed as a Medium Category facility. In addition to the Basic Station Functions, the COL considered strategies to include complimentary Joint Commercial Development (JCD) program within the Lexington MMTS building.

As part of the analysis to select the location of the station, platform and track configuration, the COL considered multiple specific sites for the new Lexington MMTS Building.

The COL initially evaluated locating the Lexington MMTS Building on the block south of South Railroad Street and between East 2nd and East 3rd Avenues. This site would place the Lexington MMTS building within the NCRR ROW "bulb-out" area (NCRR ROW area outside of the 200-foot wide charter ROW). This potential location was considered desirable because it would meet the Project purpose and need with improved multi-modal connections and redevelopment of the Depot District. Specifically, the site would place the Lexington MMTS building closer to the existing Lexington Famer's Market and Uptown Lexington business district and still have a direct relationship with the rail corridor. This potential location was also desirable because it would preserve more of the LHB property for future redevelopment and economic activities, which would add to the expected increase of the city tax base generated in the Depot District. However, the development of the NCRR ROW bulb-out area would require immediate and successful negotiation with NCRR as the property owner. Therefore, the COL removed the NCRR ROW bulb-out concept from consideration. This decision was confirmed during a COL internal review meeting October 17, 2012.

The COL then determined that an MMTS located on the southwest corner of South Railroad Street and East 3rd Avenue would also meet the Project purpose and need while being outside of the NCRR ROW. The COL and the LRC evaluated three site configurations, which are described in Appendix G. Each of the three configurations at East 3rd Avenue and South Railroad Street would occupy the same footprint. The preferred configuration for the Lexington MMTS is shown in **Figure 2-12** below and was incorporated as part of the Build Alternative (Alternative C) for the Lexington MMTS.

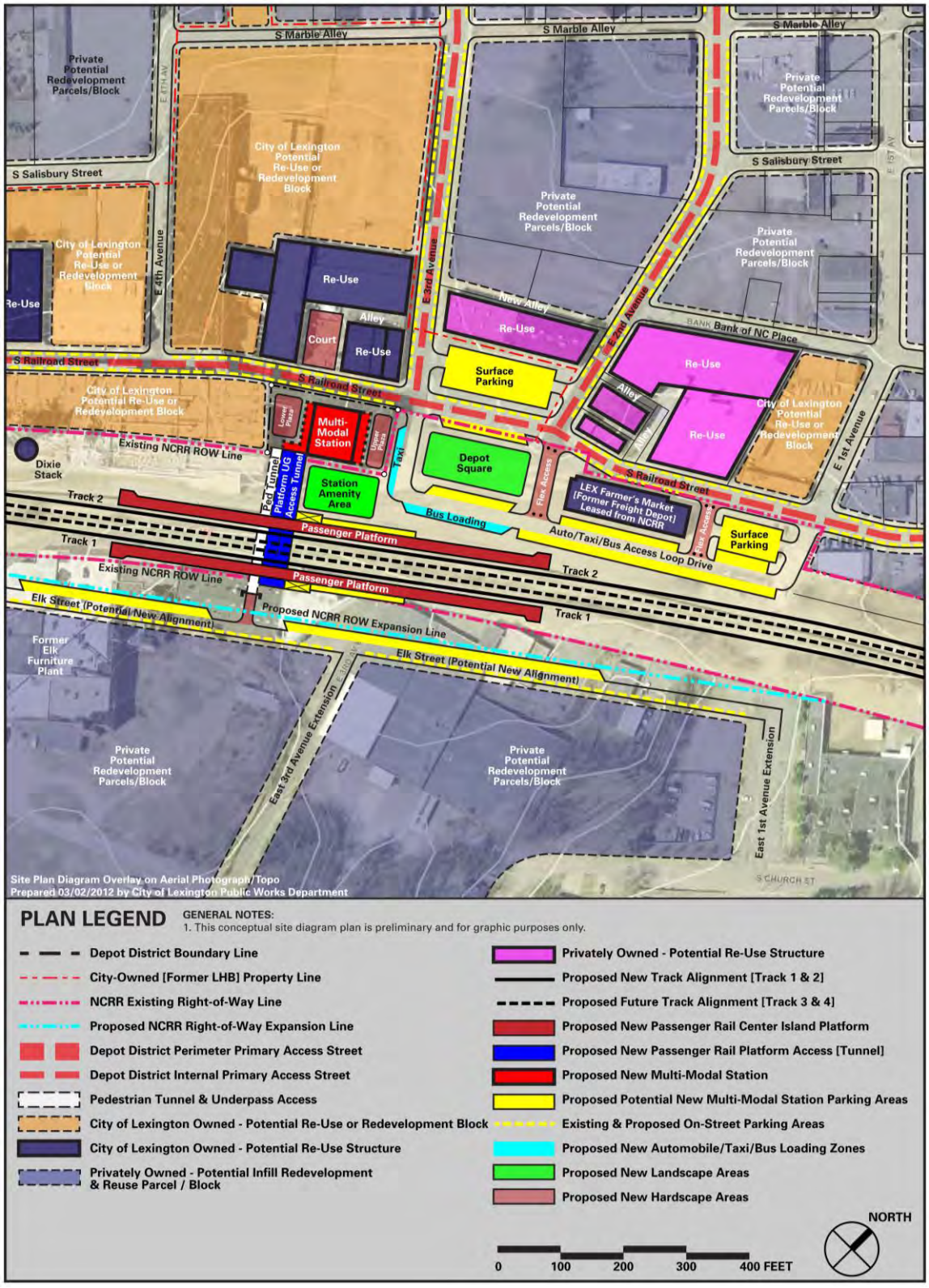


Figure 2-12: MMTS Site Plan

Building Location: The proposed Lexington MMTS Building is located outside of the NCRR ROW with a setback from the corner of East 3rd Avenue and South Railroad Street and covers a portion of the parcel up to the north side of the existing tunnel street.

Building Size: The proposed MMTS will be a multi-story building with main level building footprint (enclosed floor area) of approximately 8,000 GSF.

JCD Program Strategy: Basic Station Program with Incidental JCD program for a total gross building area of approximately 8,000-14,000 GSF.

Surface Parking Options

During the development of the site plan, the COL considered adding surface parking to the lower level of the Lexington MMTS complex. Creating this surface parking would require demolition of portions of the LHB Plant that have been identified as contributing resources by the State Historic Preservation Office to a proposed Lexington Industrial Historic District. To avoid impacts to the historic buildings, the COL eliminated the surface parking option from the lower level of the Lexington MMTS site. The Project instead will include surface parking and on-street parking east of the proposed Lexington MMTS. This parking plan was then incorporated into the Build Alternative. More detail on this revision to the Build Alternative to avoid impacts to historic resources can be found in section 5.4.3.

2.2.6 F. Lexington MMTS Building Programming and Space Planning

After selecting the location for the Lexington MMTS, the COL undertook Building Programming and Space Planning. This planning effort included advancing Conceptual Design for three Options by integrating parameters defined by the recommended Building Location, Size, and JCD Program Strategy together with the collective comments generated by the COL, SAP Team, and NCDOT Rail Division. **Figure 2-13** shows the conceptual site plan and building plan for the MMTS. Details on the evaluation of the various space planning concepts are in Appendix G.

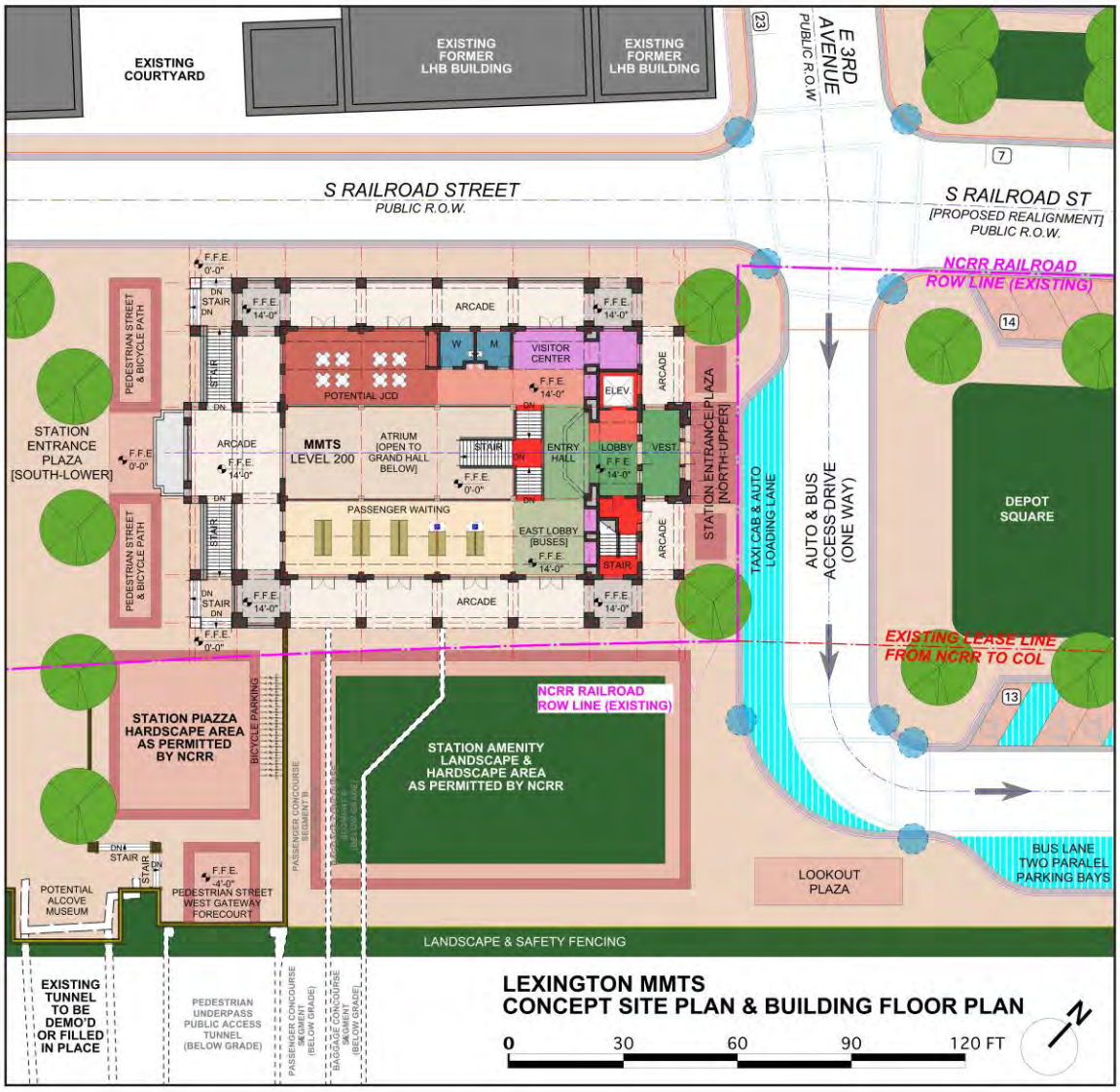


Figure 2-13: Proposed Lexington MMTS Concept

The Lexington MMTS Concept proposes a rectangular, elongated building footprint positioned with a minor setback to create a small plaza space on the corner of East 3rd Avenue and South Railroad Street, and stretches from the edge of the NCRR ROW to a setback along South Railroad Street providing pedestrian access following the existing street slope. The building is wrapped with a perimeter outdoor arcade to permit pedestrian access at multiple locations into the building and around the site. The building interior is organized with a "grand hall" interior layout providing an open central, galleria space and interior arcade around which the Basic Station Program is strategically arranged to provide passengers with good visibility and direct access to ticketing, waiting areas, restroom and vending areas, potential JCD, and concourse to the platform.

2.3 Alternatives Carried Forward for Detailed Evaluation

No-Build Alternative

The No-Build Alternative would consist of the currently planned and programmed activities within the LHB property and transportation infrastructure Projects currently included in the North Carolina State Transportation Improvement Program (STIP). The Comprehensive Transportation plan for Davidson County, July 2011, details the current and recommended transportation infrastructure within the Project area and surrounding city.

Under the No Build Alternative, the COL would not construct a new Lexington MMTS, including no new Amtrak station, no new site for DCTS and PART transit services to connect, and no Complete Street and other SAP improvements in the Depot District. Specifically, the No Build Alternative would not provide an additional passenger station along the Charlotte to Raleigh portion of the Southeast High Speed Rail corridor, and would not meet the need for a new station as identified in the recently adopted North Carolina Comprehensive State Rail Plan. The No Build Alternative would not provide a net benefit in additional ridership and revenue to the *Carolinian* and *Piedmont* train services. The No Build Alternative would not provide a transportation hub that is a central location for direct connections among DCTS and PART bus routes, and the bus routes and Amtrak. Finally, it would not improve the connections to employment and services, both within the City of Lexington and to other stops. The No Build Alternative also would not improve the region's economic competitiveness through improved transportation connections and as a catalyst to redevelopment in the Depot District. Overall, the No Build Alternative would fail to provide regional transportation alternatives and would hinder redevelopment. Therefore, the COL determined that the No Build would not meet the Project purpose and need and eliminated it from further consideration.

Build Alternative

As previously stated in Section 2.2, the SAP Team, COL, LRC and the Consultant Team evaluated various components of the proposed Lexington MMTS, which culminated in the selection of a Build Alternative (Alternative C), which consists of:

- SAP northern site orientation (located near East 3rd Avenue)
- Dual low-level side platforms on two tracks (with room for future expansion to four tracks)
- Below-grade concourse between the station building and the platforms
- Surface and on-street parking east of the Lexington MMTS

All SAP Key Components for the Build Alternative are organized within three core Project Sections (Section A – SAP Site and Lexington MMTS Building, Section B – Concourse, Platform and Track, and Section C – Primary Access Streets) that together comprise the Project, and shown **in Figure 2-14**. The following pages describe the primary components and function of the Build Alternative. More detailed descriptions of the proposed MMTS and other components can be found in Appendix G.

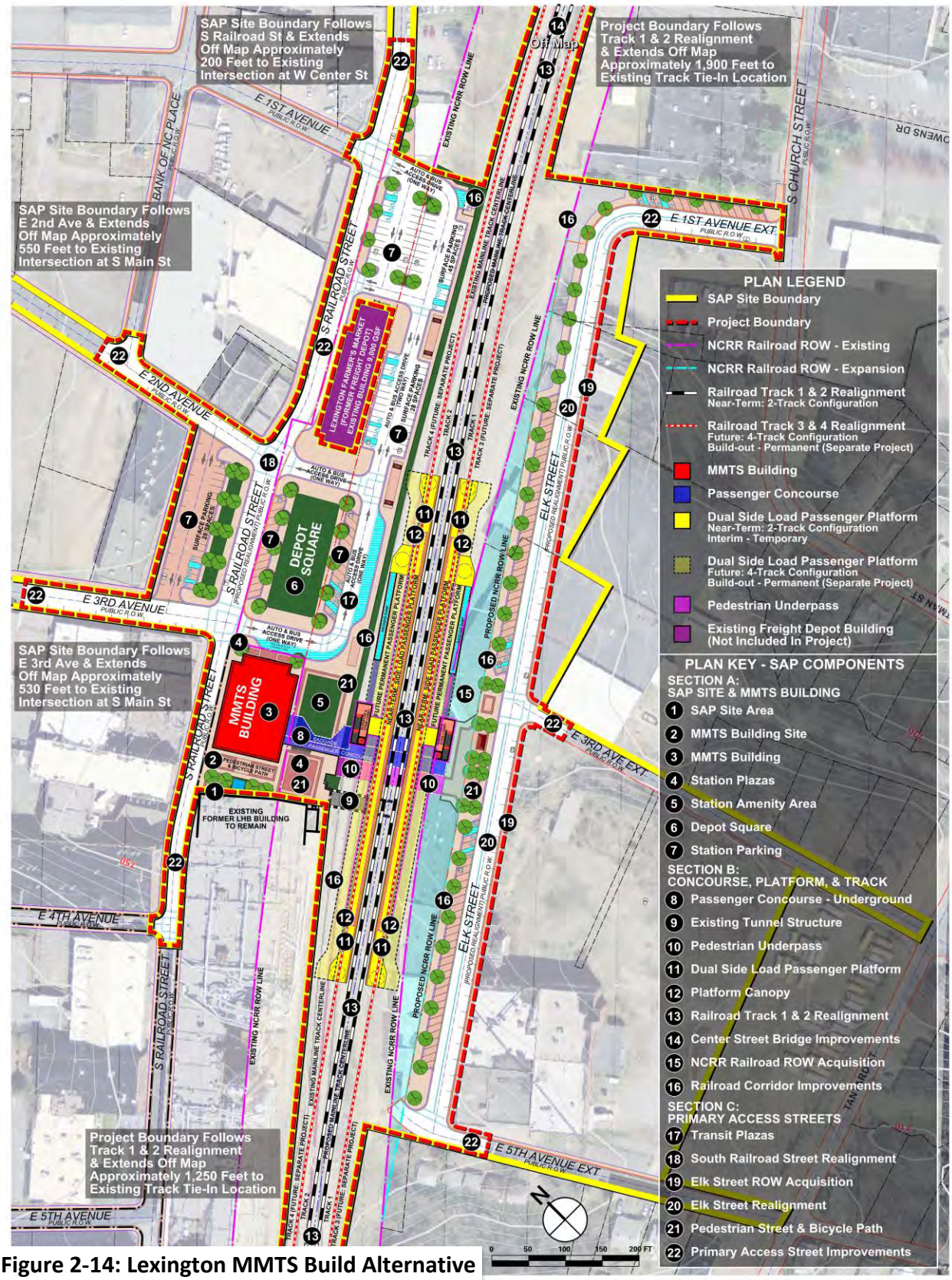


Figure 2-14: Lexington MMTS Build Alternative

SECTION A: SAP SITE AND LEXINGTON MMTS BUILDING

1. SAP Site Boundary and Project Limits

The SAP Site Area is approximately 25.5 acres defined by the combined total land area required to implement the proposed key components comprising each SAP Project Section. The Project Limits for the Lexington MMTS (and thus the limits for this EA) is approximately 18.5 acres located within the greater SAP Site Boundary and overlaps most of the SAP including the area of track work and portions of primary access streets necessary to serve the Lexington MMTS.

2. Lexington MMTS Building Site

Site preparation for the Lexington MMTS Building will include the selective demolition and shoring of existing buildings currently occupying the required limits of construction. The Lexington MMTS Site will be designed to take advantage of the unique existing topography characterized by a 12 to 14-foot grade change along South Railroad Street between East 3rd Avenue and the existing Tunnel Street. East 3rd Avenue will include surface parking, transit and taxi connections, and the station entrance. The lower level will access the below-grade passenger concourse connecting the station and the platforms. The COL expects that this proposed site configuration will facilitate the ordered site integration, construction, and functional operation of the multilevel Lexington MMTS building.

3. Lexington MMTS Building

The new Lexington MMTS Building will be the primary facility for train passengers, enabling connections to other transit modes including pedestrian, bicycle, automobile, taxicab, and bus with local and regional service. The Lexington MMTS Building is a multi-level facility with an interior gross floor area of 15,292 SF and outdoor covered gross floor area of 5,135 SF for a total gross floor area of 20,427 SF.

The Lexington MMTS Building will consist of three levels.

> **Level 100:** Provides a secondary, lower level entrance to the building with direct access to station office space, primary passenger waiting area and restroom facilities, and connection to the passenger concourse leading to the platform.
>
> **Level 200:** Provides the building primary entrance with an at-grade connection from the Station Plaza and future Depot Square to the grand hall – galleria consisting of the upper lobby, passenger waiting area (rail and bus), and potential incidental and station-related commercial space.
>
> **Level 300:** Provides a small observation gallery on the north end of the building, along with flanking outdoor balconies, with views down into the grand hall and out to Depot Square, and will be open to the public and available for special events. This area is design to accommodate the potential connection to future redevelopment buildings via pedestrian bridge structure(s).

4. Station Plazas

The Station Plazas (Upper and Lower) will be the public spaces serving as the transition or gateway thresholds between the Lexington MMTS Building and the City. Given the proposed Lexington MMTS building integration with the existing, sloped topography of the site, an Upper (Level 200) and Lower (Level 100) Station Plaza will be constructed.

5. Station Amenity Area

As permitted by NCRR, the Station Amenity Area will be located adjacent to the Lexington MMTS Building along the east side fronting the railroad corridor and constructed as a simple lawn defined by a perimeter hardscape pathway. The Station Amenity Area will function as the front lawn for the Lexington MMTS providing an outdoor waiting area for passengers and visitors as well as opportunities for staging special public and private outdoor events.

6. Depot Square

Depot Square will be a monumental public open space, for use by citizens and visitors alike, functioning as both a gateway to the COL and a central gathering space within the Depot District.

7. Station Parking

Initially, only surface and on-street parking types are necessary to provide adequate capacity within the SAP Site area; however, the COL anticipates that structured parking types will be necessary for subsequent future phases to meet the capacity increases determined by the correlating demand of passenger ridership and redevelopment of the Depot District. Surface parking will be accommodated primarily within six SAP locations: Depot Square, around the Freight Depot, the City-owned gravel parking lot along Railroad Street, the realigned Elk Street, and the proposed construction staging area south of Elk Street (subject to agreement with the existing property owner).

SECTION B: CONCOURSE, PLATFORM, AND TRACK

8. Passenger Concourse

The Passenger Concourse will be designed and constructed to facilitate a continuous underground, passenger and baggage access and connection between the Lexington MMTS building (passenger waiting area and station office/baggage room) and the boarding platform. Although baggage service will not be provided with initial Lexington MMTS operations, the baggage concourse will be designed and constructed to meet the functional requirements according to expected future service and demand.

9. Existing Tunnel Structure

The existing vehicular Tunnel Street and structure will be abandoned for use as a vehicular access below the NCRR railroad ROW. Upon review and subsequent letter by SHPO on November 4, 2013, the existing tunnel structure is a “contributing resource” to the SHPO-proposed historic district located within the property that is determined eligible for inclusion in the NRHP.

Accordingly, the current plan for the existing tunnel structure is to avoid and/or minimize impacts by incorporating the structure within the SAP site and building design. The impacts would include abandonment of the current use of the existing tunnel structure as a vehicular only access below the NCRR railroad ROW along with the removal (total or partial) and/or filling in place in order to build the Project components including new track alignment, dual low-level side platforms, passenger concourse, and pedestrian underpass tunnel for public access below the NCRR corridor.

10. Pedestrian Underpass

A new, open (non-gated) pedestrian tunnel structure (underpass) connection crossing below the NCRR railroad ROW, providing safe public access for pedestrians and cyclists only, will be designed and constructed to replace current use of the existing vehicular Tunnel Street and structure.

11. Dual Side Passenger Platforms

Two low-level side passenger platforms will be constructed in a dual side load configuration 700 feet long to provide adequate frontage for expected passenger train lengths and 16 feet wide to provide safe circulation area for passenger queuing, boarding, and alighting while also accommodating baggage handling equipment. The platforms will be constructed at a height of eight inches above the top of rail as defined by current ADA regulations. The dual side platform configuration will enhance operational efficiency and safety within this location on the corridor by facilitating the ability to dispatch trains to either track as needed. The platforms will be accessed in three locations (passenger elevator, passenger stair, and baggage ramp) to accommodate access from the concourse below.

12. Platform Canopies

Canopies will be constructed over both platforms to provide weather protection and circulation clearance for passengers, passenger accessibility equipment, and future baggage equipment. The dimensions and height of the canopies will be defined during preliminary design, and will comply with NS and Amtrak design criteria.

13. Track Configuration – Mainline Track Realignment

Common railroad practice for construction of passenger stations prefers placement of station platforms on tangent track for the full length of the trains serving the station. The existing track configuration at the site of the Lexington MMTS includes a significant curve, which does not provide a tangent sufficient to serve the full length of the *Carolinian* or *Piedmont* trains that will serve the station. To remediate the curve and provide a corridor width sufficient to support a future four-track railroad with two side platforms, the track configuration must be repositioned through the Project area. The existing two mainline tracks will be reconstructed to flank and allow passenger trains to dwell along either passenger platform, while allowing freight trains to pass safely on the opposite track. The mainline tracks will extend beyond the platform and tie into existing tracks approximately one-half mile to the north and one-quarter mile to the south.

14. Center Street Bridge Improvements

Improvements adjacent to the existing Center Street Bridge crossing the NCRR railroad ROW will be implemented as required to facilitate reconstruction of the two mainline tracks, and will include site re-grading and/or construction of retaining and/or crash walls as determined in future design phases.

15. NCRR Railroad ROW

In recognition of growing freight traffic on the NCRR corridor, the Project will allow for the future four-track configuration with construction of a third and fourth track.

16. Railroad Corridor Improvements

As permitted by NCRR, improvements within and along the railroad corridor within the SAP near the Lexington MMTS will be implemented to enhance beauty and safety. Fencing and low landscaping will be provided near the outer edge of both sides of the ROW fronting the dual side platforms and additional inter-track fencing will be provided between the two mainline tracks fronting the platform to help prevent unauthorized and unsafe pedestrian access and crossing of the NCRR corridor.

SECTION C: PRIMARY ACCESS STREETS

17. Transit Plazas

Two Transit Plazas (Upper and Lower) are proposed to provide passengers with direct, safe, and accessible access between the loading areas and the Lexington MMTS building entrances on Level 200 and 100 respectively. In addition to providing multimodal access to the Lexington MMTS building, both Transit Plazas will facilitate efficient access by emergency and service vehicles.

18. South Railroad Street Realignment

South Railroad Street will be realigned with a new street plan and safer, accessible intersections between East 2nd Avenue and East 3rd Avenue. The realignment will be designed in accordance with Complete Streets principles.

19. Elk Street ROW Acquisition

Elk Street will be realigned between East 1st Avenue Extension and East 5th Avenue Extension to accommodate the new passenger platform and associated track alignment and the associated NCRR railroad ROW expansion as required for additional tracks.

20. Elk Street Realignment

The proposed realignment of Elk Street will be constructed to complete a continuous street connection between East 1st Avenue Extension and East 5th Avenue Extension. The new alignment of Elk Street will be designed in accordance with Complete Streets principles.

21. Pedestrian Street and Bicycle Path

A new pedestrian street and bicycle path will be constructed to replace the vehicular (only) access currently provided by the existing Tunnel Street.

22. Primary Access Street Improvements

Portions of designated Primary Access Streets (including street and sidewalk areas) will be enhanced with improvements in accordance with Complete Streets principles. These enhancements are proposed along South Railroad Street, East 2nd Avenue, East 3rd Avenue, East 1st Avenue Extension, East 3rd Avenue Extension, and East 5th Avenue Extension.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the anticipated effects the Project alternatives, including the Build Alternative and a 'do nothing scenario' referred to as the No Build Alternative, would have on the existing resources within the area and community near the Project site. The No Build Alternative is a requirement of NEPA that provides a baseline for comparison with any other alternative. The Build Alternative and No Build are described in Chapter 2. For certain resource categories, specific areas outside the limits of construction as shown on **Figure 2-2** were evaluated to determine the potential impacts.

3.1 Air Quality

Description and Methods

The purpose of this project-level air quality analysis is to evaluate the potential effects of the proposed Project on the air quality, including the analysis of carbon monoxide (CO), ozone precursors (NO_x), Mobile Source Air Toxics (MSATs) and greenhouse gases. A qualitative PM2.5 hot spot analysis is not required because the Lexington Multi-Modal Transportation Station Project is not a project of air quality concern in accordance with 40 Code of Federal Regulations (CFR) 93.123.

Information presented includes a project-level air quality analysis for the Project conducted in accordance with US Environmental Protection Agency (EPA) and Federal Highway Administration (FHWA) guidelines, and the *Guidelines for Evaluating the Air Quality Impacts of Transportation Facilities,* provided by the North Carolina Department of Natural Resources (NCDENR), 2007.

The Project includes the construction of a new Lexington MMTS, passenger rail platforms and associated track realignment, parking facilities, and streetscape improvements of designated primary access streets. Project elements that may affect air quality include the motor vehicle trips to and from the new Lexington MMTS. The COL does not anticipate that the shift in train operations to accommodate the platforms will have a significant impact on adjacent sensitive land uses.

Regional air quality emissions are also not anticipated to be adversely affected. In fact, the proposed new station would result in a modal shift from single occupancy vehicles to transit trips, thereby reducing regional carbon monoxide emissions.

Legal and Regulatory Framework

Clean Air Act

The Clean Air Act (CAA) includes a provision to ensure that transportation projects conform to a state's plan for meeting federal air quality standards. The General Conformity Rule applies to non-FHWA/FTA federal transportation projects.[8] In this case, the General Conformity requirements apply as FRA is the lead federal agency. The Transportation Conformity Rule may also apply as FTA TIGER grants have been

[8] See 40 CFR Parts 51 and 93.

used to support the Project.[9] As a result, both General and Transportation Conformity are addressed in this document.

In December 2011, EPA designated Davidson County as a maintenance area (meaning it previously did not meet standards) for $PM_{2..5}$. Davidson County is in attainment for all other criteria pollutants.

The intent of the General Conformity requirement is to prevent air quality impacts of a proposed federal project from causing or contributing to new violations of the air quality standards, exacerbate existing violations, or interfering with the purpose of the applicable implementation plan.

All Federal actions within a nonattainment/maintenance area that have the potential to emit National Ambient Air Quality Standards (NAAQS) pollutants or their precursors for which the area is designated nonattainment, should evaluate the emissions to determine if they conform with the applicable State Implementation Plan (SIP). The EPA's Office of Air Quality Planning and Standards (OAQPS) sets the NAAQS for pollutants which are considered harmful to people and the environment.[10]

The EPA has established *de minimis* levels (in tons per year) for each of the criteria pollutants for each type of designated nonattainment and maintenance area. If the emissions generated by a project (on an area-wide basis) are less than these levels, the project's impacts are not considered to be significant, the Conformity Rule is not applicable, and no additional conformity-related analyses are required. The Project area is a maintenance acre for $PM_{2.5}$, which has a *de minimis* threshold of 100 tons of $PM_{2.5}$ per year.

In accordance with Transportation Conformity regulations, federal criteria that determine if a proposed transportation project in a non-attainment or maintenance area conforms to the applicable SIP are as follows:

- The project must not cause or contribute to any new violation of any National Ambient Air Quality Standard in the project vicinity;
- The project must not increase the frequency or severity of any existing violation of any National Ambient Air Quality Standard in the project vicinity; and
- The project must not delay timely attainment of any National Ambient Air Quality Standard or any required interim emission reductions or other milestones.

[9] See 40 CFR Part 93.
[10] See https://www3.epa.gov/airquality/cleanair.html

Table 3-1 presents the State and NAAQS for criteria pollutants.

Table 3-1: State and National Ambient Air Quality Standards

Pollutant	Averaging Period	North Carolina Standards	National Standards	
		Primary	**Primary**	**Secondary**
Carbon Monoxide (CO)	8 hour	10 mg/m3 (9 ppm)	10 mg/m3 (9 ppm)	-
	1 hour	40 mg/m3 (35 ppm)	40 mg/m3 (35 ppm)	-
Inhalable Particulates (PM10)	24 hour	150 µg/m3	150 µg/m3	Same as primary
Inhalable Particulates (PM2.5)	Annual geometric mean	15 µg/m3	15 µg/m3	Same as primary
	24 hour	65 µg/m3	35 µg/m3	Same as primary
Ozone (O3)	1 hour	NA	0.12 ppm (235 g/m3)	Same as primary
	8 hour	NA	0.08 ppm (235 g/m3)	Same as primary

Source: NCDENR, 2013

General Conformity

As the Project would clearly not have emissions at or near the General Conformity *de minimis* levels of 100 tons of $PM_{2.5}$ per year, the Project's impacts are not considered to be significant, the Conformity Rule is not applicable, and no additional conformity-related analyses are required.

Transportation Conformity

The Project is included in the Comprehensive Transportation Plan for Davidson County (July 2011). Davidson County in 2014 was added to the High Point Metropolitan Planning Organization (HPMPO) boundaries. Previously, Davidson County was part of the Piedmont Rural Planning Organization. The Conformity Determination Report for the Burlington-Graham MPO, Greensboro MPO, High Point MPO, Winston-Salem MPO, NCDOT (for the portion of Davidson County designated as a maintenance area for PM2.5), dated June 6, 2011 documents the region's compliance with provisions of the CAA in concurrence with all conformity requirements as detailed in 40 CFR Parts 51 and 93 (the Transportation Conformity Rule) and 23 CFR Part 450 (the Metropolitan Planning Regulations as established in the Transportation Equity Act for the 21st Century [TEA-21]). Based on the conformity determinations and comments by the EPA, the US Department of Transportation issued its finding that the projects for FY 2012-2018 State Transportation Improvement Plan for the areas in Davidson County outside of the MPO boundaries (in 2011) and the High Point MPO FY2012-2018 Transportation Improvement Plan (as a

subset of the 2035 Long Range Transportation Plan) conform to the purposes of the North Carolina State Implementation Plan. (http://daq.state.nc.us/planning/nc_sip.shtml).

Existing Conditions

Air quality data is collected for NAAQS criteria pollutants around the state based on the region's nonattainment status. A PM2.5 monitoring station is located by the City of Lexington Water Tower, with continuous 24-hour measurements. Measurements taken at this monitoring station provides the data necessary to make comparisons to the NAAQS. As shown in **Table 3-2**, the existing PM2.5 levels are far below the ambient air quality standards.

Table 3-2: Existing Air Quality Conditions

Pollutant	Time	NAAQS	Minimum	Maximum
PM 2.5	24-Hour	35 *ug/m3*	11.6 *ug/m3*	20.3 *ug/m3*

Source: North Carolina Department of Environment and Natural Resources[11], Division of Air Quality. Data for August 5, 2015, retrieved August 9, 2015

Impacts

No Build

The No Build Alternative would have no positive air quality impacts. The estimated 29 rail trips per day under the Build Alternative are currently being taken by automobiles or buses. As growth in the Lexington area and demand for travel outside of the region expands, air quality emissions would increase under the No Build Alternative due to the lack of low emission transportation options.

Build Alternative

Carbon Monoxide "Hot Spot" Air Quality Analysis

Vehicular traffic is the most significant source of CO emissions in the region. Because CO emissions dissipate rapidly with increasing distance from the source, the highest concentrations are likely to occur in the vicinity of congested roadway intersections or other locations where motor vehicles tend to idle for a period of time.

The methodology for identifying potential local air quality impacts follows the EPA recommended procedure for CO microscale impact analysis. The general evaluation procedure follows the *Guideline for Modeling Carbon Monoxide from Roadway Intersections* (EPA, 1992), and includes a multiple intersection screening process, followed by microscale CO analysis with the CAL3QHC line-source dispersion model. The multiple intersection screening analysis is used to identify Study Area locations with Level of Service (LOS) D, E, or F by peak hour traffic volumes that are affected by the proposed project, requiring further analysis for CO hot spots.

[11] In 2015, the North Carolina Department of Environment and Natural Resources (NCDENR) was renamed the North Carolina Department of Environmental Quality (NCDEQ).

Reviewing the Traffic Analysis contained within this EA, none of the Study Area intersections affected by the project has a LOS D, E, or F. As a result, no further analysis is required.

Amtrak projects that the Lexington MMTS would have a daily ridership of 58 persons, resulting in up to 29 arrival and 29 departure trips distributed throughout the day.

As shown in **Table 3-2**, existing Carbon Monoxide emissions are well below the state and national standards. The additional 58 daily motor vehicle trips would not adversely affect surrounding intersections. The Build Alternative would not increase the number of bus trips, but instead would re-route existing local DCTS Lexington Circulator and Cross County Connector, and the regional PART transit routes to serve the new MMTS. The Build Alternative would not increase the number of bus trips, but instead would re-route some transit routes to serve the new MMTS. As a result, the Project would not cause or contribute to any new violation of any CO emissions.

Mobile Source Air Toxics (MSAT)

In addition to the criteria air pollutants for which there are NAAQS, EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries).

Mobile source air toxics (MSAT) are a subset of the 188 air toxics defined by the Clean Air Act. MSAT are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The FHWA *Interim Guidance on Air Toxic Analysis in NEPA Documents* (Guidance, December 2012) requires qualitative or quantitative analysis of MSATs under specific conditions. The EPA has designated six prioritized MSATs, which are known or probable carcinogens or can cause chronic respiratory effects, for analysis: benzene; acrolein; formaldehyde; 1,3-butadiene, acetaldehyde; and diesel exhaust (diesel exhaust gases and diesel particulate matter). Based on FHWA's analysis using the latest version of MOVES, diesel particulate matter (diesel PM) has become the dominant MSAT of concern.

As determined in the traffic analysis in **section 3.13**, and the assessment of regional Vehicle Miles Travelled (VMT), the Build Alternative's new Lexington MMTS would result in a slight reduction in regional traffic and regional VMT, compared to the No Build Alternative. While the specific land uses of the proposed Depot District Redevelopment site have not been determined, this analysis assumes a combination of commercial, retail and light industrial uses. As a result, truck percentages under the Build Alternative are expected to be slightly greater than the No Build Alternative, but not significantly. While rail activity also generates MSATs, the Project is not anticipated to increase the frequency of freight or passenger trains along the line. As shown in the traffic assessment, none of the 2035 traffic volumes in the Study Area exceeds 140,000 ADT (Guidance MSAT impact criteria). Therefore, the project is considered a *Project with Low Potential MSAT Effects,* requiring a qualitative assessment.

The amount of MSAT emitted, relative to the No Build Alternative, would be proportional to the amount of VMT. This increase in truck VMT would lead to higher MSAT emissions in the Study Area. Nevertheless, emissions will likely be lower than present levels in the 2035 design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 80 percent from 2010 to 2050. Local conditions may differ from these national projections in terms of fleet mix and

turnover, VMT growth rates, and local control measures. However, the EPA-projected reductions are so significant (even after accounting for VMT growth) that MSAT emissions in the Study Area are likely to be lower in the future as well.

Greenhouse Gas (GHG) Impacts

Carbon dioxide is the principle man-made greenhouse gas, representing approximately 82 percent of all greenhouse gas emissions in the United States. Among other sources, approximately 34 percent of the total carbon dioxide is produced by the burning of fossil fuel (gasoline) in internal combustion engines in motor vehicles. The Lexington MMTS Project would result in a slight decrease or would not change vehicle emissions and VMT from traffic using the roadway. Therefore, the Project would not contribute to an increase in greenhouse gases.

Summary of Impacts

As noted above, the Build Alternative is not a Project of air quality concern. The Project would generate approximately 58 vehicle trips per day, which would not result in adverse effects to local carbon monoxide or greenhouse gases. Moreover, the Project would allow people to switch from vehicular trips to using rail and transit, which would also reduce any negative effects to air quality.

Mitigation

The Build Alternative would not impact air quality; therefore no mitigation is required.

3.2 Water Quality

Description and Methods

A review of available on-line data was conducted to evaluate the existing water quality conditions. The Water Quality review included the Project Study Area as well as for water resources near the Study Area (see **Figure 3-1**). Data included US Geological Survey (USGS) 7.5 minute series quadrangle maps (USGS 1994a; USGS 1994b); US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Maps (USFWS 2013a); US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Surveys (USDA 1994); and aerial photography. No jurisdictional field-delineation was performed for the Study Area.

Sections 401 and 404 of the Clean Water Act (CWA) require regulation of discharges of fill material into "Waters of the United States."[12] The EPA is the principal administrative agency of the CWA; however, the US Army Corps of Engineers (USACE) has responsibility for implementation, permitting, and enforcement of the provisions of the CWA related to dredging and filling. The USACE regulatory program is defined in 33 CFR 320-330. The North Carolina Division of Water Resources (NCDWR)[13] is the principal administrative agency of the Section 401 Surface Water and Wetland Standards, which are defined in

[12] Clean Water Act of 1972. http://www.epw.senate.gov/water.pdf
[13] Until 2015, NCDWR was known as the North Carolina Division of Water Quality (NCDWQ)

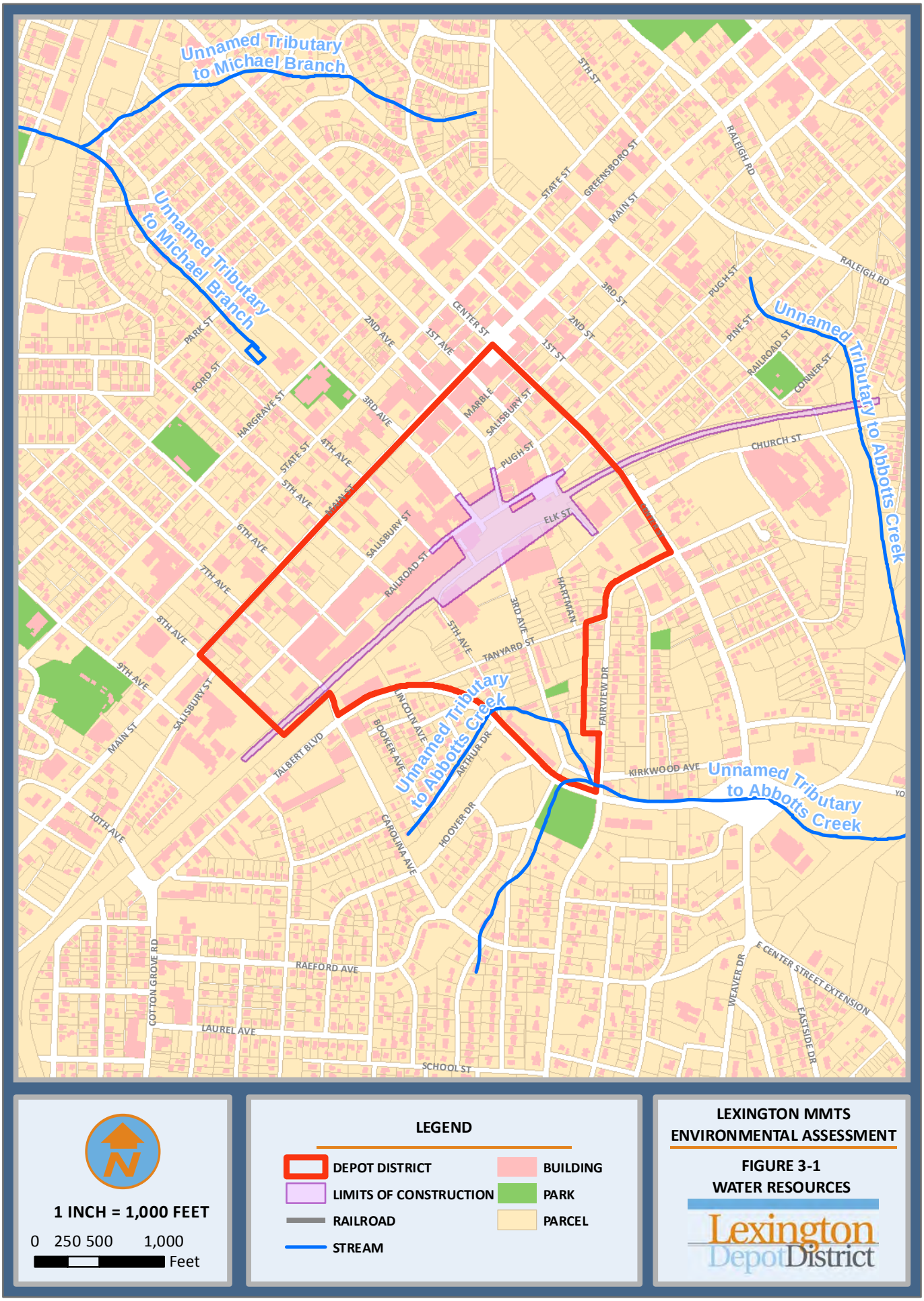
North Carolina Administration Code 15A NCAC 02B .0100 and .0200. Water bodies, including lakes, rivers, and streams, are subject to jurisdictional consideration under the Section 404 Program.

Existing Conditions

The Project lies within the Yadkin-Pee Dee River Basin. According to documentation from the Piedmont Triad Council of Governments (PTCOG), the Yadkin-Pee Dee River Basin is the second-largest river basin in North Carolina, covering twenty-one counties totaling 7,213 square miles and 5,946 linear river miles (PTCOG, 2013). The surface waters in the area are located in the watershed of the Yadkin River, US Geological Service (USGS) 8-digit Hydrologic Unit Code (HUC) 03040103, within the North Carolina Division of Water Quality (NCDWQ)[14] subbasin 03-07-07.

The nearest USGS named stream is Abbotts Creek, located approximately one mile southeast of the Study Area. Abbotts Creek is classified as a Class C water. The stream index number is 12-199-(06)a. All surface waters in the Study Area are unnamed tributaries to Abbots Creek and share the same water quality classification designation as the body of water to which they flow. Class C waters are freshwaters protected for secondary recreation, fishing, aquatic life including propagation and survival, and wildlife. No Outstanding Resource Waters (ORW), High Quality Waters (HQW), or Critical Areas (CA) were identified within the vicinity of the Study Area. The portion of Abbots Creek that the Study Area drains to is listed on the 2010 303(d) list of impaired waters for copper, turbidly and ecologic/biologic integrity of benthos (NCDENR 2010). **Figure 3-1** shows the location of Abbots Creek and the unnamed tributaries.

[14] In 2015, the North Carolina Division of Water Quality (NCDWQ) was renamed the North Carolina Division of Water Resources (NCDWR)


Unnamed Tributary to Michael Branch
Unnamed Tributary to Michael Branch
Unnamed Tributary to Abbotts Creek
Unnamed Tributary to Abbotts Creek
Unnamed Tributary to Abbotts Creek
Unnamed Tributary to Abbotts Creek
PARK ST
FORD ST
HARGRAVE ST
1ST AVE
2ND AVE
3RD AVE
4TH AVE
5TH AVE
6TH AVE
7TH AVE
8TH AVE
9TH AVE
10TH AVE
CENTER ST
STATE ST
MAIN ST
GREENSBORO ST
5TH ST
RALEIGH RD
3RD ST
2ND ST
1ST ST
PUGH ST
PINE ST
RAILROAD ST
CONNER ST
CHURCH ST
MARBLE
SALISBURY ST
ELK ST
RAILROAD ST
HARTMAN
TANYARD ST
FAIRVIEW DR
LINCOLN AVE
BOOKER AVE
ARTHUR DR
HOOVER DR
CAROLINA AVE
KIRKWOOD AVE
TALBERT BLVD
COTTON GROVE RD
RAEFORD AVE
LAUREL AVE
SCHOOL ST
WEAVER DR
E CENTER STREET EXTENSION
EASTSIDE DR
1 INCH = 1,000 FEET
0 250 500 1,000
Feet
LEGEND
DEPOT DISTRICT
LIMITS OF CONSTRUCTION
RAILROAD
STREAM
BUILDING
PARK
PARCEL
LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT
FIGURE 3-1
WATER RESOURCES
Lexington
Depot District

Impacts

No Build

The No Build Alternative would not impact stormwater, or the water quality of Abbots Creek or its tributaries.

Build Alternative

Impacts to water quality, as a result of constructing of the Build Alternative, are not anticipated to be significant. The Study Area is already disturbed from years of development and human use. Impacts to water resources could include stormwater runoff, disruption of the substrate, increased sedimentation and siltation, and temporary decreases of dissolved oxygen during construction. Clearing and grubbing activities, as well as possible culvert construction activities could also impact water resources. Most impacts would be temporary in nature, occurring only during Project construction. Impacts would be limited to the immediate area of construction and would be minimized using BMPs. Stormwater runoff rates would increase slightly due to the increase in impervious surface area. Sedimentation may also cause an impact to water systems that would be crossed. Sedimentation of the stream channel causes changes in flow rate and stream course, which may lead to increased stream bank scour and erosion. Sedimentation also leads to increased turbidity of the water column. Removal of the riparian vegetation could result in decreases in dissolved oxygen and temperature instability of the stream.

Mitigation

Stormwater runoff, as well as temporary construction impacts due to erosion and sedimentation, would be minimized through implementation of a stringent erosion control schedule and use of BMPs. Measures to control non-point source water quality impacts as described in NCDOT's *Best Management Practices for Protection of Surface Waters* (1997) will be incorporated. The goal of these BMPs is "to prevent degradation of the state's waters through the location, construction, or operation of the highway system." The COL will ensure that these measures are incorporated into the final engineering design of the project and would be detailed in an erosion and sedimentation control plan. This plan would be prepared in accordance with the requirements of the North Carolina Sedimentation Pollution Control Act (15A NCAC 4B.0101-0130).

3.3 Noise and Vibration

This section includes an assessment of noise impacts of the Project followed by the potential vibration impacts.

3.3.1 Noise

Description and Methods

The noise assessment for the Project was performed according to the procedures set forth in the second edition of FTA's *Transit Noise and Vibration Impact Assessment,*[15] released in May of 2006, as well as the

[15] See https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/noise-and-vibration

FRA's *High-Speed Rail Initial Noise Evaluation, version 2.0*, January 2012,[16] and the *FRA Horn Noise Model*.[17] For the purpose of the noise analysis, the Project was evaluated for potential noise impacts associated with three sources: track realignment, trains serving the new Lexington MMTS, and parking facilities.

Additional assumptions on horn use follow FRA's final rule on the use of locomotive horns at highway-rail grade crossings,[18] which requires that locomotive horns be sounded at all public grade crossings at least 15 seconds, but not more than 20 seconds before entering a crossing. This rule applies when the train speed is below 45 mph. While train operating engineers may sound horns in the event of emergencies or prior to entering stations or rail yards, it is not an FRA requirement, and therefore the noise analysis did not include these additional horn operations.

While growth in freight train frequencies is anticipated between the existing and future conditions, the Project would not increase the number of freight and passenger trains; rather it changes the operational conditions by providing a new station and platform(s) for Lexington residents to use the Amtrak service. As a result, the analysis of noise is based on the realignment of track approximately 35 feet to the south to accommodate the center platform and other future tracks and the increased speed of passenger rail service that does not stop at the station from 65 mph to 80 mph. This realignment brings train operations and their related noise (wheel, engine and horn noise) closer to residential properties to the south. Some noise sensitive land uses to the north of the tracks will experience a reduction in noise because the rail operations under the build condition will be farther away.

Existing Conditions

This section includes a description of the existing land uses, existing train operations and identifies the noise sensitive receptors within the appropriate screening distances, as defined by the FTA and FRA. Existing noise levels have been quantified using the applicable FTA and FRA noise models with the existing operations.

Track Realignment and New Station

Existing rail traffic includes a total of 44 trains per day (34 freight trains and 8 to 10 passenger trains with additional round trip service proposed for 2017). While noise from the daily train pass-bys is relatively low, there is a grade crossing at East 7th Avenue, which requires the trains to sound their horns a minimum of 15 seconds and maximum of 20 seconds in advance of the crossing.

The Project Study Area is based on the realignment of track for approximately 4,100 feet, located between a point 1,400 feet east of the intersection of East Center Street and East 7th Avenue. Land uses on the northern and southern sides of the track include a combination of industrial properties close to the tracks, educational offices and residential properties.

The FTA Noise Impact Criteria categorizes noise sensitive land uses as follows.

[16] See FRA's Guidance on Assessing Noise and Vibration Impacts; https://www.fra.dot.gov/Page/P0216
[17] See https://www.fra.dot.gov/Page/P0599#six
[18] See 49 CFR Part 222

Category 1: buildings or parks where quiet is an essential element of their purpose, such as amphitheaters and concert pavilions.

Category 2: buildings used for sleeping such as residences, hospitals, and hotels where nighttime sensitivity is of utmost importance.

Category 3: institutional land uses with primarily daytime and evening use including schools, libraries, churches, and active parks.

According to the FTA and FRA Guidance manuals, the screening distances for impacts from freight and passenger rail are 750 feet from track with no intervening buildings and 375 feet with intervening buildings. Where there are grade crossings that require the trains to sound horns, the screening distances increase to 1,600 feet and 1,200 feet, respectively. **Figure 3-2** provides a Study Area map showing the screening distances for potential impacts from noise. **Table 3-3** identifies the noise sensitive land uses within the impact screening distances. Where multiple residential units are grouped together, they are identified as one receptor with the closest resident to rail distance provided. Receptor 1, East Street Park, is currently used to store construction materials and appears not to have any passive or active recreational facilities.

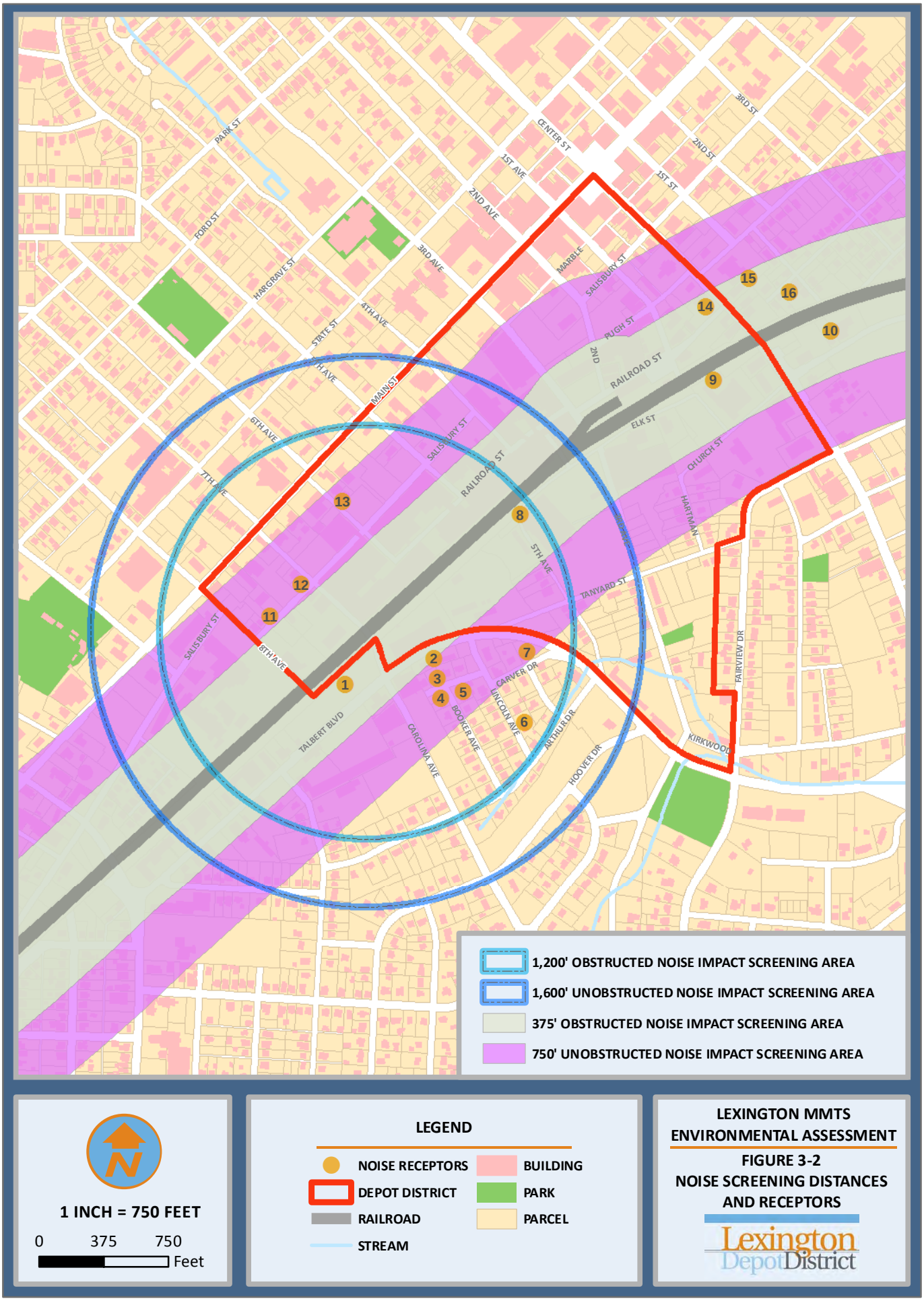

1,200' OBSTRUCTED NOISE IMPACT SCREENING AREA
1,600' UNOBSTRUCTED NOISE IMPACT SCREENING AREA
375' OBSTRUCTED NOISE IMPACT SCREENING AREA
750' UNOBSTRUCTED NOISE IMPACT SCREENING AREA
1 INCH = 750 FEET
0 375 750
Feet
LEGEND
NOISE RECEPTORS
DEPOT DISTRICT
RAILROAD
STREAM
BUILDING
PARK
PARCEL
LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT
FIGURE 3-2
NOISE SCREENING DISTANCES
AND RECEPTORS
Lexington Depot District

Table 3-3: Noise Sensitive Receptors

Site No.	Receiver Site	Land Use	# Residential Units	FTA Noise Category	Distance to Centerline (feet)	
					Track	Grade Xing
1	East Street Park	Park	-	3	75	190
2	S. Talbert & Carolina	Residential	2	2	340	340
3	Carver Drive	Residential	5	2	440[1]	440[3]
4	Booker Avenue	Residential	8	2	540[1]	540[3]
5	Lincoln Avenue (1)	Residential	4	2	545[1]	545[3]
6	Lincoln Avenue (2)	Residential	2	2	1020[1]	1020
7	Washington Avenue	Residential	2	2	530	715
8	E. 5th Avenue Ext.	Residential	5	2	140	1020
9	Get Real Program – Elk St.	Office	-	3	170	[2]
10	North Church Street	Residential	1	2	150	[2]
11	S. Salisbury & E. 8th Avenue	Residential	2	2	[1]	600
12	S. Salisbury & E. 7th Avenue	Residential	1	2	[1]	445
13	E. 6th Avenue	Residential	2	2	[1]	610
14	E. Center Street	Residential	2	2	270	[2]
15	Shady Side Presbyterian	Church	-	3	350	[2]
16	N. Pine St. & E. 1st Street	Residential	8	2	100	[2]

Notes: [1] Distance exceeds screening distance to track of 750 feet unobstructed and 375 feet obstructed
[2] Distance exceeds screening distance to grade crossing of 1,600 ft unobstructed and 1,200 feet obstructed
[3] Denotes receptor has at least one intervening building between track.

Existing Freight and Passenger Noise

The FRA Horn noise model was used to evaluate existing noise levels that result from the use of rail horns approaching the East 7th Avenue grade crossing. The FRA High Speed Initial Rail evaluation model was used to evaluate the existing operational noise of the 10 passenger and 34 freight trains per day that cross the Study Area. **Table 3-4** lists the existing operating conditions that were used in the analysis of existing noise. **Table 3-5** presents the results of the modeled existing noise levels.

As shown in **Table 3-5**, the prominent noise source originates from the freight rail horns. The existing conditions show operational (no horn) noise levels within the Study Area of 42 to 60 decibels (dBA).

Horn noise levels from the 7th Avenue grade crossing range from 69 dBA at the East Street Park to 51 dBA at East 5th Avenue.

Table 3-4: Rail Model Inputs

Horn Noise Model	**Freight/Passenger**	
Horn Noise Model	**Freight Inputs**	**Passenger Inputs**
Horn Lmax (decibels)	104 dBA at 100 feet	104 dBA at 100 feet
Train Speed (Existing & No-Build)	50 mph	65 mph
Train Speed (Build)	50 mph	80 mph
Length of impact area before station	15 seconds	15 seconds
Existing # Trains (7:00am – 10:00pm)	23	8
Existing # Trains (10:00pm - 7:00am)	11	2
Build # Trains (7:00am – 10:00pm)	42	18
Build # Trains (10:00pm - 7:00am)	26	2
Noise Environment	Suburban	Suburban
Average # of cars	100 cars	9
Average # locomotives	2	2
High Speed Rail Noise Model		
Track Separation	15 feet	15 feet
Shielding	Light Urban	Light Urban
Intervening Building Rows	0-1	0-1
Train Type	2 – Fossil Fuel	2 – Fossil Fuel
Length of cars	85 feet	85 feet

Source: AECOM, February 2016

Table 3-5: Modeled Existing Noise (dBA)

Site No.	Receiver Site	FTA Noise Category	Distance to Centerline (feet)		Existing Passenger Noise			Existing Freight Noise			Existing Total Noise
			Track	Grade Xing	Track	Horn	Total	Track	Horn	Total	
1	East Street Park	3	75	190	54	58	58	56	69	69	69
2	S. Talbert & Carolina	2	340	340 [3]	46	53	54	52	63	63	63
3	Carver Drive	2	[1]	440 [3]	[1]	50	50	50	61	61	61
4	Booker Avenue	2	[1]	540 [3]	[1]	48	48	49	59	59	59
5	Lincoln Avenue (1)	2	[1]	545 [3]	[1]	48	48	49	59	59	59
6	Lincoln Avenue (2)	2	[1]	1020 [3]	[1]	42	42	45	51	51	51
7	Washington Avenue	2	[1]	715 [3]	[1]	46	46	47	55	55	55
8	E. 5th Avenue Ext.	2	140	1020	53	42	53	58	51	58	58
9	Get Real Program – Elk St.	3	170	[2]	50	[2]	50	51	[2]	51	54
10	North Church Street	2	150	[2]	52	[2]	52	58	[2]	58	58
11	S. Salisbury & E. 8th Avenue	2	[1]	600	[1]	47	47	48	57	57	57
12	S. Salisbury & E. 7th Avenue	2	[1]	445	[1]	50	50	50	61	61	61
13	E. 6th Avenue	2	[1]	610 [3]	[1]	48	48	48	57	57	57
14	E. Center Street	2	270	[2]	51	[2]	51	53	[2]	53	55
15	Shady Side Presbyterian	3	350	[2]	45	[2]	45	46	[2]	46	49
16	N. Pine St. & E. 1st Street	2	100	[2]	54	[2]	54	60	[2]	60	60

Source: AECOM Compiled from FRA Horn Noise Model & High Speed Rail Noise Model, January 2016

Notes: * Horn noise levels obtained from Xing Impact tab and Middle Impact tabs, Smoothed Curbs – Existing levels.

[1] Distance exceeds screening distance to track of 750 feet unobstructed and 375 feet obstructed

[2] Distance exceeds screening distance to grade crossing of 1,600 ft unobstructed and 1,200 feet obstructed

[3] Denotes receptor has at least one intervening building between track.

Project Impacts (Track Realignment and Station)

No Build

Under the No Build alternative, passenger rail service would increase to 20 trains per day and freight service would increase to 68 trains per day by 2017. No changes in track configuration would occur in the No- Build alternative. Train speeds would remain the same as existing conditions. As a result, the East Street Park and the various residential properties closest to the tracks would remain impacted by the existing rail and horn noise.

Build Alternative (Track Realignment and New Station)

Under the Build Alternative, the track alignment would be reconfigured for approximately 4,100 feet to accommodate the passenger platform(s) and new Lexington MMTS. The surrounding Depot District would be designated as a redevelopment zone, to be constructed by a third party developer. Parking facilities would be constructed to support the train station and the redevelopment projects.

The Project impacts would include the shift in track alignment 35 feet at its widest, to the south, and increased speeds of through passenger trains (not stopping at the station) from 65 mph to 80 mph. A conservative estimate of twelve (10 daytime and 2 nighttime) of the 20 passenger trains would stop at the station. Of the 68 freight trains per day, 26 trains were assumed to travel between 10pm and 7am, and 42 trains were assumed to travel between 7am and 10pm. Freight train speeds would remain constant at 50 mph. **Table 3-6** presents the changes between the existing, No-Build and Build alternatives. As noted in the existing conditions section, the prominent source of noise originates from the freight horns. Where receptors are located greater than 1,600 feet or 1,200 feet obstructed, from the grade crossing, the prominent source of noise in the Build Alternative shifts from the freight horn to the regular freight rolling noise. As a result, changes between the No Build and Build Alternatives are limited to the shift in tracks.

Table 3-6: Modeled Noise: Existing, No-Build and Build (dBA)

Site No.	Receiver Site	No-Build Alternative Distance to Source(ft.)	Build Alternative Distance to Source (ft.)	Existing Noise	No Build Noise	Build Noise	Impact
1	East Street Park	190 [1]	190 [1]	69	72	72	No
2	S. Talbert & Carolina	340 [1]	305 [1]	63	67	68	No
3	Carver Drive	440 [1]	405 [1]	61	64	65	No
4	Booker Avenue	540 [1]	505 [1]	59	62	63	No
5	Lincoln Avenue (1)	545 [1]	510 [1]	59	62	63	No
6	Lincoln Avenue (2)	1020 [1]	985 [1]	51	55	55	No
7	Washington Avenue	715 [1]	680 [1]	55	59	60	No
8	E. 5th Avenue Ext.	140	105	58	61	63	No
9	Get Real Program – Elk St.	170	135	54	54	55	No
10	North Church Street	150	115	58	61	63	No
11	S. Salisbury & E. 8th Avenue	600 [1]	610 [1]	57	61	61	No
12	S. Salisbury & E. 7th Avenue	445	455 [1]	61	64	64	No
13	E. 6th Avenue	610 [1]	645 [1]	57	61	60	No
14	E. Center Street	270	270	55	57	57	No
15	Shady Side Presbyterian	350	350	49	49	49	No
16	N. Pine St. & E. 1st Street	100	100	60	63	63	No

Source: AECOM Compiled from FRA Horn Noise Model & High Speed Rail Noise Model, January 2016
Notes: [1] Noise Source is horn at grade crossing

Based on Table 3-6, freight traffic is the dominant source of noise in the Study Area. The increased frequencies between the existing condition and the No Build condition is projected to increase noise levels up to four decibels over existing noise. Both freight and passenger traffic frequencies are expected to remain constant in the No Build and Build conditions. As a result, noise levels increase and decrease up to two decibels to account for the shift in track alignments closer or farther from receptors. Changes that are less than 3 dB(A) may be considered negligible or unimportant under NEPA because they are barely perceptible (FTA Transit Noise And Vibration Impact Assessment, May 2006).

Parking Facilities

While parking facilities have not been finalized, this analysis used the FTA base model to assess the effects of a new park and ride facility using 500 cars per hour, 6 buses per hour and a distance to the closest receptor of 100 feet. Noise levels from such a parking and bus facility would result in 24-hour noise levels of 53 decibels and hourly average noise levels of 55 decibels. Unless such parking facilities are located closer to residential properties, it is unlikely that they would result in noise impacts. Further, the Project is estimated to result in approximately 58 vehicles per day, much less than the FTA estimate described above.

Mitigation

The Build Alternative would not have a significant impact on noise levels. Therefore, no mitigation is required.

3.3.2 Vibration

Description and Methods

The vibration assessment for the Project was performed according to the procedures set forth in the second edition of the FTA *Transit Noise and Vibration Impact Assessment,*[19] released in May of 2006.

The analysis of vibration impacts includes the following:

- Identification of the FTA Vibration impact criteria
- Screening distances for potential vibration impacts
- Assessment of existing vibration levels at the closest sensitive receptors under the No Build Alternative
- Assessment of Build Alternative vibration using closer distances created by the shift in track alignments
- Comparison of Build Alternative vibration levels to vibration impact criteria

[19] See https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/noise-and-vibration

Vibration Impact Criteria

FTA impact criteria used for this Project are provided in **Table 3-7**. Where vibration is intermittent (e.g., a transit train pass-by) human annoyance from ground vibration is dependent on the number of vibration events that occur during a typical 24-hour period. The FTA Manual presents two categories of criteria for infrequent and frequent events, respectively. "Frequent events" is defined as more than 70 vibration events per day. The No Build Alternative and Build Alternative rail operations in the Study Area would have up to 88 trains per day in both directions (68 freight and 20 passenger); however, under the Build Alternative eight of the passenger trains would be high speed, traveling at 80 mph, and would bypass the station. As a result, the frequent event criteria apply. As shown in the Table, vibration levels of 72 vibration decibels (VdB) or greater are considered an impact for residential uses. Daytime vibration levels for office, religious or school land uses should not exceed 75 VdB.

Table 3-7: Ground-Borne Vibration and Noise Impact Criteria (Frequent Events)

Land Use Category	Category Comment	Ground-borne Vibration (VdB re 1 micro in/sec)	
		Ground-Borne Vibration	Ground-Borne Noise
1	Low interior ambient is essential	65 VdB	N/A
2	Residential & sleep	72 VdB	35 dBA
3	Institutional & daytime	75 VdB	40 dBA

Source: FTA Transit Noise and Vibration Impact Assessment, 2006

Existing Conditions

The existing vibration levels in the Study Area are primarily the result of the freight and passenger rail operations. The FTA Manual defines screening distances for vibration assessments of transit projects of 200 feet for residential land uses and 120 feet for office, schools and churches, measured between the property line and the railroad tracks. These land uses are subject to the vibration analysis and are detailed in **Table 3-8**.

Ground surface vibration levels for transit systems, based on North American transit systems, are also provided for each receptor in the Table. The vibration levels provided herein are based on existing freight rail speeds of 50 mph and track equipment in good condition. As shown, only three of the 16 noise sensitive receptors would potentially experience vibration impacts.

Table 3-8: Existing Vibration Levels

Site No.	Receiver Site	Land Use	# Residential Units	Distance to Centerline (feet)	Existing Vibration Levels (VdB)
8	E. 5th Avenue Ext.	Residential	5	140	70
10	North Church Street	Residential	1	150	69
16	N. Pine St. & E. 1st Street	Residential	8	100	73

Source: AECOM, February 2016

Impacts

As presented above, the realignment of rail track to accommodate the platform(s) would only affect the five residential properties at East 5th Avenue Ext., bringing train operations approximately 35 feet closer, from 140 feet to 105 feet. Passenger train speeds would increase from approximately 65 mph to 80 mph dues to improved track curvatures for the eight trains per day that will bypass the station, however freight rail speeds would remain constant at 50 mph. The track realignment would be tying back into the original tracks by the North Pine Street and North Church Street land use locations so these properties would not be affected by the realignment. **Table 3-9** presents the assessment of No Build and Build alternatives vibration levels, based on the FTA Transit Noise and Vibration Impact Assessment methodology for general vibration assessments. The base curve represents vibration levels from heavy rail vehicles at established distances to receptors, on good condition track, traveling 50 mph. Vibration levels from the eight higher speed passenger trains are also included. Adjustments are made to base curve to account for vehicle speed, special track conditions, soil types, and building construction material.

No Build

As noted in the table, under the No Build Alternative, the residential properties at East 5th Avenue would have vibration levels that exceed the FTA impact criteria for residential properties.

Build Alternative

The Build Alternative's impacts are primarily from the 35-foot shift closer to the residential properties, and to a lesser extent, the increased speed of through passenger trains to 80 mph that result from realignment of curve track. Vibration levels from the shift in track under the Build Alternative would increase 2 to 3 VdB over the No Build Alternative during freight train passbys. The increased speed of the eight passenger trains per day under the Build Alternative would increase vibration levels by 4 to 7 VdB over the No Build Alternative. Both the shift in the tracks and the increased speed exceed the FTA impact criteria and therefore, have the potential to result in a significant impact.

Mitigation

Mitigation measures that are typically incorporated into rail projects to reduce excessive vibration include changes to the track support system. Floating slabs, resiliently supported ties, high resilience fasteners, and ballast mats have all been used in subways to reduce ground-borne vibration. Applications on at-grade track are less common. Therefore, due to the low-level of geotechnical and track design information used in the analysis, the COL will conduct a detailed vibration analysis during final design. If the detailed analysis continues to show significant impacts, the COL will mitigate impacts through the identification and implementation of specific mitigation measures.

Table 3-9: No Build and Build Vibration Levels

Site #	Receptor	Base Curve Distance VdB	MPH	Speed Adjustment	Building Construction Type	Building Construction Adjustment	Peak Frequency	Ground –Borne Vibration	Impact	Ground Borne Noise	Impact
No Build alternative											
8	E. 5th Ave.	140 ft 75VdB	50	0	Wood	-5	-50	70	No	20	No
10	N. Church St	150 ft 74VdB	50	0	Wood	-5	-50	69	No	19	No
16	N. Pine St	100 ft 78VdB	50	0	Wood	-5	-50	73	**Yes**	23	No
Build alternative Freight											
8	E. 5th Ave.	105 ft 78VdB	50	0	Wood	-5	-50	73	**Yes**	23	No
10	N. Church St	115 ft 76VdB	50	0	Wood	-5	-50	71	No	21	No
16	N. Pine St	100 ft 78VdB	50	0	Wood	-5	-50	73	**Yes**	23	No
Build alternative High Speed Passenger											
8	E. 5th Ave.	105 ft 78VdB	80	+4	Wood	-5	-50	77	**Yes**	27	No
10	N. Church St	115 ft 76VdB	80	+4	Wood	-5	-50	75	**Yes**	25	No
16	N. Pine St	100 ft 78VdB	80	+4	Wood	-5	-50	77	**Yes**	27	No

Source: AECOM, February 2016

3.4 Solid Waste Disposal

Description and Methods

The Solid Waste Disposal Act of 1965 was an initial attempt to broaden the scope of environmental regulation and oversight by the federal government and was passed as a part of amendments to the Clean Air Act. The act required environmentally sound methods for disposal of household, municipal, commercial, and industrial waste. The Resource Conservation and Recovery Act (RCRA), and other amendments to the Solid Waste Disposal Act, have provided further guidance related to solid waste recovery and remediation from the federal perspective. RCRA encourages environmentally sound solid waste management practices that maximize the reuse of recoverable material and foster resource recovery.

The term solid waste, as defined by the Statute, is very broad, including not only the traditional nonhazardous solid wastes, such as municipal garbage and industrial wastes, but also hazardous wastes, which are addressed in **section 3.19**.

Existing Conditions

The former LHB furniture manufacturing complex, purchased by the COL in 2007, is approximately 18 acres and characterized by 28 purpose-built and irregular warehouse buildings connected directly to each other with shared walls or enclosed bridge structures. The spaces between buildings are defined by large open service yards and surface parking lots. Currently, a few of the former LHB buildings, or portions of, are leased from the COL for storage uses and the majority of the former LHB buildings are vacant.

Impacts

No Build

The No Build Alternative would maintain the existing uses for the site and create no additional solid waste.

Build Alternative

Implementation of the Build Alternative would result in the need for demolition of all or part of several buildings within the Study Area near the Project site as depicted in **Figure 3-3**. Recoverable materials will be identified prior to building demolition as part of a comprehensive resource reclamation program for the entire LHB property site. In addition to material reclamation and reuse planning, material sorting for recycling purposes will be implemented during the demolition process. Solid waste not suitable for reclamation or recycling shall be properly disposed of in accordance with state and federal statutes.

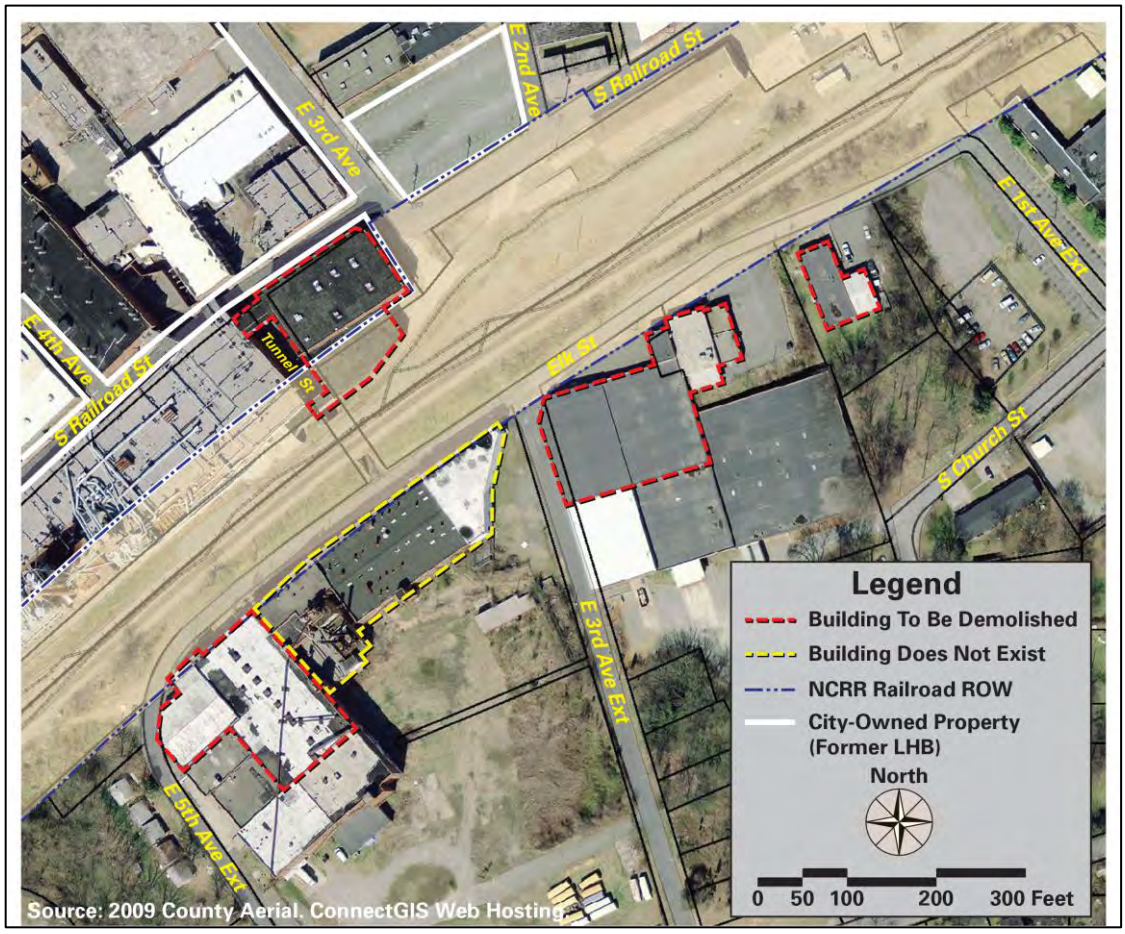


Figure 3-3: Anticipated Building Demolitions

Mitigation

Existing building demolition and clearing of vacant lots will be conducted according to a developed solid waste resource reclamation and recycling program developed by the COL prior to any construction activities. Solid waste will be disposed of in accordance with State and local requirements throughout the duration of construction.

3.5 Ecological Systems

Description and Methods

Ecological systems associated with terrestrial resources were evaluated for the Study Area. A review of the North Carolina Natural Heritage Program database and the U.S. Fish & Wildlife Service list of threatened and endangered species for Davidson County were conducted in May of 2012. A site visit to the study area was also performed to assess the presence of habitat for any state and federally listed endangered species.

Existing Conditions

The Study Area is located in an urban, highly developed area. The terrestrial community is disturbed and generally consists of a few landscape plants along East 2nd Avenue and East 3rd Avenue, and numerous ruderal species that have colonized within vacant lots and along the railroad ROW. Trees observed include red maple (*Acer rubrum*), hackberry (*Celtis laevigata*), honey locust (*Gleditsia triacanthos*), eastern red cedar (*Juniperus virginiana*), Crapemyrtle (*Lagerstroemia* sp.), magnolia (*Magnolia* sp.), mulberry (*Morus alba*), cherry (*Prunus* sp.), and willow oak (*Quercus phellos*). Shrubs observed included smooth sumac (*Rhus glabra*), winged sumac (*Rhus copallinum*), and winged elm (*Ulmus alata*). Vines observed included Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*), and wild grape (*Vitis* sp.). Herbaceous plants observed included chicory (*Cichorium intybus*), oatgrass (*Danthonia* sp.), joe-pye-weed (*Eupatoriadelphus maculatus*), fennel (*Eupatorium* sp.), fescue (*Festuca* sp.), wild geranium (*Geranium* sp.), hawkweed (*Hieracium* sp.), dock (*Rumex* sp.), white clover (*Trifolium repens*), and yucca (*Yucca* sp.).

Wildlife using the existing habitat would be those typical of the piedmont region and are adapted to human disturbance.

Impacts

No Build

The No Build Alternative would not impact terrestrial resources within the local area.

Build Alternative

Construction of the Build Alternative would impact terrestrial resources in the Study Area from clearing and construction activities associated with improvements to East 2nd Avenue and East 3rd Avenue access roads, the vacant lots in the vicinity of the proposed passenger station, the realignment of Elk Street, and along the existing railroad ROW. These impacts would be minor given the previously disturbed character of the vicinity of the Build Alternative. Wildlife using the existing habitat would be those typical of urban environments and are adapted to routine human disturbance.

Mitigation

A landscape plan will be implemented to provide vegetation along the East 2nd Avenue and East 3rd Avenue access roads and the proposed passenger station. Vegetation along the railroad will be allowed to regenerate naturally.

3.6 Impacts to Wetland Areas

Description and Methods

Under Executive Order 11990, Protection of Wetlands, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance their natural and beneficial values.[20] Sections 401 and 404 of the Clean Water Act (CWA) require regulation of discharges of fill material into "Waters of the United States."[21] The EPA is the principal administrative agency of the CWA; however, the US Army Corps of Engineers (USACE) has responsibility for implementation, permitting, and enforcement of the provisions of the CWA related to dredging and filling. The USACE regulatory program is defined in 33 CFR 320-330. The North Carolina Division of Water Quality (NCDWQ) is the principal administrative agency of the Section 401 Surface Water and Wetland Standards, which are defined in North Carolina Administration Code 15A NCAC 02B .0100 and .0200.

Water bodies, including lakes, rivers, and streams, are subject to jurisdictional consideration under the Section 404 Program. Wetlands are also identified as waters of the United States and are defined, in 33 CFR 328.3, as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Any action that proposes to place fill into these areas falls under USACE jurisdiction.

To determine the likely presence or absence of jurisdictional wetlands within the Study Area a review of readily available data was conducted. Data included US Geological Survey (USGS) 7.5 minute series quadrangle maps (USGS 1994a; USGS 1994b); US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Maps (USFWS 2013a); US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Surveys (USDA 1994); and aerial photography. No jurisdictional field-delineation was performed for the Study Area.

Existing Conditions

Wetlands

According to the USFWS NWI, no wetlands are mapped within the Study Area. The nearest mapped wetland is located approximately one mile from the Study Area site and is associated with Abbotts Creek floodplain. A portion of the Study Area is mapped with a hydric soil: Chewacla loam, frequently flooded. This soil is located within a floodplain adjacent to an unnamed stream located between East Center Street and Raleigh Road. This soil is characterized as somewhat poorly drained and has a seasonal high water table of 0.5 feet to 1.5 feet. Hydric soils is one of the three parameters for an area to be classified

[20] 42 FR 26961, 3 CFR, 1977
[21] Clean Water Act of 1972. http://www.epw.senate.gov/water.pdf

as a wetland. As such, the Study Area has the potential to contain a wetland. No field visit to the area mapped with hydric soils was conducted as part of this report. No wetlands or other waterbodies were observed in the immediate proximity of the Project during the May 2012 field visit.

Streams

The nearest USGS named stream is Abbotts Creek, located approximately one mile southeast of the Study Area. The Study Area drains to Abbotts Creek via several unnamed tributaries (Davidson County 2013, USDA 1994, USGS 1994a, USGS 1994b). During the May 2012 field visit, one jurisdictional stream was observed near the Project site, located west of Elk Street and north of Tanyard Street. The stream began from a culvert under the rail line embankment and flowed for approximately 300 feet before entering another culvert. The stream daylighted again south of Tanyard Street. The flow regime of the stream appeared intermittent, and contained incised and eroding banks. Portions of the stream contained riprap stone. Trash was observed throughout the stream and its narrow wooded riparian corridor. No fish or benthic organisms were observed in this stream.

Within the Study Area, two additional mapped streams are crossed by the rail line between East Center Street and Raleigh Road. These streams were not evaluated during the May 2012 field visit. No wetlands or other waterbodies are mapped within the Study Area.

Impacts

No Build

The No Build Alternative would not impact local area wetlands or streams.

Build Alternative

Construction of the Build Alternative could potentially have direct impacts to wetlands and water resources that cross the Project Limits shown in Figure 3-1. Improvements within the railroad corridor may require widening of the existing embankment, which would necessitate extending existing culverts. The rail line contains three mapped stream crossings that could require culvert extensions, one of which is also mapped with a wetland indicator soil. Prior to any construction activities, COL will conduct or cause to be conducted a formal jurisdictional determination of the entire Study Area, and COL will be responsible for obtaining all required federal and state water protection permits.

Construction activities could also contribute sedimentation impacts to aquatic resources in the Study Area. COL will require that a sediment and erosion control plan be developed, and that BMPs will be implemented to minimize potential impacts.

Mitigation

Land development activities that may adversely impact wetlands and streams require consent through permit approval from the regulating agency. At the Federal level, under the CWA Section 404b(1) Guidelines (40 CFR 230) and USACE regulations (33 CFR 320.4(r)), as a condition of permit approval, the USACE is obligated to require mitigation for any unavoidable impacts to wetlands and streams. Mitigation for impacts to wetlands and streams include: avoiding impacts, minimizing impacts, and compensating for impacts.

3.7 Impacts on Endangered Species or Wildlife

Description and Methods

Species with the federal status of endangered, threatened, proposed endangered, and proposed threatened are protected under provisions of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.). Any action likely to adversely affect a species classified as federally protected will be subject to review by the United States Fish and Wildlife Service.

A review of the readily available and accessible data from USFWS and the North Carolina Natural Heritage Program (NHP) was performed (USFWS 2015, NHP 2015). In addition, the Consultant used NHP Data Explorer website to generate a list of known element occurrences within one mile of the proposed Project. Based on this search, only the federally threatened northern long-eared bat (*Myotis septentrionalis*) is listed as occurring within one mile of the Project. This element occurrence has a very low accuracy level and encompasses all of Davidson County. In addition, Schweinitz's sunflower (*Helianthus schweinitzii*), a federally endangered species, is listed for Davidson County. Potential habitat for Schweinitz's sunflower occurs along the easement for the railroad line and several non-maintained lots. The bald eagle (*Haliaeetus leucocephalus*) is also listed for the county as protected under the Bald Eagle and Golden Eagle Protection Act. No habitat for bald eagle occurs within the vicinity of the site.

In addition to the online database search described above, on October 14, 2015, a biologist for the Consultant team conducted a pedestrian survey of the proposed Project Limits for these two listed species. No habitat for northern long-eared bat occurs within this Project Limits, and no populations or individuals of Schweinitz's sunflower were observed. Consultation with the USFWS was initiated on October 22, 2015 to request their concurrence with the biological conclusion of “No effect” for the Project’s potential impact to both the northern long-eared bat and Schweinitz’s sunflower.

Table 3-10 presents the federal and state listed species within Davidson County. The Build Alternative is located in an urban, highly developed area.

Table 3-10: Federal and State Threatened and Endangered Species listed for Davidson County, NC

Taxonomic Group	Scientific Name	Common Name	State Status	Federal Status	Record
Vascular Plant	*Baptisia alba*	Thick-pod White Wild Indigo	T		Current
Vascular Plant	*Gillenia stipulata*	Indian Physic	T		Current
Vascular Plant	*Helianthus schweinitzii*	Schweinitz's Sunflower	E	E	Current
Vascular Plant	*Helenium brevifolium*	Littleleaf Sneezeweed	E		Current
Vascular Plant	*Plantago cordata*	Heart-leaf Plantain	E		Current
Vascular Plant	*Primula meadia*	Shooting-star	T		Historical
Vascular Plant	*Symphyotrichum georgianum*	Georgia Aster	T	C	Current
Freshwater Bivalve	*Lampsilis radiata*	Eastern Lampmussel	T		Current
Freshwater Bivalve	*Strophitus undulatus*	Creeper	T		Current
Bird	*Haliaeetus leucocephalus*	Bald Eagle	T	BGPA	Current
Freshwater Fish	*Moxostoma robustum*	Robust Redhorse	E	FSC	Historical
Mammal	*Myotis septentrionalis*	Northern Long-eared Bat	SR	T-4(d)	Current

E = Endangered
T = Threatened
T-4(d) = Threatened, with an Interim 4(d) Rule
C = Candidate
SR = Significantly Rare
BGPA = Bald and Golden Eagle Protection Act
FSC = Federal Species of Concern

Existing Conditions

The vacant lots and the railroad ROW within the Study Area may provide some marginal habitat for four of the listed plant species: Schweinitz's sunflower, golden aster, thick-pod white wild indigo, and Heller's bird's-foot trefoil. No habitat for any of the other listed species occurs within the Study Area. All of the species with marginal habitat present within the Study Area can be found in habitats associated with roadsides, open woodland, and clearings. Consequently, construction of the Build Alternative may affect these threatened and endangered plant species in the Study Area. A field survey for federally listed species was conducted within the Study Area in October 2015 and found no evidence of the Schweinitz's sunflower. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live trees and snags (dead trees). They may also roost in outbuildings and vacant structures. Based on a review of the USGS mineral resources data, no mines were mapped within one mile of the Project Study Area. No habitat for the northern long-eared bat was observed within the Study Area during a field survey conducted in October 2015. The Project's approximate clearing limits is

generally characterized as upland hardwood forest that comprise a treeline along the railroad easement, which has been encroached upon by the surrounding urban development and is fragmented by residential and commercial buildings, utility easements, and road rights-of-way. A few vacant buildings were located within the Project Study Area. A visual survey for bats was conducted for the interior and exterior of the buildings and no bats, or evidence of their presence (guano and urine staining) was observed (see January 15, 2016 letter from the City of Lexington in Appendix B).

Impacts

No Build

The No Build Alternative would not impact local protected species.

Build Alternative

The Build Alternative would have no effect on either the federally listed northern long-eared bat or the Schweinitz's sunflower that have the potential to occur within the Study Area, and would not impact any other federally or state protected species that are listed within Davidson County.

Mitigation

The Build Alternative will not impact listed threatened or endangered species. Therefore, no mitigation is required.

3.8 Flood Hazards and Floodplain Management

Description and Methods

Flood Insurance Rate Maps (FIRM) and/or Flood Hazard Boundary Maps (FHBM) outline flooding risks and define the 100-year floodplain areas for communities that are members of the National Flood Insurance Program (NFIP). The 100-year floodplain designates the area that would be inundated during a storm having a 1.0 percent chance of occurring in any given year.[22] These maps, produced by the Federal Emergency Management Agency (FEMA), also identify the 500-year floodplain, which designates the area that would be inundated during a storm having a 0.2 percent chance of occurring in any given year.

EO 11988, regarding floodplain management issues, requires Federal agencies to minimize occupancy and modification to the floodplain. Specifically, the EO prohibits Federal agencies from funding construction in the 100-year floodplain unless there are no practicable alternatives.

Existing Conditions

The COL participates in the NFIP. The most recent Flood Insurance Study (FIS) for the area was published in March 2009. The Study Area is contained within the limits of the North Carolina FIRM 3710672500J Panel 6725 and FIRM 3710673500J Panel 6735 (FEMA 2013). As indicated on these maps, one area mapped with both a 100-year and 500-year floodplain occurs within the Study Area. This area is

[22] Federal Emergency Management Agency floodplain mapping 2016.

associated with an unnamed stream located approximately 1000 feet west of the Raleigh Road railroad bridge crossing.

Impacts

No Build

The No Build Alternative would not impact local area floodplains or floodways.

Build Alternative

Construction of the Build Alternative could potentially have direct impacts to floodplain resources in the Study Area. Railroad improvements may require widening of the existing embankment, which would necessitate placement of fill and extending an existing culvert into mapped floodplain areas. These encroachments on floodplains are anticipated to be minor and are not likely to be significant, as the Project is not likely to raise the water elevation to a level that would affect insurable structures. The encroachments on the floodplain would also not present an increased danger to human health and safety as a result of the construction, nor would it promote development within the floodplain.

Mitigation

Prior to any construction activities, coordination with FEMA should occur to ensure compliance with their regulations.

3.9 Coastal Zone Management

The Coastal Zone Management Act provides for the management of the nation's coastal resources, including the Great Lakes.[23] The Study Area is not located within North Carolina's twenty coastal counties. As such, there are no Areas of Environmental Concern (AEC) in the study area that fall under the jurisdiction of the Coastal Area Management Act (CAMA), as implemented by the NC Division of Coastal Management. Therefore, no impacts would occur due to the proposed alternatives and no mitigation would be required for Coastal Zone Management Resources.

3.10 Energy Use

Description and Methods

Current CEQ regulations in Section 1502.16 (e) address the need for agencies to discuss "energy requirements and conservation potential of various alternatives and mitigation measures." Section 1502.16(f) of the CEQ regulations requires agencies to consider the "natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures." Energy efficiency and conservation concepts may also be interpreted as a necessary consideration in addressing the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources as required by the CEQ regulations (Section 1502.16).

[23] See https://coast.noaa.gov/czm/act/

This section addresses the Project site within the limits of construction as depicted in **Figure 2-2**.

Existing Conditions

The existing structures located on the Project site are vacant buildings and vacant lots used informally for parking purposes. No activities occur on an ongoing basis that require energy use. The existing parking areas do not include lighting.

Impacts

No Build

The No Build Alternative would not create additional needs for energy use. However, under the No Build there would be no reduction in vehicles miles travelled as calculated under the Benefit-Cost Analysis (see Build Alternative below).

Build Alternative

The Build Alternative would increase short-term energy use during construction and long-term energy use during facility operation in the local area while reducing energy use on a regional basis resulting from an increase in passenger rail use.

Construction of the Project and surrounding site improvements would require the use of energy for construction activities, materials production and product manufacturing. These activities will also require increased fuel use over the existing condition for shipping of construction materials and construction worker transportation to the job site. Once operating, the facility will require energy to provide lighting, HVAC systems, and equipment required to fulfill the functions of the Lexington MMTS. The facility is expected to be in continuous use after construction for at least fifty years.

The Build Alternative would reduce regional energy use by providing a transportation mode alternative (passenger rail) that does not currently exist within Lexington. The addition of passenger rail and a new rail and transit center within Lexington will have no discernable impact on vehicular traffic (see **section 3.1**). The Complete Streets component of the alternative will also address substantial sidewalk gaps within the Study Area creating pedestrian links between residential communities and historic Uptown, which is anticipated to reduce the use of single occupant vehicles for short trips. According to the a Benefit-Cost Analysis completed under the TIGER application in 2016, the COL anticipates Vehicle Miles Traveled (VMT) to decrease resulting in $6,300 savings in reduced emissions in 2025, with the annual reduced emissions savings increasing to $6,700 by 2040. The Benefit-Cost Analysis found that in part with the projected increase in passenger rail, transit and pedestrian traffic and projected reduction in VMT, the Project has an overall benefit-cost ratio of 2.53.

Mitigation

Design of the facility will employ BMPs for the efficient use of energy for operation and equipment purposes. Preliminary station layouts arrangements consider efficiency in the location of potential baggage handling facilities siting them closest to the platform to minimize travel distances for baggage cart operations. Recycling programs and other building system efficiency efforts will be considered during final design and construction.

3.11 Natural Resources: Use of Water, Minerals, or Timber

There will be no extraction of water, minerals, or timber as a result of the proposed alternatives and no mitigation would be required for natural resources.

3.12 Aesthetic and Design Quality

As the Study Area, including the Project site and Depot District in general, is located in the central portion of Lexington and nearby many community resources such as community churches, Historic Uptown Lexington and many government centers, the aesthetic and design quality is an important component of the Build Alternative. The Build Alternative's potential impact on nearby visual resources and its own conceptual design quality, as well as the Build Alternative's impacts on viewsheds in the Study Area, are addressed in this section.

Description and Methods

In order to address the Build Alternative's potential impact on existing visual resources, information about existing Public Art projects and initiatives was obtained from the COL Office of Business and Community Development and the Urban Land Institute (ULI) website. Direct observations of the existing development character and conceptual renderings of the Project site were created by the Project architect to analyze design quality for the Build Alternative. Information on the Build Alternative's changes to the existing street network, buildings, and railroad corridor was also reviewed to determine changes to the existing views in the Project Study Area.

Existing Conditions

Surrounding Areas

The COL has spearheaded a number of Public Art projects and initiatives both within the City and in association with the future redevelopment of the Depot District.

- *Pigs in the City* is a public art initiative coordinated by ULI. Five new groups of 20 to 25 whimsically decorated fiberglass pigs lined the streets of Historic Uptown Lexington during the projects in 2003, 2004, 2006, 2008, and 2009. The pigs, each with a different theme, were painted and decorated to portray the title and business that they represented. With 121 pigs created during the five years of the project, today visitors can see over 35 pigs on the streets and in businesses throughout the Uptown Lexington Business District adjacent to the Study Area (ULI 2013).

- The Depot District 2013 Pilot Community Art Project within the Study Area and the Project site was initiated in December 2012 by the COL with support from the AADC and is funded by the Lexington Appearance Commission. The project, completed in April 2013, included two building facade murals: (a) one mural depicting a large train will be applied with rice paper to a building located within the Project site; and, (b) one mural depicting a timeline representing the COL's heritage as defined by furniture manufacturing and barbecue, and a future defined by the new transportation hub in the Depot District painted on a building within Study Area. The mural projects are temporary by design and will be removed upon commencement of the Project site construction and redevelopment of the adjacent building within Study Area.

Project Site

Located within a light industrial area, the aesthetic tone within the Study Area is dominated by brick warehouse buildings. While a few individual buildings (Figures 3-4 and 3-5) within the Study Area have unique characteristics, the aesthetic quality of the district as a whole is low due to the apparent lack of a coordinated master plan or theme to the structures and the massing of industrial equipment and utilities along the exterior walls of the buildings (see Figures 3-6 and 3-7).

Figure 3-4: Former North Carolina Candy Company

Figure 3-5: Existing Building, Former Furniture Showroom

Figure 3-6: View Southwest Along Railroad Street

Figure 3-7: Industrial Equipment and Utilities

Impacts – Aesthetic Design

No Build

The No Build Alternative would not impact existing Public Art or alter the design quality of the Study Area or Project site. However, the visual character of the Study Area would change as the COL progresses with the demolition of certain buildings within the LHB property that are deemed a threat to public health, safety or welfare. The Study Area would gradually transition from being dominated by vacant buildings and industrial uses to an area of vacant lots.

Build Alternative

The Build Alternative would create a positive impact for existing Public Art. The Build Alternative would benefit the Study Area by providing increased community and visitor access to existing city wide Public Art projects and opportunities for new Public Art features, through the City's existing community art program, as overseen by Lexington's Appearance Commission. Design quality and building massing of the Lexington MMTS would mirror the historic qualities of the Depot District and receive influence from surrounding elements. Specifically, the building (Figure 3-8) that currently sits on the site of the future Lexington MMTS would be demolished to be replaced with an inviting public building (Figure 3-9).

Figure 3-8: Existing Building at Lexington MMTS Site

Figure 3-9: Conceptual Rendering of Future Lexington MMTS

Impacts – Visual and Viewsheds

No Build

The No Build Alternative would not create any changes to the view in the railroad corridor, nor to the industrial nature of the Study Area.

Build Alternative

The Build Alternative will create temporary visual impacts attributed to construction activities within the Limits of Construction shown in Figure 2-2. Views of heavy equipment and material stockpiles will be commonplace throughout the curation of construction. However, most of the area within the Limits of Construction consists of vacant and/or underutilized buildings, and thus these construction activities should have minimal visual impacts. The Build Alternative will realign a portion of Elk Street, as well as construct new railroad tracks, retaining walls, berms, and new Multimodal Station. However, the Build Alternative will not significantly alter the elevations of the streets or railroad tracks, and thus will not impact the viewsheds in the Study Area.

Mitigation

In order to ensure consistency with local aesthetic values, the COL will consult with local public representatives regarding the design concept and exterior appearance during building design.

3.13 Transportation

This section describes and analyzes surface transportation modes; including roadways, transit, bicycle and pedestrian in local, regional, and national, perspectives; including analysis on impacts to traffic congestion.

3.13.1 Roadways and Traffic

Description and Methods

To assess the current and future traffic conditions within and surrounding Lexington, various resources were utilized to evaluate major existing and proposed roadways providing access to Uptown Lexington. The Davidson County Comprehensive Transportation Plan (CTP), dated July 2010, includes analysis of existing and future transportation systems such as roadways, public transportation, rail, bicycle and pedestrian, as well as land use analysis. CTP facility type definitions have been used below to classify primary corridors used to access Uptown Lexington. The CTP includes an analysis of the transportation system typical section (or number of lanes), including local and statewide initiatives, which utilizes a travel demand model to provide 2009 Annual Average Daily Traffic (AADT), 2035 AADT, and 2035 AADT with transportation project recommendations in place. The roadway analysis involves calculating a volume-to-capacity (VC) ratio, which is a comparison of the existing and future travel demand to the capacity or amount of traffic the roadway can carry. When the VC ratio approaches 1.0, the traffic volume is approaching the roadway's capacity, meaning that heavy congestion is present.

The following sections include a brief discussion of the major highways in the vicinity of Lexington, the roadways used to access Uptown Lexington, and the current and future traffic conditions with and without the Project.

Existing Conditions

The COL is served by several major highways including I-85, I-85 Business, US 29, US 52, US 64, and US 70. **Figure 3-10** shows the existing primary roadways providing access to Lexington and the proposed Project site that are described further in this section. Given the CTP base year data is for 2009, 2011 AADT provided by the NCDOT is reported below to reflect more recent conditions.

I-85 creates the eastern boundary of Lexington, and is a north-south interstate facility with full control of access, with a southern terminus at I-65 in Montgomery, Alabama and a northern terminus at I-95 in Petersburg, Virginia.

I-85 Business creates the western boundary of Lexington, and is a north-south business loop of I-85 with limited control of access. I-85 Business runs parallel and to the west of I-85, with a southern terminus just south of Lexington, and a northern terminus just south of Greensboro, North Carolina.

US 29 is a north-south US highway which extends from Baltimore, Maryland to Pensacola, Florida. US 29 is concurrent with I-85 Business around the City of Lexington.

US 52 is an east-west US highway extending from Portal, North Dakota to Charleston, South Carolina. In the Lexington area, US 52 is a freeway facility with full control of access.

US 64 is an east-west US highway which extends from Teec Nos Proas, Arizona to Nags Head, North Carolina. From west of Lexington, US 64 is a two-lane roadway with no control of access, whereas, to the east of Lexington, US 64 is a five-lane facility with no control of access.

US 70 is an east-west US highway which extends from Atlantic, North Carolina to Globe, Arizona. US 70 is concurrent with I-85 Business around the City of Lexington.

Access from I-85, I-85 Business, US 29, US 52, US 64, and US 70 to Downtown Lexington and the proposed train station facility is provided primarily by eight corridors. Characteristics of the existing corridors are described further in this section.

Local Roadways connecting I-85 Business and US 64 to north of Lexington, two primary corridors provide access to Uptown Lexington: North Main Street and Old Winston Road. North Main Street is a four-lane undivided major thoroughfare with no control of access, carrying approximately 10,000 AADT, with the major intersections signal controlled. As Old Winston Road approaches Uptown Lexington, the roadway transitions from a rural two-lane minor thoroughfare to a three-lane boulevard with no control of access, carrying approximately 22,000 AADT with the major intersections signal controlled.

From I-85 Business and US 52 west of Lexington, three primary corridors provide access to Uptown Lexington: West Center Street, West 5th Avenue, and South Main Street. West Center Street is a four-lane undivided major thoroughfare with no control of access, carrying approximately 9,300 AADT with the major intersections signal controlled. West 5th Avenue is a two-lane minor thoroughfare with no control of access, carrying approximately 7,000 AADT with nearly all intersections stop controlled. As South Main Street approaches Uptown Lexington, the roadway transitions from a three-lane boulevard to a four-lane undivided major thoroughfare with no control of access carrying approximately 13,000 AADT with the major intersections signal controlled.

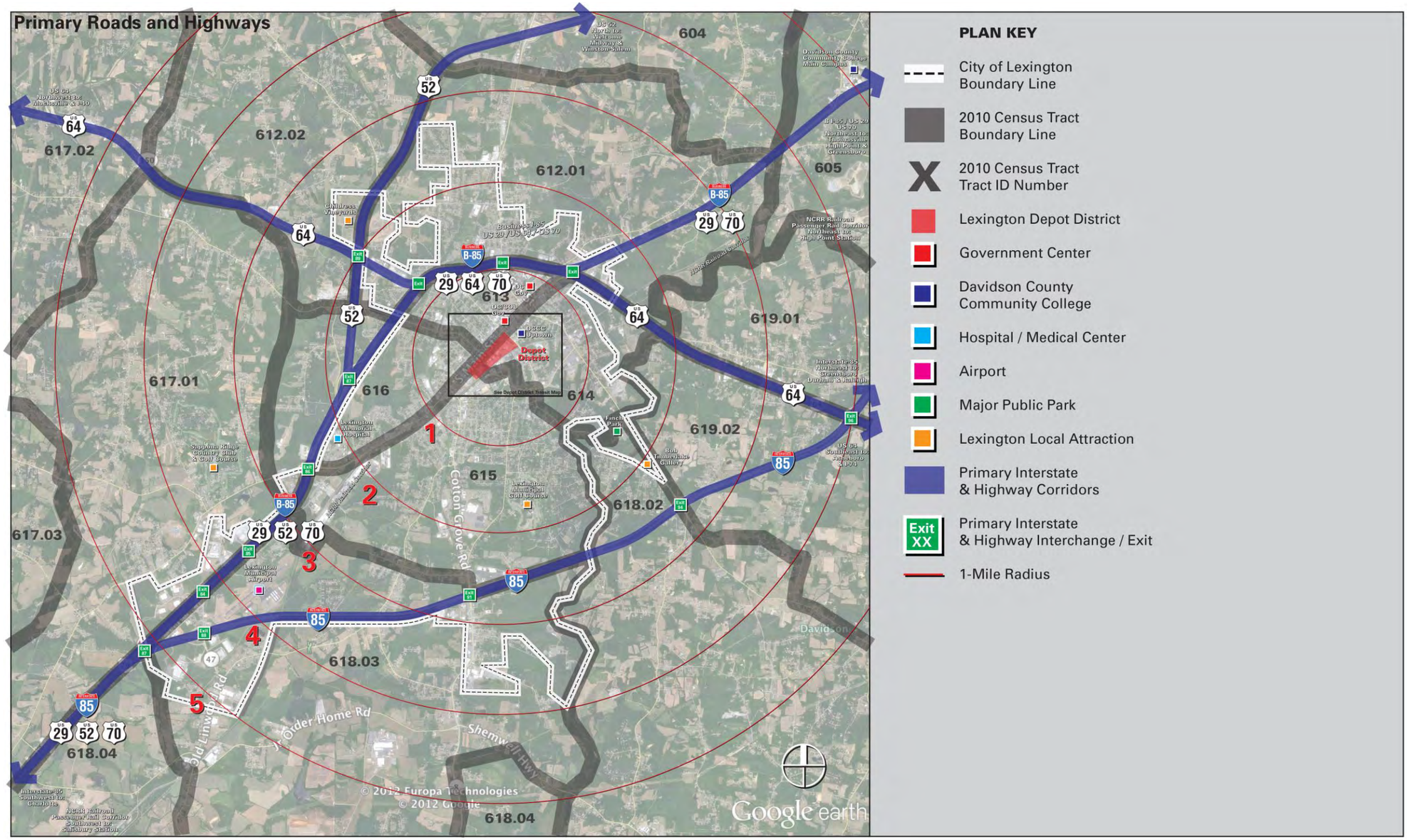


Figure 3-10: Primary Roadways and Highways

From I-85 south of Lexington, the primary corridor utilized would be NC-8, also known as Cotton Grove Road. From I-85 to near Hickory Street, Cotton Grove Road is a two-lane boulevard with no control of access, carrying approximately 9,700 AADT with major intersections signal controlled. As Cotton Grove Road approaches Uptown Lexington, the roadway transitions to a three-lane boulevard, carrying approximately 11,000 AADT with major intersections signal controlled.

From I-85 southeast of Lexington, two primary corridors provide access to Uptown Lexington: East Center Street and Raleigh Road. Between Raleigh Road and Curry Street, East Center Street transitions from a two-lane minor thoroughfare to a three-lane minor thoroughfare with no control of access, carrying approximately 7,300 AADT, with intersections stop controlled. As East Center Street approaches Uptown Lexington, the roadway transitions to a four-lane undivided major thoroughfare with no control of access, carrying approximately 9,300 AADT with major intersections signal controlled. From I-85 to North Talbert Road, Raleigh Road is a two-lane major thoroughfare with no control of access, carrying approximately 6,400 AADT with intersections stop controlled. As Raleigh Road approaches Uptown Lexington, Raleigh Road transitions to a four-lane undivided major thoroughfare with no control of access, carrying approximately 14,000 AADT with major intersections signal controlled. Between Pine Street and North Main Street, Raleigh Road transitions to a one-way couplet formed with East 5th Street. In this location, Raleigh Road includes two lanes for eastbound traffic with no control of access, carrying approximately 6,600 AADT with major intersections signal controlled. East 5th Street includes two lanes for westbound traffic with no control of access, carrying approximately 6,600 AADT with major intersections signal controlled.

Existing primary access streets within the Depot District are defined by an irregular street grid that connects the Depot District with Uptown Lexington and the surrounding neighborhoods. Consistent with the former predominant manufacturing land uses and the NCRR corridor, the current block structure within and surrounding the Depot District is delineated by large block sizes defined by irregular geometries, occasional dead-end streets, and buildings with massive footprints. Consequently, overall connectivity and walkability is reduced in the Depot District. Furthermore, there are currently several irregular street intersections defined by off-set street approaches and confusing traffic signage and roadway striping. Many areas have limited sidewalk accessibility, poor as-built conditions, and minimal or no streetscape and pedestrian amenities such as streetlights, crosswalks, street streets, benches, waste receptacles, etc.

Impacts

No Build

AADT and roadway capacities are reported within the CTP for the 2009 Existing Conditions, the 2035 Existing Conditions with no transportation improvements, and the 2035 Proposed Recommendations. When considering roadway corridors that may provide access to the proposed train station facility, a review of the VC ratios for 2009 shows there are four corridors with roadway sections having a VC ratio greater than 1.0. Review of the VC ratios for the 2035 Existing Conditions shows there are seven corridors with roadway sections having a VC ratio greater than 1.0; a review of the VC ratios for the 2035 Proposed Recommendations shows there are only three corridors with roadway sections having a VC ratio greater than 1.0.

The No Build Alternative is expected to support only a prolonged and limited scope of improvements to the street network, consisting of gradual repairs and enhancements. This will result in a delay in

improving multimodal access (including pedestrian and bicycle traffic), and may result in a slower pace, lower quality and less diverse type of redevelopment in the Depot District with a lower level of private sector interest.

Build Alternative

According to a March 2015 Amtrak analysis memorandum to the COL, the proposed train station facility in Lexington is estimated to include an annual ridership of 10,700, which will include trips during the weekday peak and non-peak hours as well as trips during the weekends. Distribution of the 10,700 trips through the course of 365 days per year yields approximately 29 trips per day to and from the proposed train station facility in Lexington. The COL anticipates that proposed train station trips will include bicyclists and pedestrians, users of transit and taxis in addition to motor vehicles; however, for the purposes of evaluating the worst-case impact the proposed train station facility will have on traffic, it is assumed all trips will utilize motor vehicles. As a worst case scenario, the COL also assumes that all 58 trips per day will include an AM departure and a PM return. DCTS and PART buses will also be re-routed to serve the Lexington MMTS (described below). COL anticipates that the 58 daily trips will be distributed across the eight primary corridors utilized to access the proposed train station, resulting with a negligible impact on any one corridor.

The Build Alternative will also initiate improvements to the primary access streets within the Depot District that will provide the community and visitors within enhanced linkages to existing community facilities and events, along with opportunities to connect with other nearby walking trails and bicycle routes between the future Lexington MMTS, Depot District and other areas on each side of the NCRR corridor. In addition, primary access street improvements are expected to stimulate redevelopment of the dormant LHB properties (a city-owned brownfield site), as well as other adjacent vacant land and buildings located within the Deport District and encompassing neighborhoods. As part of the Project, sections of the primary access streets will be reconstructed in accordance with adopted Complete Street policies. These improvements in the street network will result in better community cohesion, increased pedestrian safety, walkability and accessibility.

Mitigation

The Build Alternative will only produce 58 additional trips per day, and will not add significant additional traffic to the Study Area. Given the low number of daily trips being added to the existing roadway as a result of the proposed train station, there are no impacts to mitigate.

3.13.2 Transit

Description and Methods

To assess the current and future transportation conditions within and surrounding Lexington, various resources were used to evaluate transit operations in and around the Study Area. Davidson County has local and cross-county public transit service that has been in operation since 1979. This EA reviewed the current local and the regional service provided by the Piedmont Authority for Regional Transportation (PART) to assess the impacts on the transit connectivity to the proposed rail station.

The following sections include an overview of the existing public transit conditions, and the current and future transit conditions with and without the Project.

Existing Conditions

The Davidson County Transportation System (DCTS) began their operation in 1979. This service is operated as a department of the Davidson County government. The current service is designed as mostly a human service agency transportation provider, but recently there has been a focus to improve service to the general public. The majority of the funding for this service is through state funding programs that target rural transportation services. A review of the DCTS budget shows that there is significant revenue generated from contracts with local human service agencies, which leverage federal subsidies from non-FTA sources. Davidson County does receive a small amount of urbanized area formula funds because there is a small portion of the High Point urbanized area within the County, and there is now a circulator route that is operated in Thomasville.

PART provides two park-n-ride locations within the Lexington city limits. The first is located on US 52, where the PART Route 8 bus provides service Monday through Friday. The second location is off of Business 85 near the Davidson County Airport. The PART Route 9 bus provides service to this location, Monday through Friday.

DCTS operates a deviated fixed route, circulator loop in Uptown Lexington.[24] DCTS ridership in 2013 was 162,474 unlinked trips (National Transit Database). This service is currently fare free and operates from 6:00 AM to 6:00 PM Monday through Friday. The deviated fixed route does not serve the proposed MMTS site. **Table 3-11** shows the current stops for this route. The DCTS operating budget is approximately $1.1 million. Davidson County provides a little over $200,000 of its general funds as a local match and direct operating assistance. Davidson County is in support of the new PART sponsored services to where PART has strategically placed park and ride lots in the Lexington community.

PART was created through state enabling legislation in 1997 (GS 160A-630). Its members include the four Triad MPOs (Burlington-Graham, Greensboro, High Point, and Winston-Salem). The counties that participate in the service area include: Alamance, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, and Yadkin; and the cities of Burlington, Greensboro, High Point and Winston-Salem. In 2013, PART had 771,293 unlinked trips, with nearly 3,000 unlinked average weekday trips (NTD).

The Board of Trustees for the PART Board consists of the Mayors of Burlington, Greensboro, High Point and Winston-Salem, the chairs of the four Metropolitan Planning Organizations (Burlington-Graham, Greensboro, High Point, and Winston-Salem), a member of each board of county commissioners (Alamance, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, and Yadkin are represented on the Board), chairs of the two largest airport authorities and the Division 7 and Division 9 members of the North Carolina Board of Transportation. The Board of Transportation members serve as ex officio members. Eighteen of the twenty-two Board members are elected officials.

PART is authorized to operate transportation services and systems, and has limited taxing authority. Davidson County currently participates in a vehicle registration and/or a passenger vehicle rental fee that goes to support the PART services. PART presently receives funds from a five percent vehicle rental

[24] A deviated fixed route means that the bus can deviate from the route to go to a specific location, such as a house, child care center or employment site. Once the pick-up or drop-off is made, the vehicle goes back to the place along the route that it left.

tax in Davidson, Forsyth, Guilford, Stokes, Surry, and Yadkin Counties. In addition to these funds, PART receives a vehicle registration fee for registered vehicles in Randolph County. NCDOT and FTA grants have also been awarded for studies and services that are ongoing throughout the PART service area.

Figure 3-11A shows the current PART and DCTS transit services for the greater Lexington area, while **Figure 3-11B** shows the routes that currently serve the Lexington Depot District. The Figures also show private bus routes that serve seasonal events (described below).

Table 3-11: Lexington Circulator Loop

	Stop	Address
1	Davidson County Transportation Hub	945 N. Main St.
2	Hempstead St.	
3	Davidson Medical Ministries	420 N. Salisbury St.
4	Davidson Co-Operative Extension	301 E. Center St. / CVS
5	111 N. Carolina Ave. / Hilltop	
6	Woodsway & (200) Carolina Ave	
7	(908) Fairview Dr. & Melrose Dr.	
8	Walgreens (upon request)	
9	Wal-Mart	160 Lowes Blvd.
10	Cotton Grove Rd. & Smith Ave.	814 Cotton Grove Rd.
11	Cotton Grove Rd. & Laurel Ave.	200 Cotton Grove Rd.
12	South Main / Fowler St.	
13	Lexington Medical Center	
14	Monarch / Brian Center	Upon request
15	South Main / Fowler St.	
16	Compare & Save Food Store	100 W. 9th Ave / Soup Kitchen
17	Library / Cancer Center	491 S. State St & 6th Ave
18	Davidson County Courthouse	110 W. Center St.
19	G. W. Smith	Upon request
20	Walmart Neighborhood Market	Upon request

Source: Davidson County Transportation System website, accessed August 15, 2015 (http://www.co.davidson.nc.us/transportation/LexingtonCirculatorLoop.aspx)

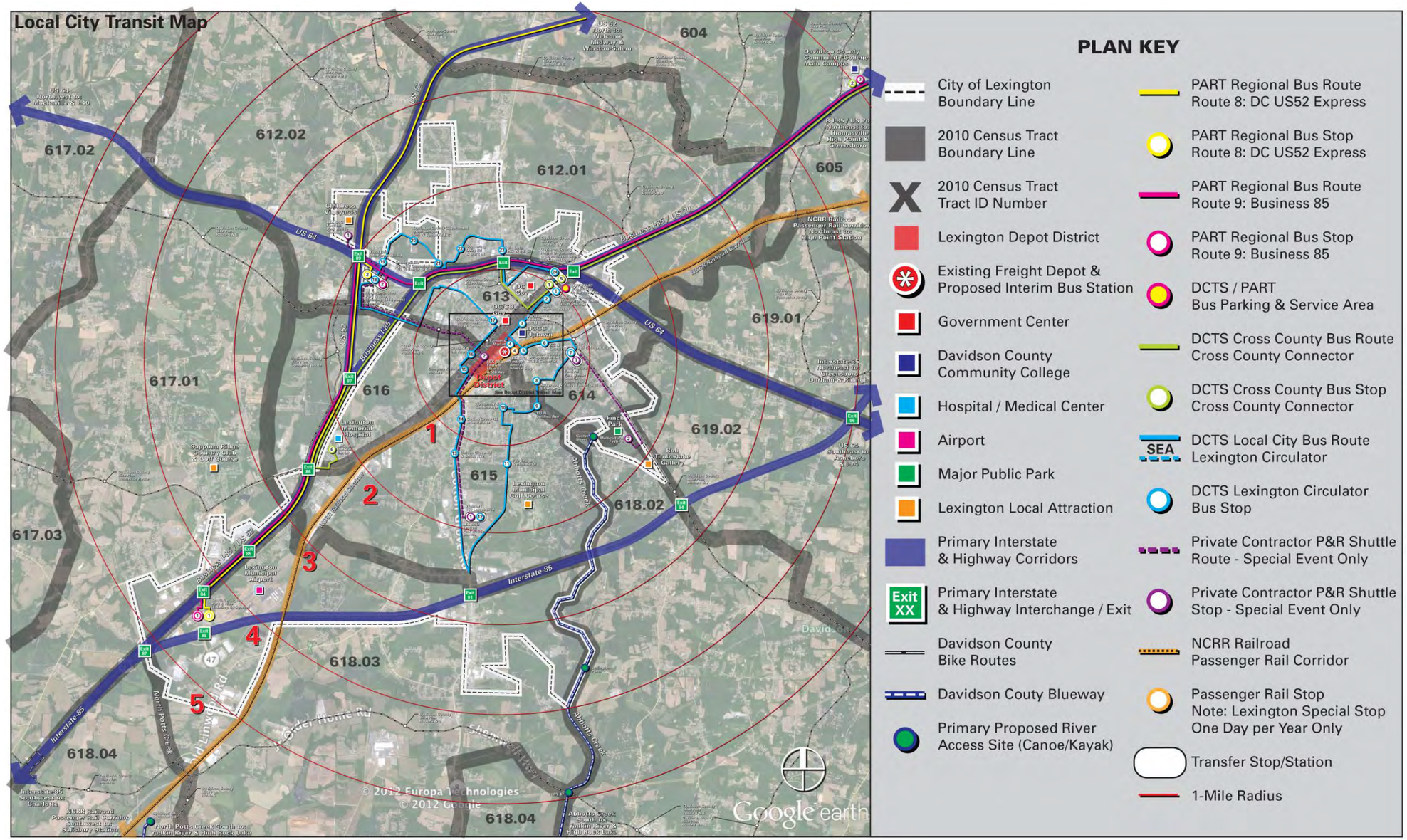


Figure 3-11A: Existing Transit Services, Lexington Area

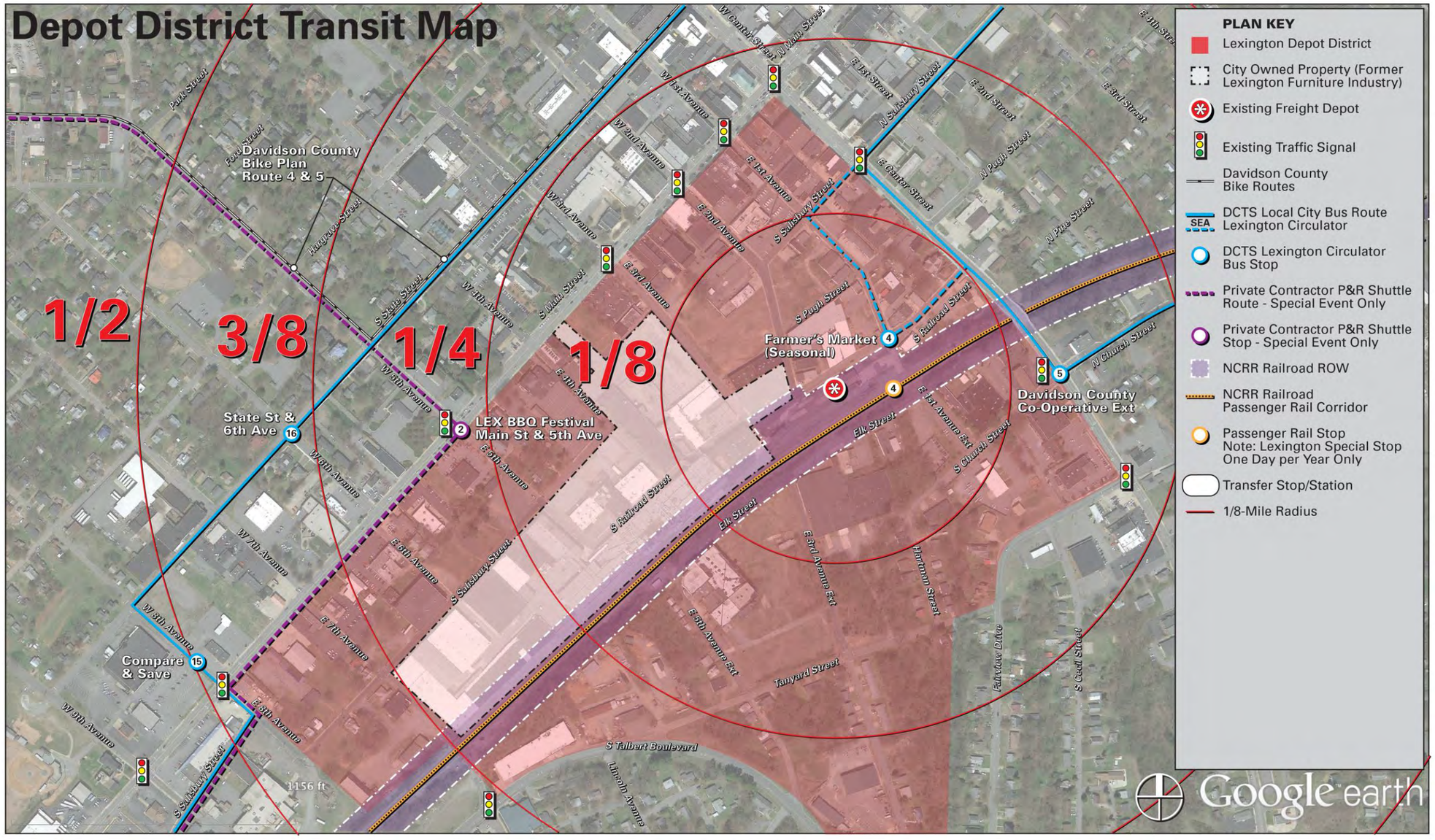


Figure 3-11B: Existing Transit Services, Lexington Depot District

The service plan for Davidson County residents includes providing free Medicaid transportation to medical appointments, provided they have no other means of transportation. The DCTS service agreement with Davidson County Department of Social Services provides this transportation service for Medicaid recipients, Monday through Friday, between the hours of 6:30 am and 5:00 pm within Davidson County. Medicaid recipients who provide their own transportation to these services may receive reimbursement if providing their own transportation is a hardship.

DCTS Cross County Connector provides cross county fixed route bus service, originating in Lexington, with round trip service, 7:00 AM to 5:00 PM (10 trips a day) Monday – Friday. The service connects the Lexington Medical Center, Davidson County Transportation office, and Davidson Health Department and Government Center bus stops with three other stops including Davidson County Community College and Thomasville Medical Center between Lexington and downtown Thomasville.

Seasonal Transit Services

A range of public transportation services are provided for community and visitor access to special annual seasonal events in Lexington:

- Amtrak currently provides a "Special Stop" in Lexington for one day in October each year or the Lexington Annual BBQ Festival. All North Carolina Amtrak Passenger trains including the Carolinian and Piedmont provide service with six trains originating in Raleigh and Charlotte, and making regular stops at all stations in between. City volunteers host the Special Stop in Lexington within the Lexington Farmer's Market (former Freight Depot) and provide hospitality all day for passengers.

- The Lexington Annual BBQ Festival sponsors a free park-and-ride bus shuttle service, provided by private contractors, from two remote locations with direct access to the festival location in Uptown Lexington. The Walmart Plaza Shuttle Bus, a 4-mile round trip loop, originates from the southern edge of the city, and the Childress Vineyard Trolley, a 5.5-mile round trip loop, originates from the northwestern edge of the city; and, both shuttles provide continuous round trip service throughout the day.

- The Multicultural Festival sponsors a free park-and-ride bus shuttle service, provided by a private contractor, from one remote location with direct access to the festival location in Finch Park. The Davidson Shopping Plaza shuttle, a 3.5-mile round trip loop, originates from outside the southeastern edge of Uptown Lexington and provides continuous round trip service throughout the day.

Impacts

No Build

Both DCTS and PART have transportation operations that serve the Uptown Lexington community. If the Lexington MMTS is not built, the COL expects existing operations will be able to accommodate existing and future transit riders.

Currently, the PART regional bus routes function primarily independent from the Davidson County routes. The existing PART transfer stops are situated on the outer edges of the city, and thus provide limited opportunity for access by transit dependent citizens residing within Lexington's central city

neighborhoods. Therefore, the No Build Alternative would not help with providing a single central and accessible location for connecting among all Lexington's transit to services. The potential for linking public transportation with existing and potential new employment, housing, and community events within the Depot District redevelopment would not be realized. Beyond currently planned and funded projects, additional improvements to existing transportation service and bus stops would occur only on a significantly prolonged and staggered schedule.

Build Alternative

The Build Alternative is expected to improve transit performance by centralizing a new multimodal hub that will provide better connections, reduce wait times, and more efficiently utilize available transit services, which currently have excess capacity. The Build Alternative would consist of the Lexington MMTS facility situated within the Depot District connecting regional, cross county, and local bus service in one central location, together with improvements to the existing Lexington and Depot District primary access streets (see **Figures 3-12A and 3-12B**).

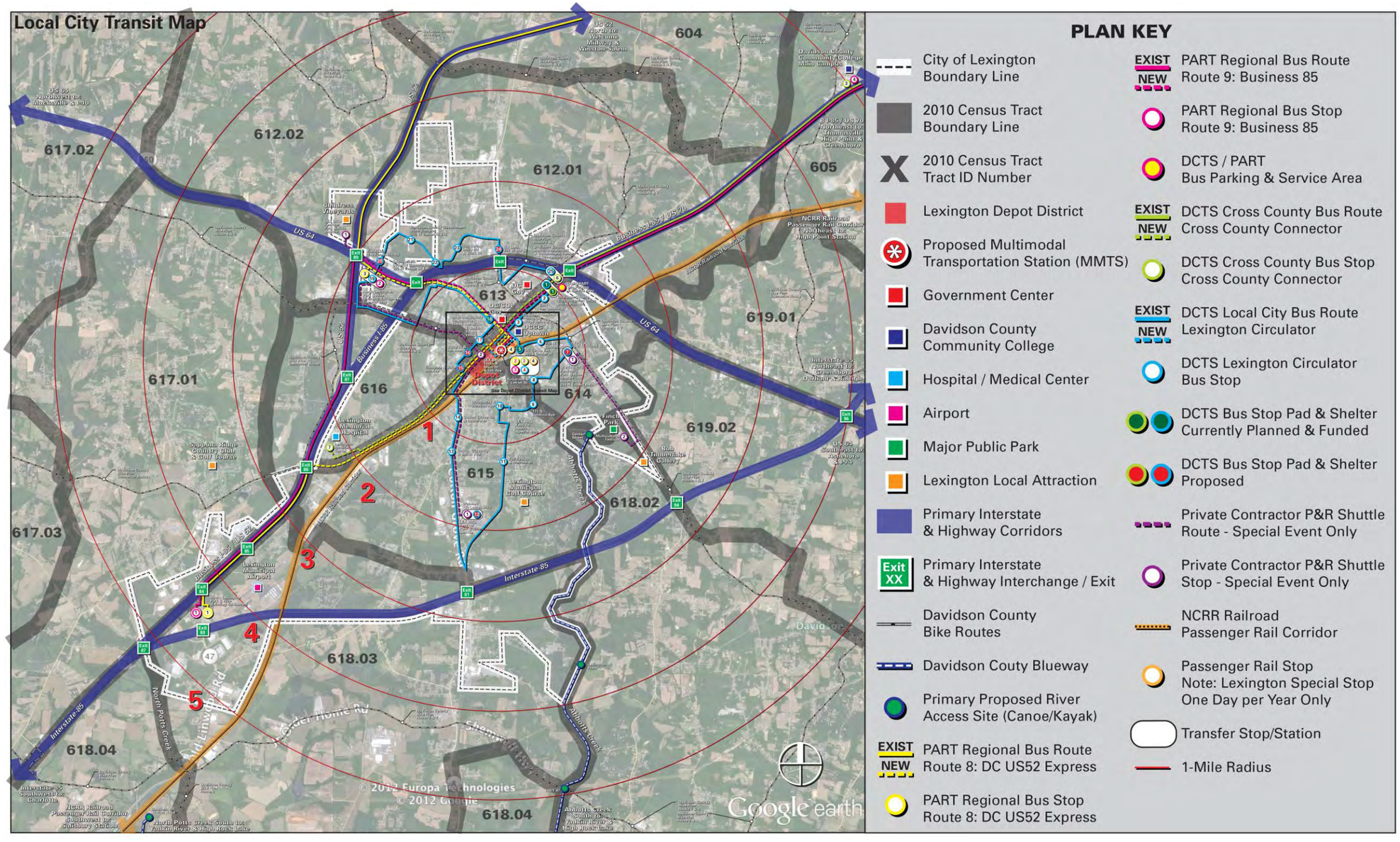


Figure 3-12A: Possible Changes to Transit Services, Lexington Area

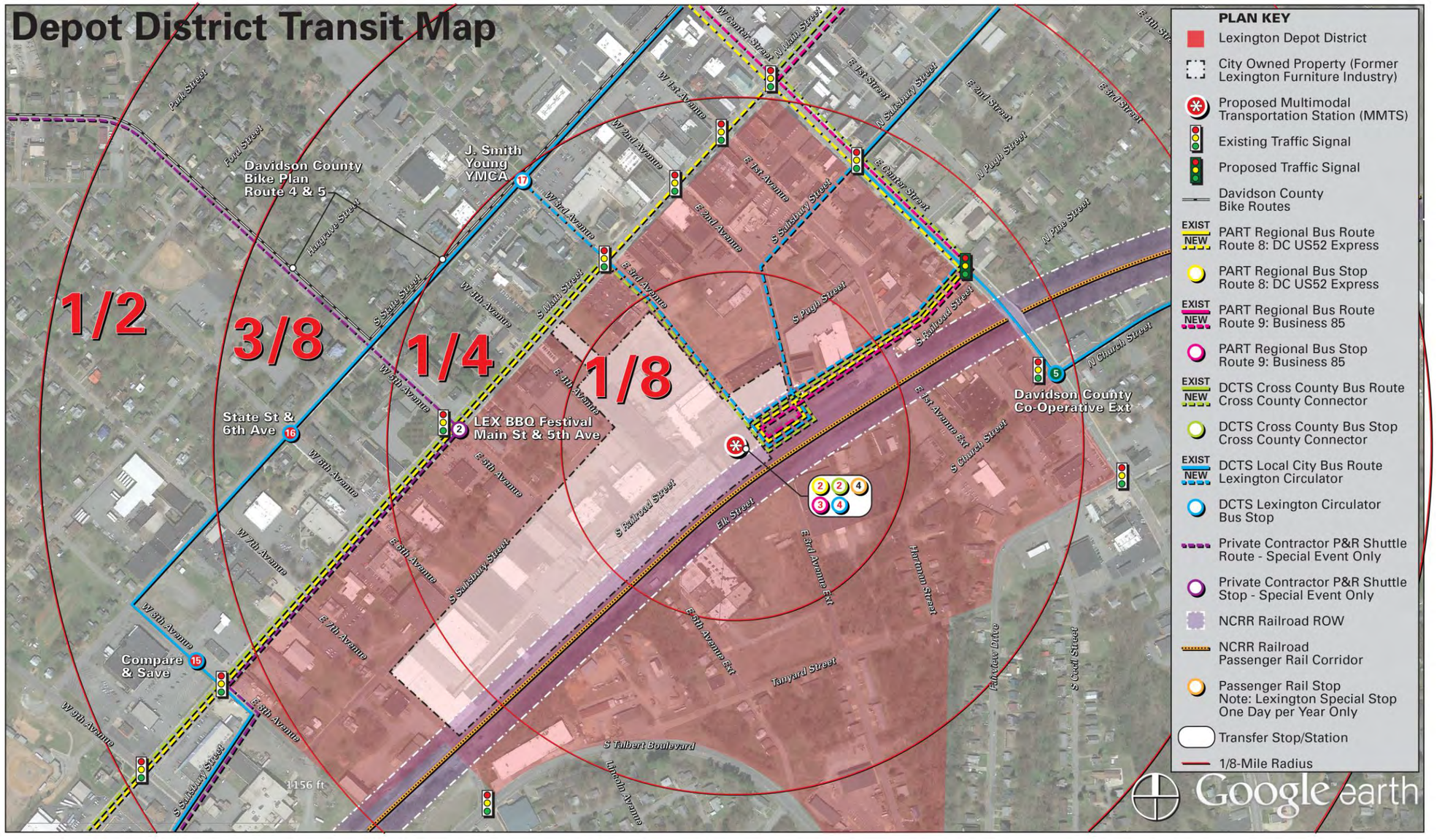


Figure 3-12B: Possible Changes to Transit Services, Lexington Depot District

Building the Lexington MMTS facility will provide an opportunity for both DCTS and PART to market their respective services to both transit "choice riders" and "dependent" passengers, who are expected to benefit from the addition of passenger rail service connected with complementary transit services. The current PART regional fixed routes, DCTS Cross County fixed route, and local deviated fixed route bus services would each add a stop at the proposed Lexington MMTS. While the PART and DCTS fixed route transit services currently have excess capacity, the additional stops at the proposed Lexington MMTS could increase ridership, thereby requiring DCTS and PART to acquire additional and perhaps larger buses. Any upgrade to the capital rolling stock for DCTS would be a potential challenge due to budgetary constraints.

The Build Alternative is also expected to facilitate neighborhood redevelopment in the Depot District. Concentrating transit improvements in the SAP is expected to assist the initiation of neighborhood revitalization in the surrounding Depot District and further enhance access to jobs, educational, medical, and other services; transit choice and utilization; productivity of land, capital and human resources; livability; sustainability and safety; while also reducing transportation costs.

Mitigation

Given the relatively low number of daily trips being added to the existing transit network as a result of the proposed Lexington MMTS, COL does not anticipate negative impacts to transit operations. However, COL will continue to coordinate with DCTS and PART to ensure the design of the Lexington MMTS will accommodate the fleet, and services correspond to anticipated ridership when the Lexington MMTS opens.

3.13.3 Freight

This section describes and analyzes freight rail.[25]

Description and Methods

The following includes an overview of the existing freight traffic in the Study Area, and the future impacts to freight under the proposed Project.

Existing Conditions

NCRR owns 317 miles of tracks in North Carolina. A portion of these tracks stretch through Lexington to Charlotte and Salisbury to the southwest, and onto Greensboro, Durham, and Raleigh to the east. The southeast terminus of the tracks is in Morehead City. Norfolk Southern carries products on the NCRR, and Amtrak currently runs two passenger services, the *Piedmont* and the *Carolinian*. Amtrak also operates the *Crescent* along a portion of the NCRR-owned corridor.

The High Point, Thomasville & Denton Railroad Co (HPT&D) operates from High Point through Thomasville and Denton (just north and southeast of the proposed train station location) to a junction

[25] The Project is not expected to produce impacts on truck freight. The Study Area does not experience significant truck traffic, as most truck traffic is along I-85, well outside of the Project area.

with the Winston-Salem Southbound Railway at High Rock. HPT&D is owned by the Winston-Salem Southbound Railway, which is jointly owned by CSX and Norfolk Southern (NS). The bulk of the commodities carried by the railroad are forest products, paper products, chemicals, brick, coal, cement, and furniture. Principal shippers are: Thomasville Forest Products of Shale Brick – a division of Lowes Inc.; Carolina Container Corp. of High Point – manufacturer of pulpboard; and Georgia Pacific of Denton, a chemical manufacturer.

At one time, the entire rail corridor between Greensboro and Charlotte had two tracks. Portions of the second track were removed in the late 1960s as part of a signal system improvement. Railroad traffic has increased greatly since that time and additional capacity is now needed.[26] The NCDOT Rail Division, in a partnership with the FRA, NS, NCRR and Amtrak under the NCDOT's Piedmont Improvement Program, is rebuilding the second track in three separate areas will create a 92-mile stretch of double-track railroad between Greensboro and Charlotte. This long double-track section is expected to greatly increase corridor capacity, improve traffic flow and passenger train reliability.

Impacts

No Build

The No Build would not impact the existing or future freight rail traffic within the Study Area. Freight rail traffic is expected to increase under both the No Build and Build alternatives.

Build Alternative

The Build Alternative will allow Amtrak trains to stop in Lexington. This additional passenger rail stop would be added once NCDOT completes the capacity and speed improvements under the Piedmont Improvement Program, and as part of an operating agreement among Amtrak, NCDOT and NS. The track improvements proposed under the Build Alternative will be designed to accommodate the projected freight and passenger rail needs, including allowance for adding two additional tracks in the corridor (four tracks total). The build alternative also includes a realignment of the railroad tracks, which will improve the efficiency and safety of freight operations on a reduced curve through the Project site.

The Build Alternative will not create any significant truck freight traffic beyond intermittent deliveries to the Lexington MMTS.

Mitigation

The track and platform improvements for the Build Alternative have been designed by the Consultant Team through coordination with the NCDOT Rail Division. The dual side platforms with upgrades to the two existing tracks in the corridor should allow for both Amtrak and NS to efficiently and safely operate their respective services. Finally, the Build Alternative will allow for a separate project in the future to install two additional tracks within the Project area. The COL will continue to coordinate with NCDOT and NS on the track and platform design to ensure the Project does not negatively impact freight operations. Prior to initiation of passenger service at the Lexington MMTS, NCDOT, NS, NCRR and

[26] See https://www.ncdot.gov/projects/pip/. See also the track capacity needs for the corridor as discussed in the Tier I Environmental Impact Statement for the Washington, DC to Charlotte, NC portion of the Southeast High Speed Rail Corridor at https://www.fra.dot.gov/Page/P0427

Amtrak will complete operations modeling and execute an operations agreement to ensure no significant impact to freight operations will occur.

3.14 Barriers to the Elderly and Handicapped

Description and Methods

A review of the existing conditions of the streets and of the possible improvements under the Build Alternative were undertaken to evaluate the impacts to the elderly and handicapped.

Existing Conditions

The current street network in the Depot District consists of an irregular street grid partially bisected by the NCRR corridor. As noted in Section 3.13, several of the streets in the area have narrow sidewalks, and the area lacks clear crosswalks, accessible wheelchair ramps, etc. The Study Area also only has a few crossings of the NCRR corridor, including the Center Street overpass, an at-grade crossing at East 7th Avenue (lacking sidewalks), and the Tunnel Street underpass connecting Railroad Street and Elk Street, which also lacks sidewalks. Moreover, elderly and the disabled who wish to access passenger rail services must make connections in Salisbury or High Point.

Impacts

No Build

The No Build would not make passenger rail more accessible for elderly and the disabled. Moreover, the No Build Alternative would not make ADA-compliant improvements to the street network.

Build Alternative

The Lexington MMTS would be built in compliance with ADA requirements including accessible entrances, elevator access to the platform , accommodations for a wheelchair loading located on the platform, and provide a pedestrian only walkway that would eliminate pedestrian/bicycle/vehicle conflicts for those wishing to cross the rail corridor from the south of the tracks to access the Lexington MMTS, Depot District and Historic Uptown Lexington. Due to railroad operating conditions, the station platform will not include a high-level platform; however, access to the train will be provided from the low-level platform by mobile lift when required. Street improvements as part of the Project would follow Complete Street policies and meet the requirements of ADA. The Lexington MMTS will also provide a more convenient station alternative to all residents of Lexington, including the elderly and disabled.

Mitigation

No need for mitigation is anticipated. The COL anticipates that the Project will have only positive impacts to the elderly and handicapped.

3.15 Land Use, Existing and Planned

This section provides an analysis of Existing Conditions within the Study Area to determine whether the Project will have any potential impacts upon and is consistent with surrounding land use patterns and local planning efforts.

Description and Methods

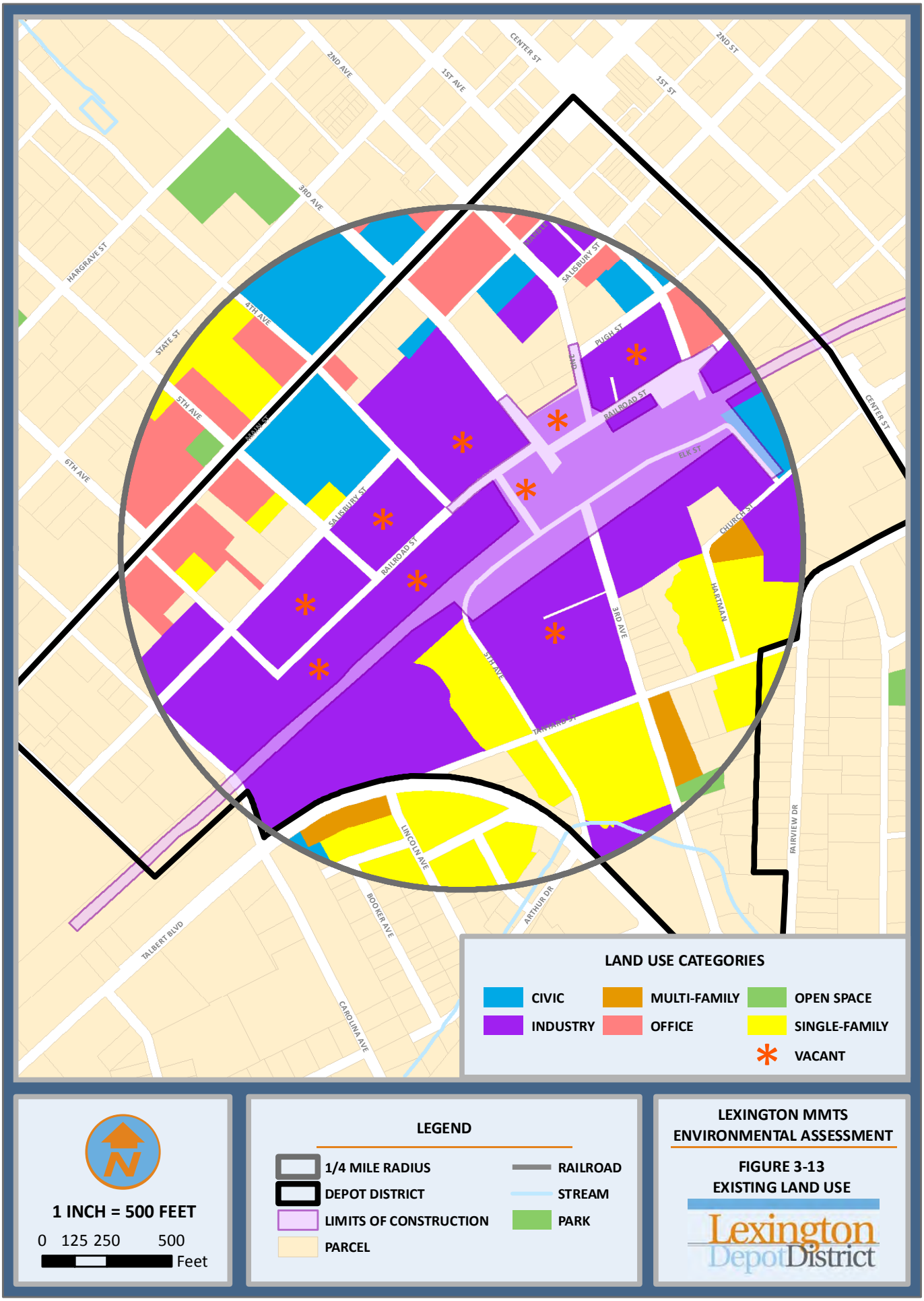
Existing general Land Use data and mapping information, along with unique activities and events, were obtained from several sources including COL Office of Business & Community Development and Engineering Departments, COL Land Use and Land Development Ordinances, COL and Davidson County GIS websites, Lexington Depot District: Building Survey & Assessment, The City of Lexington Depot District Master Plan, and Google Earth. Specific information related to the NCRR ROW delineation adjacent the Project site was obtained from the current Sublease/Lease Agreement between the NCRR and COL relative to use of the former Freight Depot and associated land area by the COL.

Existing local plans and initiatives were obtained from several sources including COL correspondence letters and meeting minutes, COL Office of Business and Community Development and Finance Departments, The Dispatch (the local COL newspaper), the COL website, The City of Lexington Depot District Master Plan, TRIP, PART, PTRC and NCDOT Rail Division.

The analysis focused on the areas where Project construction and operation would have influence on surrounding land use activities and development patterns instead of only the area within the Project study boundary defined as the limits of construction in **Figure 2-2**. The study area for land uses is defined as the approximately one-quarter-mile area encompassing the core Project site, which includes the proposed primary SAP components including the Lexington MMTS, the passenger platforms and associated track alignment, station parking areas, and primary access streets.

Existing Conditions

The Study Area contains a mixture of low-density commercial, office, industrial (manufacturing), institutional (church), municipal, and single-family residential uses (see **Figure 3-13**). In addition, there are several large parcels of undeveloped land characterized by open grass fields and underutilized surface parking lots. The Study Area is adjacent to the vibrant Historic Uptown Lexington District comprised of a mix of diverse commercial, restaurant, office, institutional (church), municipal, and residential uses; and, has direct street access to South Main Street and East Center Street.


2ND AVE
1ST AVE
CENTER ST
2ND ST
1ST ST
3RD AVE
HARGRAVE ST
4TH AVE
STATE ST
5TH AVE
6TH AVE
MAIN ST
SALISBURY ST
PUGH ST
RAILROAD ST
ELK ST
CHURCH ST
HARTMAN
3RD AVE
5TH AVE
TAYLORS LN
LINCOLN AVE
BOOKER AVE
ARTHUR DR
FAIRVIEW DR
TALBERT BLVD
CAROLINA AVE
LAND USE CATEGORIES
CIVIC
MULTI-FAMILY
OPEN SPACE
INDUSTRY
OFFICE
SINGLE-FAMILY
VACANT
N
1 INCH = 500 FEET
0 125 250 500
Feet
LEGEND
1/4 MILE RADIUS
DEPOT DISTRICT
LIMITS OF CONSTRUCTION
PARCEL
RAILROAD
STREAM
PARK
LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT
FIGURE 3-13
EXISTING LAND USE
Lexington
Depot District

The existing land use of the Project site is a mix of vacant industrial (manufacturing) buildings, along with adjacent gravel surface parking lots and open service yards, located inside and outside of the existing NCRR ROW. The Project site is accessed by several existing streets including East 2nd Avenue, East 3rd Avenue, South Railroad Street, and Tunnel Street - a single lane street with tunnel access across and below the NCRR ROW.

NCRR ROW

The Study Area overlaps and the Project site is bounded on the southeast by the NCRR ROW. There are currently two active tracks within the NCRR ROW along the frontage of the combined Study Area and the Project site. Within Study Area A, the NCRR "Charter" ROW is 200-feet wide and bulbs out on the north side of the Project site approximately 100 feet for a distance of approximately 314 feet and approximately 67 feet for a distance of approximately 389 feet (according to the Sublease/Lease Agreement between the COL and NCRR, Map - Exhibit A 2009). According to the Sublease/Lease Agreement the NCRR ROW 'bulb-out' area encompassing the Lexington Farmer's Market (former freight depot); "… shall be used to prepare for/establish future Amtrak and multi-modal offices and waiting room, a future bus and taxi office and waiting room, and a farmer's market to include parking...". The initial Term in the agreement granted to the COL is for 60 months with provisions for an Extended Term of two additional terms of five years each and/or an Alternative Extended Term of 30 years.

In addition, there are multiple rail spurs of various lengths along the west side of the ROW fronting the Project site. Adjacent to the Project site, portions of five tax parcels (including the LHB site) and various portions of 15 buildings are located within the NCRR "Charter" ROW. According to the COL's purchase agreement for the LHB property, the portions of existing buildings located within the NCRR ROW are subject to a 180-day notice of demolition.

Lexington Home Brands

The predominant land use encompassing and adjacent to the Project site is the former LHB furniture manufacturing complex situated within approximately 18 acres and characterized by approximately 28 purpose-built and irregular warehouse buildings connected directly to each other with shared walls or enclosed bridge structures. The spaces between buildings are defined by large open service yards and surface parking lots. The LHB closed operations in 2003 and the entire 18-acre property was purchased by the COL in May 2007 to guard against decline and ensure positive redevelopment because of its critical proximity to Historic Uptown Lexington NHRD. Currently, approximately four former LHB buildings, or portions of, are leased from the COL for storage uses and the remaining 24 former LHB buildings are vacant (PTRC 2010).

Special Events within the Study Area

Unique seasonal and annual activities and events attract a large numbers of visitors and citizens to the Study Area. These current uses are anticipated to continue and include:

- Lexington Farmer's Market -Renovation of the former freight depot in 2006 for the Farmer's Market has been designated as one of the most successful North Carolina farmer's market projects by the North Carolina Tobacco Trust Fund Commission. The market provides an opportunity for farmers in Davidson and adjacent counties to sell seasonal produce and has brought significant activity to the Depot District. The Farmer's Market is located adjacent to the Project site and is open May through October on Saturdays and Wednesdays. Designated a "growers only" market, participating vendors are required to grow 50% of what they are selling

from May 1 - June 16, 100% June 16 - September 1, and 50% September 1 - October 16 (Lexington Farmer's Market 2013).

- Annual Barbecue Festival - Held in Uptown Lexington every October, an eight-block stretch of Main Street, overlapping the Study Area, is closed to vehicular traffic to accommodate over 100,000 visitors. Amtrak currently makes once-a-year stops in Lexington for the Barbecue Festival with passenger rail service by the Piedmont, originating from Raleigh, and the Carolinian, originating from Charlotte (The Barbecue Festival, Lexington NC 2013).

- BBQ Capital Cook-off - Held in Uptown Lexington every April, several blocks within the Study Area are defined for the nationally televised, international competition that attracts up to 55 teams from across the United States and from as far away as Australia. The two-day event is coupled with the Southern Gateway Wine Festival, includes music and family entertainment, and is attended by over 25,000 visitors (ULI 2013).

Existing Land Use Planning Efforts

Lexington Challenge 2000 Strategic Plan

The COL identified problems and outlined recommended actions within a wide range of categories including Economic Development, Education, Quality of Life, and Transportation. Recommendations on Transportation identify specific actions related to rail service (COL 2000):

> *The Problem: North Carolina is placing a renewed emphasis on passenger rail service. However, the plans that are currently being developed by the State might completely bypass Lexington due to a perceived lack of interest.*
>
> *Recommended Actions: The City of Lexington needs to initiate the formation of a "Rail Transportation Steering Committee" to pursue Lexington as a passenger stop for high-speed and commuter rail service in Davidson County. This committee would be charged with working with the Piedmont Authority for Regional Transportation (PART) and the North Carolina Department of Transportation (NCDOT) Rail Division and other entities to accomplish the goals of this report. The committee may be required to seek local funding or grants for professional planning and design services, informational materials, etc. to accomplish its mission. The City and other like-minded businesses or agencies may be required to provide professional staff or other support. The City and its partners may need to secure depot location.*

Impacts

No Build

Without further redevelopment of the Project site, the surrounding land uses within the Study Area analyzed and the adjacent areas would remain consistent with existing land uses. This condition would not be consistent with local plans and goals for the area and COL.

Build Alternative

The COL intends to redevelop the former LHB property into a new mixed-use transit oriented development (TOD), anchored by the new Lexington MMTS, as the centerpiece within the Depot

District, defined by a total of 35 encompassing blocks (approximately 125 acres) bounded by South Main Street, East Center Street, East 8th Avenue, and South Talbert Boulevard as shown on **Figure 1-2.**

The COL anticipates that the Build Alternative will create a positive impact on existing land use patterns. A key feature of the Build Alternative is the new Lexington MMTS. Such a facility is consistent with current land use planning and activities within and nearby the encompassing Depot District. The COL expects that the Lexington MMTS will be an asset within the Depot District and will provide a necessary link and multi-modal transportation access to many nearby amenities including community and City/County government services, employment and educational resources, and historic resources, public art, and other tourist attractions. In addition, the Project is expected to support land uses as required to facilitate a viable TOD district, providing a diversity of future commercial and residential development along with new employment opportunities within the Study Area.

A number of local (including city, county, and regional) plans and initiatives have been spearheaded by and collaborated between several agencies, including COL, Davidson County, PTRC, and PART, related to supporting the re-introduction of passenger rail service in Lexington with a new Lexington MMTS along with the redevelopment of the encompassing Depot District.

Mitigation

The COL anticipates that the Project will have positive impacts on land uses. Therefore, no mitigation is required.

3.16 Socioeconomic Environment

This section provides an analysis, including data tables along with a description of economic indicators, of existing conditions within the Study Area to determine whether the Project will have an adverse impact on economic resources relative to Per Capita Income, Employment, and Occupations. In addition, existing Development and Incentives are outlined relative to stimulating and encouraging new economic development within and adjacent to the Project site and Study Area A.

Description and Methods

For purposes of this assessment, the combined Study Area was delineated by including all U.S. Census block groups intersecting the Project limits of construction. The block groups and encompassing census tracts were identified using a GIS mapping tool and data from the U.S. Census Bureau. The data used for this assessment was collected from the Census 2000, Census 2010, and 2007-2011 American Community Survey, which are released by the U.S. Census Bureau. Data was collected for four Block Groups (BG) encompassing the Project site and delineating the combined Study Area. In addition, this assessment has endeavored to collect data for at least two dates in an effort to establish trends and understand correlations at the BG and CT level and within the context of the COL, Davidson County, and North Carolina.

As shown on **Figure 3-14** Census Block Groups, the Project site is located near the border of two census tracts and nearby several others. Current census tract 614, block group 4 encompasses the Project site as defined by primary SAP components including the Lexington MMTS, the passenger platforms and associated track alignment, station parking areas, and primary access streets. Census tract 614, block group 2 borders the core Project site along the southeast side of the NCRR ROW. Extending to the northeast, the Project site as defined by the proposed track alignment is bordered along the NCRR ROW by the current census tract 614, block group 2 on the southeast side and the current census tract 614,

block group 4 and portion of the current census tract 614, block group 3 on the northwest side. Extending to the southwest, the Project site as defined by the proposed track alignment is bordered along both sides of the NCRR ROW by the current census tract 615, block group 1. Together, these Block Groups and Census Tracks encompass the Project site and the Study Area, and for purposes of this assessment they are defined as the Delineated Study Area (DSA) Aggregate.

Census Tracts 613 and 614 define the core of the Uptown Lexington District and surrounding urban neighborhoods, and census tracts 615 and 616 define the adjacent southeastern suburban neighborhoods transitioning to the southeast. Together, census tracts 613-616 encompass the geographic center of Uptown and the surrounding neighborhoods defining a substantial area of the greater COL, and for purposes of this assessment they are defined as the Census Tract (CT) Aggregate.

Existing Conditions

The economic resources within the combined Study Area include the following characteristics:

Per Capita Income

According to the U.S. Census Bureau, between 1999 and 2007-2011, Per Capita Income for the COL has increased (19.5%) from $15,310 to $18,033 (See **Table 3-12**). Between 2007 and-2011, Per Capita Income for Davidson County was $22,624 and for North Carolina was $25,256.

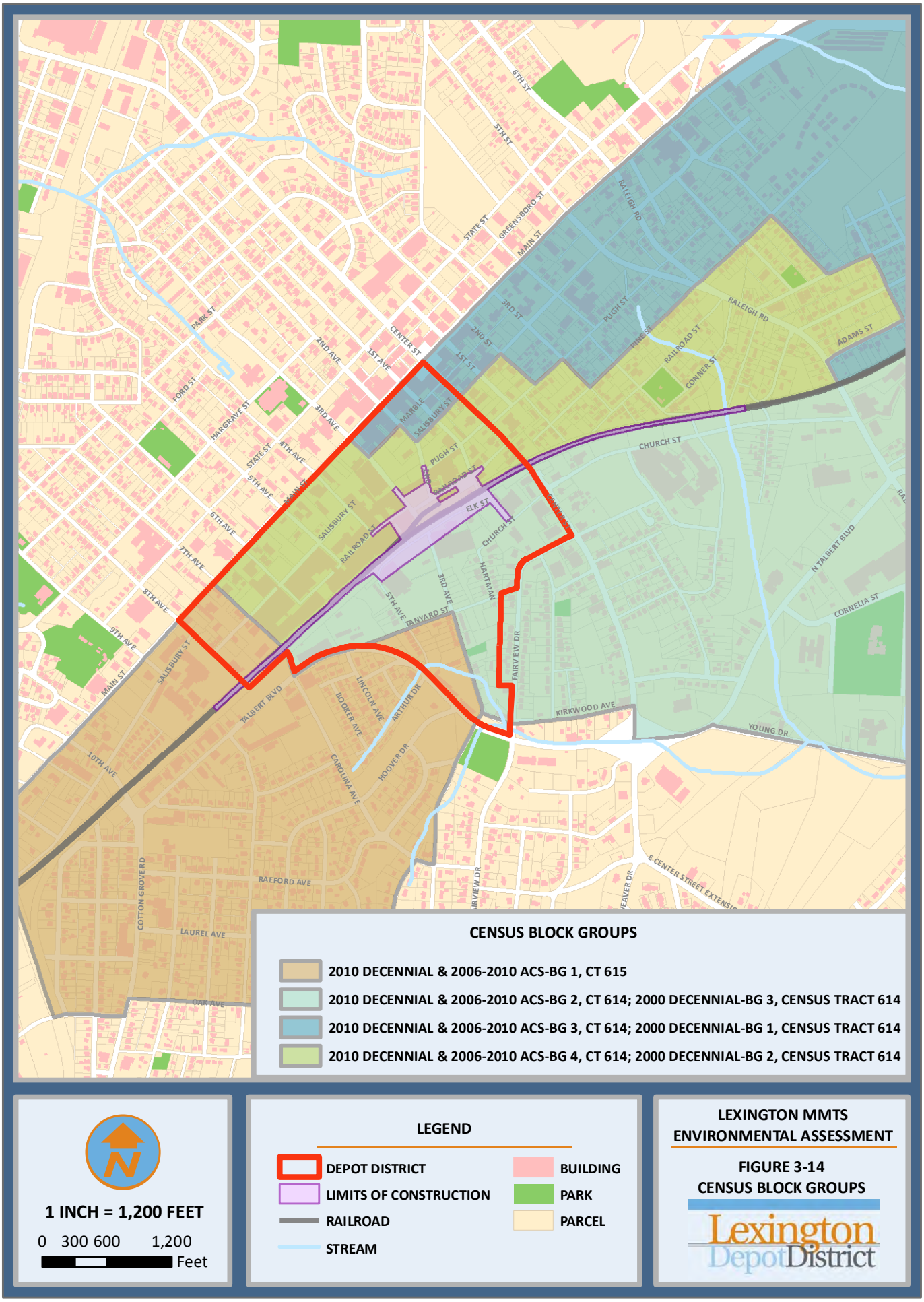
In 1999, the Per Capita Income in the DSA Aggregate was $8,999. As a comparison, the Per Capita Income in the CT Aggregate was $15,088 and in the COL was $15,310.

Between 1999 and 2007-2011, the Per Capita Income within the CT Aggregate has increased (19.5%); slightly higher than the current city-wide trend (17.8%) and less than the Davidson County and North Carolina trend (21.0%) and (24.4%) respectively.

Table 3-12: Income Data

	Geography 1999	Geography 2007-2011	2000	2007-2011	% Change
Delineated Study Area Aggregate	CT 614, BG1 CT 614, BG2 CT 614, BG3 CT 615, BG1	CT 614, BG3 CT 614, BG4 CT 614, BG2 CT 615, BG1	$8,999	UA	UA
Census Tract Aggregate	CT 613 CT 614 CT 615 CT 616	CT 613 CT 614 CT 615 CT 616	$15,088	$18,030	19.5% increase
City of Lexington			$15,310	$18,033	17.8% increase
Davidson County			$18,703	$22,624	21.0% increase
North Carolina			$20,307	$25,256.	24.4% increase

Source: U.S. Census Bureau, Census 2000, U.S. Census Bureau, American Community Survey 2007-2011.
Notes & Definitions: UA = Unavailable Data.


CENSUS BLOCK GROUPS
2010 DECENNIAL & 2006-2010 ACS-BG 1, CT 615
2010 DECENNIAL & 2006-2010 ACS-BG 2, CT 614; 2000 DECENNIAL-BG 3, CENSUS TRACT 614
2010 DECENNIAL & 2006-2010 ACS-BG 3, CT 614; 2000 DECENNIAL-BG 1, CENSUS TRACT 614
2010 DECENNIAL & 2006-2010 ACS-BG 4, CT 614; 2000 DECENNIAL-BG 2, CENSUS TRACT 614
1 INCH = 1,200 FEET
0 300 600 1,200
Feet
LEGEND
DEPOT DISTRICT
LIMITS OF CONSTRUCTION
RAILROAD
STREAM
BUILDING
PARK
PARCEL
LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT
FIGURE 3-14
CENSUS BLOCK GROUPS
Lexington Depot District

Employment

Over the past decade the North Carolina Piedmont Triad Region (pop. 1,062,509) has experienced over 50,000 job losses (Employment Security Commission of North Carolina) due to severe declines in its traditional economic bases of furniture, textiles and tobacco. This has been especially difficult for small communities like the COL that were highly dependent on furniture manufacturing. Since 2000, layoffs due to plant closings have affected 5,400 people, more than 22 percent of the COL's job base. Furthermore, Davidson County has seen a net loss of over 8,000 jobs since 2001, more than 10 percent of the total job base (COL 2010).

According to the U.S. Census Bureau, between 2000 and 2010, the Unemployment Rate in the COL has increased (from 4.2 percent to 9.7 percent (see **Table 3-13**). Compounded by the national recession beginning in 2008, unemployment rates have dramatically increased throughout the Piedmont Triad region and North Carolina; accordingly, the trend of unemployment increase within the COL correlates with Davidson County and North Carolina, which have both sustained increases in unemployment (270.4 percent) and (185.3 percent) respectively.

Table 3-13: Unemployment Rate

	2000	2007-2011	% Change
Delineated Study Area Aggregate	UA	UA	UA
Census Tract Aggregate	6.3%	16.5%	162.2% increase
City of Lexington	4.2%	9.7%	131.0% increase
Davidson County	2.7%	10.0%	270.4% increase
North Carolina	3.4%	9.7%	185.3% increase

Source: U.S. Census Bureau, Census 2000, U.S. Census Bureau, American Community Survey 2007-2011.
Notes & Definitions: UA = Unavailable Data.

Although unemployment data between 2000 and 2007-2011 at the BG level in the COL is unknown (data is unavailable or pending additional research); data at the CT level records the Unemployment Rate within the CT Aggregate has increased from 6.3 percent to 16.5 percent. By comparison, this unemployment rate is higher than the city-wide trend and appears to indicate that unemployment is more prevalent in the center city areas as opposed to the outlying areas.

Although North Carolina ranks amongst states with the highest unemployment rates in the country, current economic predictions have indicated that local, regional, and statewide unemployment rates are stabilizing and are expected to decrease slowly over the next several years.

Occupations

The Study Area contains a mixture of commercial, industrial, and municipal uses. Current COL employment data indicates there are 190 businesses in the immediate Uptown Lexington district adjacent to the combined Study Area. The majority of the uptown businesses represent the Business Services, Retail, Professional, Finance, Insurance, Real Estate, and Governmental Services; with top employers including the COL, Davidson County, New Bridge Bank, and Lexcom Communications. The Uptown Lexington Business district collectively employees 1,600 workers (ULI 2013).

According to the U.S. Census Bureau, the majority of workers in the COL have been in Production, Transportation, and Material Moving Occupations; (37.6 percent) in 2000 and (27.4 percent) in 2010. The proportion of workers in similar occupations were less in both Davidson County (29.2 percent) in

2000 and (20.7 percent) in 2010 and North Carolina (18.7 percent) in 2000 and (13.7 percent) in 2010. Despite this majority of workers in Production, Transportation, and Material Moving Occupations within the COL, between 2000 and 2010 the highest decline in jobs (21.3 percent) has been recorded for this occupation category. Between 2000 and 2010, the highest increase in jobs (43.8 percent) has been in workers in Service Occupations.

Although specific occupation data in 2010 at the block group level in the COL is unknown; data at the census tract level records the proportions of worker Occupations within the CT Aggregate similar to the city-wide trend. However, the trend for census tract 614 contrasts with the CT Aggregate and COL proportions in 2010 whereby only 6.4 percent (decline of 24.7 percent) of workers are in Management, Professional, and Related Occupations and a predominant 48.3 percent (increase 43.8 percent) of workers are in Construction, Extraction, and Maintenance Occupations. All other occupations remained comparatively stable. The trend shift for census tract 614 appears to indicate a shift in the occupational character of the area encompassing the Project site and Study Area.

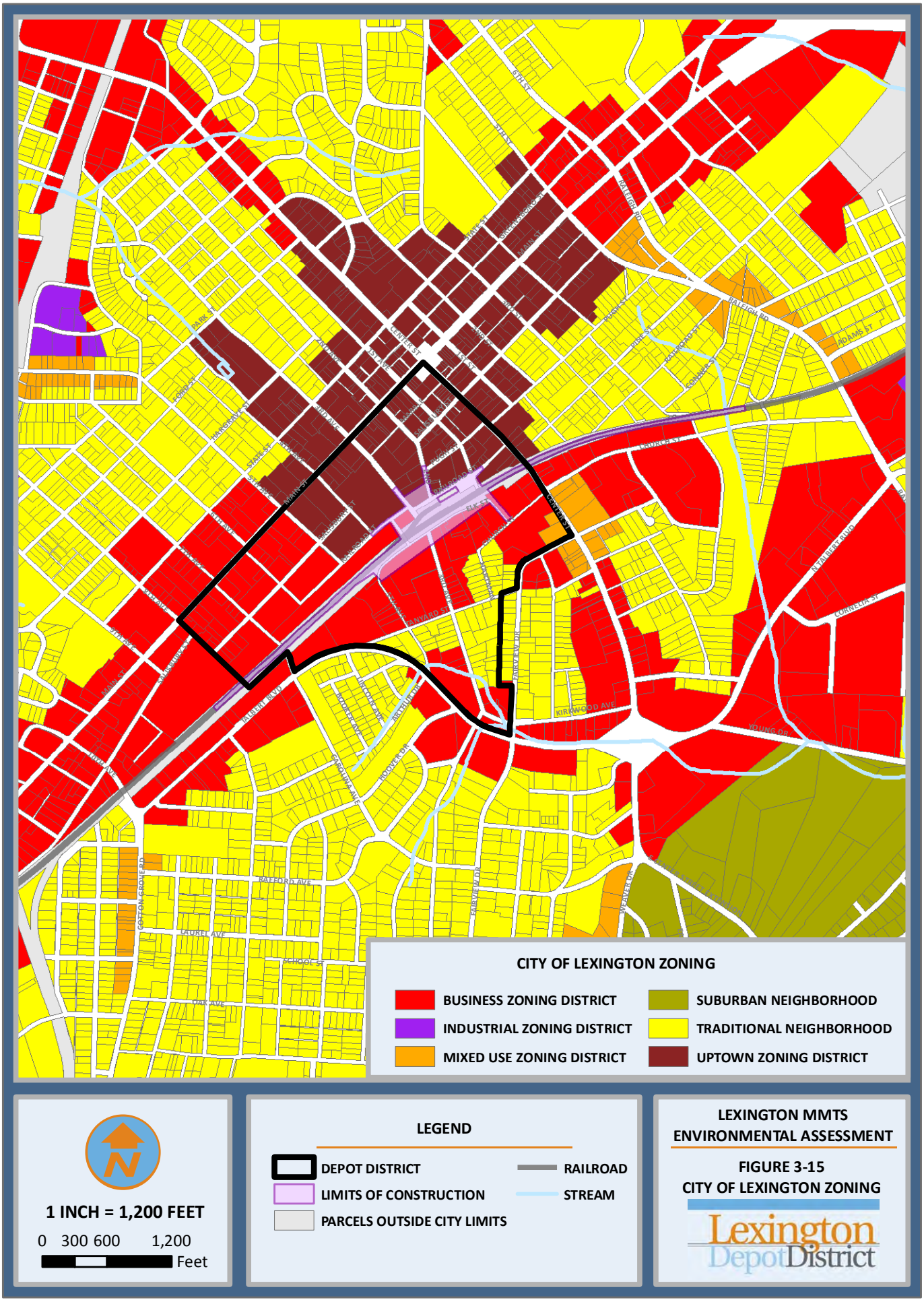
Zoning and Business Development Planning Districts

The Land Use Ordinance of the City of Lexington was updated in 2010, the COL and established Zoning Districts within the Project site as shown on **Figure 3-15**. The Study Area is currently defined predominantly Business District (BD) with some portions located within the Uptown District (UD). Transit facilities are a permitted use under current BD and UD zoning.

- Business District (BD): The intent of the BD is to accommodate a wide range of retail, service, governmental, and office uses that serve not only the Lexington community, but also travelers along key highway corridors. This district provides an opportunity for economic development with convenient automobile access, minimal traffic congestion, and reduced visual clutter along designated commercial corridors.

- Uptown District (UD): The intent of the UD is to support the vitality and growth of Historic Uptown Lexington. As the traditional focal point of community life, the UD is intended to serve as the hub of commerce, civic, cultural, and governmental activity. The shop fronts with upper-story residences, restaurants, civic uses and public uses, primarily along North and South Main Streets and East and West Center Streets, help to define the general character of this area. New infill development will be carefully designed to add to the character, charm, and economic strength of this vital, historic, community-wide activity center.

Beyond the Project site and immediately adjacent to the Depot District, zoning designations are UD and BD across and along South Main Street and transitions to predominantly Traditional Neighborhood District (TND) to the northwest; BD to the southwest; BD across and along the NCRR ROW and transitions TND to the southeast; and, UD, BD, and Mixed Use District (MUD) across and along East Center Street and transitions to TND to the northeast.


CITY OF LEXINGTON ZONING
BUSINESS ZONING DISTRICT
INDUSTRIAL ZONING DISTRICT
MIXED USE ZONING DISTRICT
SUBURBAN NEIGHBORHOOD
TRADITIONAL NEIGHBORHOOD
UPTOWN ZONING DISTRICT
1 INCH = 1,200 FEET
0 300 600 1,200
Feet
LEGEND
DEPOT DISTRICT
LIMITS OF CONSTRUCTION
PARCELS OUTSIDE CITY LIMITS
RAILROAD
STREAM
LEXINGTON MMTS
ENVIRONMENTAL ASSESSMENT
FIGURE 3-15
CITY OF LEXINGTON ZONING
Lexington
Depot District

Impacts

No Build

The No Build Alternative would not affect economic resources. However, the No Build Alternative is not consistent with the objectives outlined by the COL for the designated zoning areas and would not help to stimulate potential new investment in development and employment opportunities associated with (a) the construction industry, aligned with the predominant occupations held by workers living within the Study Area, and (b) the service industry, aligned with the largest growing occupations in the COL. Therefore, the No Build would not spur development and would not meet the Project purpose and need.

Build Alternative

The Build Alternative would create a positive impact for economic resources in the Study Area. Currently, the site contains vacant, obsolete industrial buildings along with portions of an adjacent surface parking lot, and accommodates little public or private use. COL anticipates that construction of the Build Alternative would stimulate investment in new commercial and mixed-use ventures within areas adjacent to the Project site. This would improve the COL economy by providing additional tax base and potential new employment opportunities associated with (a) the construction industry, aligned with the predominant occupations held by workers living within the combined Study Area, and (b) the service industry, aligned with the largest growing occupations in the COL.

Further, the Build Alternative is consistent with existing zoning patterns; however, in accordance with the evolving Master Plan for the Depot District encompassing the Project site, the COL is contemplating two possible alternative zoning options:

(a) rezone the entire Depot District, including the Project site, as a Planned Development District (PDD) so that the master plan establishes the zoning regulations defining the desired character for new development and activities within the Depot District. Accordingly, the Lexington MMTS would require a major zoning permit to be issued by City Council if building construction is possible prior to completion of an approved master plan upon which to base the zoning regulations; or,

(b) rezone the entire Depot District, including the Project site, to UD as the regulations support and compliment the desired character for new development and activities within the Depot District.

Both options would meet the Project purpose and need. Potential future implementation by the COL of either proposed zoning strategy would be a positive impact and will permit and support the Lexington MMTS within the Project site, as well as facilitate managed growth in accordance with local initiatives.

Mitigation

No need for mitigation is anticipated. The Build Alternative will provide positive impact by helping spur redevelopment within the Depot District.

3.17 Environmental Justice

This section provides an assessment of protected populations in order to determine whether the Project will have disproportionately high and adverse impacts to low-income, minority, or other populations protected by Title VI of the 1964 Civil Rights Act (Title VI) and described as protected populations in this document. A dual purpose is to determine whether protected populations will receive an equitable distribution of benefits.

Description and Methods

For purposes of this assessment, the combined Study Area was delineated by including all U.S. Census block groups intersecting the Project limits of construction. The block groups were identified using a GIS mapping tool and data from the US Census Bureau resulting in analysis of the census tracts and block groups shown on **Figure 3-14** and described in section 3.16 previously.

The data used for this assessment was collected from the Census 2000, Census 2010, and 2007-2011 American Community Survey, which are released by the U.S. Census Bureau. Data was collected for four Block Groups (BG) encompassing the Project site and delineating the combined Study Area. In addition, this assessment has endeavored to collect data for at least two dates in an effort to establish trends and understand correlations at the BG and CT level and within the context of the COL, Davidson County, and North Carolina.

For poverty status, the Davidson County average for persons below the poverty line was determined. The County average was used as a baseline for determining which block groups in the Study Area had higher concentrations of residents below the poverty line.

The Davidson County average percentage of minority populations was determined. The County average was used when analyzing which block groups in the Study Area had higher concentrations of minority residents above or below the county average. Minority residents included in the total minority count for each block group were Black or African American alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian and Other Pacific Islander alone, Some other race alone, and Two or more races. Hispanic populations were also included in the minority counts.

Legal and Regulatory Framework

Title VI and related statutes provide that no person shall, on the grounds of race, color, age, religion, sex, national origin, or handicap/disability, be excluded from participation in, or be denied the benefits of, or be otherwise subject to discrimination under any program of the federal, state, or local government.

On February 11, 1994, President Clinton signed EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations (59 Federal Register (FR) 7629). EO 12898 was designed to supplement Title VI, EO 12250 and the resulting promulgated regulations for the United States Department of Transportation (USDOT) (49 CFR Part 21), all of which prohibit discriminatory practices in programs receiving Federal financial support. The thrust of EO 12898 is to identify and address, as appropriate, disproportionately high adverse human health or environmental effects of each agency's programs, policies, and activities on minority populations and low-income populations.

Specifically, EO 12898 mandates that all federal agencies provide a strategy to implement the EO, which charges each federal agency with responsibility of:

> *conduct[ing] its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin. (59 FR 7629, Section 2-2)*

This order also requires that each agency:

> *whenever practicable and appropriate, collect, maintain and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding facilities or sites expected to have a substantial environmental, human health, or economic effect on the surrounding populations, when such facilities or sites become the subject of a substantial Federal environmental administrative or judicial action. Such information shall be made available to the public, unless prohibited by law; and (c) Each Federal agency, whenever practicable and appropriate, shall collect, maintain, and analyze information on the race, national origin, income level, and other readily accessible and appropriate information for areas surrounding Federal facilities that are... (2) expected to have a substantial environmental, human health, or economic effect on surrounding populations. Such information shall be made available to the public, unless prohibited by law. (59 FR 7629, Section 2-3(b))*

In response to the mandates of EO 12898, USDOT developed a Final Environmental Justice Strategy (60 FR 125 33896) and a proposed USDOT Order titled *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The analysis contained in this technical memorandum is consistent with that outlined in the USDOT Final Strategy and proposed Order.

Existing Conditions

Low-Income Populations

In order to assess potential impacts to populations protected by EO 12898 and Title VI, low-income and minority populations in the combined Study Area were identified.

According to the USDOT Order on Environmental Justice (62 FR 18377), an individual is considered to have a low income if their median household income is at or below the poverty guidelines, as set by the Department of Health and Human Services (DHHS). The DHHS poverty guidelines are available online at http://aspe.hhs.gov/poverty/figures-fed-reg.shtml. In 2009 the poverty guideline for a four-person family was $22,050. According to DHHS, “The best approximation for the number of people below the HHS poverty guidelines in a particular area would be the number of persons below the Census Bureau poverty thresholds in that area.” For this reason the U.S. Census poverty threshold was used to calculate low-income individuals. Poverty levels used by the U.S. Census Bureau are available online at http://www.census.gov/hhes/www/poverty/methods/definitions.html. In 2009 the weighted average threshold.

Tables 3-14, 3-15 and 3-16 provide a summary of the poverty levels found in the DSA Aggregate. The 2007-2011, 5-year estimate for the poverty level in Davidson County is 15.1 percent. The county average is used as a threshold to measure the relative concentration of poverty found in the Study Area. The 2007-2011, 5-year estimate for the poverty within all four of the Block Groups exceeded the comparison threshold. Within the Delineated Study Area, the highest concentration of poverty was found east of the

Project site within Census Tract 614, Block Group 1; which had 61.8 percent of its population living below poverty as reported by the Census 2000 data.

More recent data is found in the American Community Survey 2007-2011 data produced by the Census Bureau as shown in **Table 3-15**; however, the geographical boundaries of the data collection areas were not exactly the same as the data collection areas used for the 2000 Census. **Table 3-16** compares the Census Tracts for the geographic center of Uptown and the surrounding neighborhoods defining a substantial area of the greater COL, creating a comparison for change over time in the areas near the Project site.

Table 3-14: Poverty Status, Census 2000

Geography 1999	Total Population for whom Poverty Status is Determined	Below Poverty Level	
		Number	Percent
Census Tract 614, BG 1[1]	781	483	61.8%
Census Tract 614, BG 2[1]	563	176	31.3%
Census Tract 614, BG 3[1]	1,065	388	36.4%
Census Tract 615, BG 1[1]	1,204	324	26.9%
Census Tract 613[2]	2,405	322	13.4%
Census Tract 614[2]	3,019	1,220	40.4%
Census Tract 615[2]	6,498	1,257	19.3%
Census Tract 616[2]	2,852	558	19.6%
Census Tract Aggregate	14,774	3,357	22.7%
City of Lexington[2]	19,513	4,146	21.2%
Davidson County[2]	145,335	14,636	10.1%
State of North Carolina[2]	7,805,328	958,667	12.3%

Source:

1. U.S. Census Bureau, Census 2000, Summary File 3 Sample Data, Table P087 "Poverty Status in 1999 by Age".

2. U.S. Census Bureau, Census 2000, Summary File 4 Sample Data, Table QT-P34 "Poverty Status in 1999 of Individuals: 2000".

Notes & Definitions:

a. Davidson County CT 614 encompasses the Project site and Study Area, and BG 2(2000) & 4(2010) encompasses the Project site.

b. The combined Davidson County CT 613-616 encompasses the geographic area of Uptown and greater City of Lexington.

Table 3-15: Poverty Status, American Community Survey 2007-2011

Geography 2007-2011	Total Population for whom Poverty Status is Determined	Below Poverty Level	
		Number	Percent
Census Tract 613[1]	1,888	412	21.8%
Census Tract 614[1]	3,132	1,509	48.2%
Census Tract 615[1]	5,802	1,165	20.1%
Census Tract 616[1]	2,642	891	33.7%
Census Tract Aggregate	13,464	3,977	29.5%
City of Lexington[2]	18,183	4,634	25.5%
Davidson County[2]	159,535	24,092	15.1%
State of North Carolina[2]	9,162,147	1,473,556	16.1%

Source:

1. U.S. Census Bureau, American Community Survey 2007-2011, 5-Year Estimates, Table S1701 "Poverty Status in the Past 12 Months".

2. U.S. Census Bureau, American Community Survey 2007-2011, 5-Year Estimates, Table B17001 "Poverty Status in the Past 12 Months by Sex by Age".

Notes & Definitions:

a. Davidson County CT 614 encompasses the Project site and Study Area, and BG 2(2000) & 4(2010) encompasses the Project site.

b. The combined Davidson County CT 613-616 encompasses the geographic area of Uptown and greater City of Lexington.

Table 3-16: Poverty Status, Comparison Table

Comparable Geography	Percent Below Poverty Level		Percent Change
	Census 2000	American Community Survey 2007-2011	
Census Tract 613	13.4%	21.8%	8.4%
Census Tract 614	40.4%	48.2%	7.8%
Census Tract 615	19.3%	20.1%	0.8%
Census Tract 616	19.6%	33.7%	14.1%
Census Tract Aggregate	22.7%	29.5%	6.8%
City of Lexington	21.2%	25.5%	4.3%
Davidson County	10.1%	15.1%	5.0%
State of North Carolina	12.3%	16.1%	3.8%

Minority Populations

In FHWA Actions to Address Environmental Justice in Minority and Low-income Populations (Order 6640.23) USDOT provides clear definitions of the four minority groups addressed by EO 12898. These groups are:

- Black – a person having origins in any of the black racial groups of Africa;
- Hispanic – a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;
- Asian American – a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands; and
- American Indian and Alaskan Native – a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.

Data provided by the U.S. Census Bureau in both the Census 2000 and American Community Survey 2007-2011 are presented in **Tables 3-17, 3-18, and 3-19**. Based on CEQ guidelines, the minority threshold is determined when the minority population of the affected area exceeds 50 percent or by adding 10 percent to the overall county minority level (whichever is less). In this instance, 27.6 percent is used as threshold given that the county minority rate in 2010 is 17.6 percent. The 2010 minority population in the DSA Aggregate is 64.8 percent, which is approximately double the threshold level. Within the DSA Aggregate, the highest concentration of minority population was found within Block Group 4; which had 79.1 percent minority population.

Table 3-17: Minority Populations, Census 2000

Geography 1999	Total Population	White Non-Hispanic	Minority Populations	
			Number	Percent
Census Tract 614, BG 1[1]	781	221	560	71.7%
Census Tract 614, BG 2[1]	563	55	508	90.2%
Census Tract 614, BG 3[1]	1,206	537	669	55.5%
Census Tract 615, BG 1[1]	1,224	495	729	59.6%
DSA Aggregate	3,774	1,308	2,466	65.3%
Census Tract 613[2]	2,443	1,831	636	26.0%
Census Tract 614[2]	3,663	1,593	2,264	61.8%
Census Tract 615[2]	6,556	3,301	3,615	55.1%
Census Tract 616[2]	2,879	2,127	957	33.2%
CT Aggregate	15,541	8,852	7,472	48.1%
City of Lexington[3]	19,953	11,733	8,714	43.6%
Davidson County[3]	147,246	128,184	21,299	14.4%
State of North Carolina[3]	8,049,313	5,804,656	2,333,731	29.0%

Source:

1. U.S. Census Bureau, Census 2000, Summary File 3 Sample Data, Table P007 "Hispanic or Latino by Race".

2. U.S. Census Bureau, Census 2000, Summary File 1 100-Percent Data, Table DP-1 "Profile of General Demographic Characteristics: 2000" for selected Census Tracts.

3. U.S. Census Bureau, Census 2000, Summary File 1 100-Percent Data, Table DP-1 "Profile of General Demographic Characteristics: 2000" for City of Lexington, Davidson County, and State of North Carolina.

Table 3-18: Minority Populations, American Community Survey 2007-2011

Geography 1999	Total Population	White Non-Hispanic	Minority Populations	
			Number	Percent
Census Tract 614, BG 3[1]	753	214	539	71.6%
Census Tract 614, BG 4[1]	522	109	413	79.1%
Census Tract 614, BG 2[1]	1,187	522	665	56.0%
Census Tract 615, BG 1[1]	1,086	403	683	62.9%
DSA Aggregate	3,548	1,248	2,300	64.8%
Census Tract 613[2]	2,176	1,528	648	29.8%
Census Tract 614[2]	3,389	1,436	1,953	57.6%
Census Tract 615[2]	6,214	3,039	3,175	51.1%
Census Tract 616[2]	2,926	1,881	1,045	35.7%
CT Aggregate	14,705	7,884	6,821	46.4%
City of Lexington[3]	18,931	9,424	9,507	50.2%
Davidson County[3]	162,878	133,486	29,392	18.0%
State of North Carolina[3]	9,535,483	6,223,995	3,311,488	34.7%

Source:

1. U.S. Census Bureau, Census 2010, Redistricting Data, Table P2 "Hispanic or Latino, and Not Latino by Race".
2. U.S. Census Bureau, Census 2010, Summary File 1, Table QT-P4 "Race, Combinations of Two Races, and Not Hispanic or Latino: 2010".
3. U.S. Census Bureau, Census 2010, 2010 Demographic Profile Data, Table DP-1 "Profile of General Population and Housing Characteristics: 2010".

Table 3-19: Minority Populations, Comparison Table

Comparable Geography	Percent Minority Populations		Percent Change
	Census 2000	American Community Survey 2007-2011	
Census Tract 613	26.0%	29.8%	3.8%
Census Tract 614	60.5%	57.6%	-2.9%
Census Tract 615	54.8%	51.1%	-3.7%
Census Tract 616	32.4%	35.7%	3.3%
Census Tract Aggregate	47.4%	46.4%	-1.0%
City of Lexington	45.2%	50.2%	5.0%
Davidson County	14.3%	17.6%	3.7%
State of North Carolina	29.8%	34.7%	4.9%

Impacts

No Build

The No Build Alternative would not change the existing conditions, and thus would not have disproportionate adverse impacts on minority or low-income populations. However, the No Build Alternative would not meet the Project purpose and need because it would not provide increased public

transportation connectivity that may be of value to low-income residents who may not be able to afford reliable personal transportation to travel to employment opportunities.

Build Alternative

The Build Alternative is expected to have a net positive impact on minority and low-income populations by increasing mobility between underserved areas within the combined Study Area currently defined by high unemployment and productive economic areas (local and regional) where job opportunities exist in greater numbers, and by increasing affordable and accessible transportation options for local residents. The Build Alternative would also benefit all minority and low-income populations by meeting the Project purpose and need, by providing additional public transportation connectivity between existing and future communities, shopping centers, and recreational amenities within the COL and Piedmont Triad region. Therefore, the Build Alternative would not have any disproportionately negative environmental justice impacts.

Mitigation

The COL expects the Build Alternative will have a positive impact on minority and low-income populations. Therefore, no need for mitigation is anticipated.

3.18 Public Health

Description and Methods

A review was undertaken of the possible public health impacts from construction of the Lexington MMTS and the overall SAP, compared against the No Build Alternative.

Existing Conditions

As noted in **sections 3.13 and 3.14**, the current street network in the Project area lacks adequate crosswalks, sidewalks and street lighting, and several intersections have unsafe off-set approaches.

Impacts

No Build

The No Build Alternative would not impact public health and safety. The safety of vehicular, bicycle and pedestrian traffic would not be enhanced as the facilities would not be enhanced.

Build Alternative

The Build Alternative would result in positive impacts on public health and safety. Implementation of the Lexington MMTS, pedestrian tunnel access, and surrounding Complete Streets would improve public health and safety by upgrading out-of-date facilities and reducing the potential for pedestrian/train conflict and pedestrian/vehicular conflict.

Mitigation

The Project will have no adverse effects on public health and safety. Therefore, the COL does not anticipate any mitigation.

3.19 Public Safety (Hazardous Materials)

Description and Methods

To access hazardous materials, a radius search was conducted for the area, with the target property being centered on the outline of the planned platform of the Lexington MMTS.

A database search was performed by URS for the Lexington Depot District redevelopment area (referred to in this section as the subject property) to determine the impact or potential impact of hazardous substances or petroleum products on the property from the property itself or surrounding properties. The database search included:

- Review of published information on general geology, hydrogeology, and topographic setting for the property.
- Radius search to identify any recognized environmental concerns (RECs) associated with the development area and/or surrounding properties.
- Regulatory agency file search to identify federal and state-listed sites known to be contaminated or to have potential environmental concerns.
- Review of historical aerial photographs to determine the change in land use of the area
- Review of fire insurance records of the area to identify any land use not noted in the EDR radius check.

It should be noted that information provided in this review was solely gathered from the database search provided by Environmental Data Resources (EDR) on April 20, 2012. No field survey of the surrounding area was performed. Data from the database search results were analyzed with existing terrain data and historic aerial photographs to create an assessment of relative risks. For purposes of this assessment, URS has assigned three risk categories – low, potential and high - to environmental concerns surrounding and on the redevelopment project area. A 'low' risk site will be identified as one that has open issues, but is located downgradient of the redevelopment project area. A 'potential' risk site will be identified as one that has open environmental issues, and is located at an elevation equal or upgradient of the site within one-quarter-mile. A 'high' risk site will be identified as one that has open environmental issues, and is located within the redevelopment project area.

Existing Conditions

The Study Area generally slopes to the south-southeast. The 1951 topographical map provided by EDR depicts the subject property and surrounding areas as virtually unchanged in relation to that of the 1994 topographical map. Soils beneath the subject property are generally classified under the Cecil component of sandy clay loam texture and particle size. Soils of this description generally experience moderate infiltration rates, are well drained along with intermediate water holding capacity, and with moderately coarse textures. The depth to the water table in this area is reported to be greater than 6 feet below ground surface (bgs).

The subject property was listed in the databases searched for or provided by Environmental Data Resources (EDR), and information is provided in **Table 3-20 and 3-21** below. Details of these findings are included in **Appendix C**.

The records reviewed in the EDR report indicated several sites within a one-eighth-mile radius from the subject property that may have the potential to impact the area, as shown in **Figure 3- 16** and listed in **Table 3-20**.

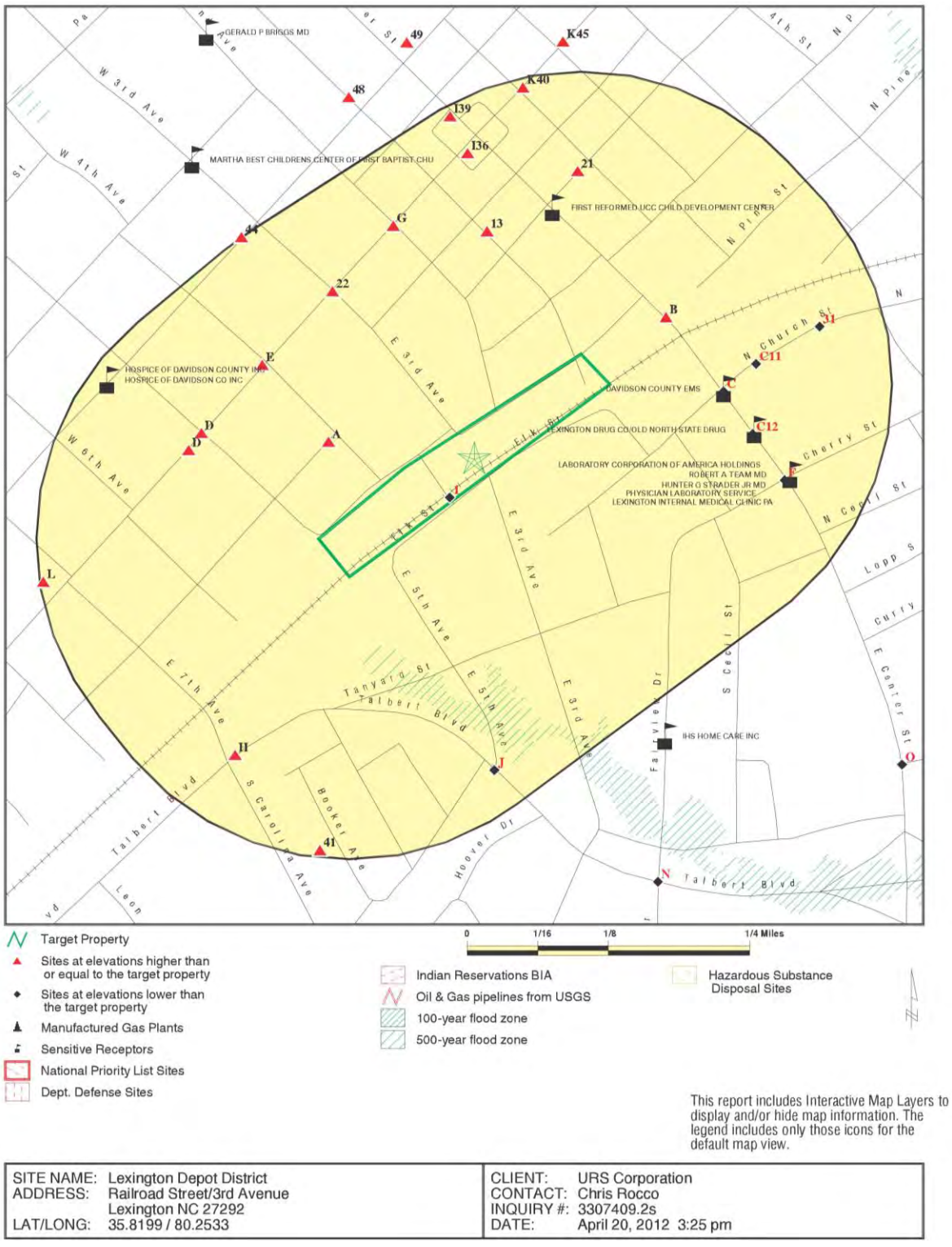


Figure taken from EDR Report (April 20, 2012)

Figure 3-16: Potential Hazardous Waste Sites

Table 3-20: Potential Hazardous Waste Sites (within one-eight mile)

Site Name and Address	Database	Location in relation to subject property	Risk category
	Description		
Burlington Industries, Inc 151 Elk Street	*RCRA-CESQG*	Subject Property	High Risk
	Hazardous Waste code: F003; generator of virgin, waste or mixtures of the following non-halogenated solvents: xylene, acetone, ethyl acetate, ethylbenzene, ethyl ether, methyl isobutyl ketone (MIBK), n-butyl alcohol, cyclohexanone and methanol. Mixtures greater than 10% are listed F001, F002, F004 and F005.		
Lexington Furniture Industries/Plant 1-C 411 S. Salisbury Street	*State and tribal leaking underground storage tank (LUST) list*	Equal/Higher Elevation; West of subject property	Does not appear to pose risk to the re-development area
	Low Risk Site; No Further Action (NFA) letter issued; Notice of Residual Petroleum on April 20, 2009. Site does not appear to pose risk to the proposed Lexington Depot District.		
Raymond Smith – Former Station; 234 E. Center Street	*State and tribal leaking underground storage tank (LUST) list*	Equal/Higher Elevation; Northeast of the subject property	Does not appear to pose risk to the re-development area
	Soil contamination was discovered subsequent to UST closure; Closure report issued on April 20, 2001. Site does not appear to pose risk to the proposed Lexington Depot District.		
NCDOT-Smith-Lohr Property; 230-234 E. Center Street	*State and tribal leaking underground storage tank (LUST) list*	Equal/Higher Elevation; Northeast of the subject property	Potential Risk
	The site has the potential to pose risk to the proposed Lexington Depot District, due to the proximity to the proposed area and the topographic layout, and due to the issue still being active. – Petroleum release from orphan heating oil UST reported in November 2005; incident number 30719.		
CVS, New; 309 E. Center Street	*State and tribal leaking underground storage tank (LUST) list*	Lower Elevation; East-Northeast of the subject property	Does not appear to pose risk to the re-development area

Site Name and Address	Database	Location in relation to subject property	Risk category
	Description		
	Incident number 22027 given to the site following the discovery of a leaking heating oil tank with associated impacted soil. Issue was closed out in May of 2001.		
Dixie Furniture Company, Inc.; 411 S. Salisbury Street	*UST Database*	Equal/Higher Elevation; West of the subject property	Does not appear to pose risk to the re-development area.
	All tanks were noted as containing various petroleum products, and appear to have been removed; the USTs associated with this property do not appear to pose risk to the re-development area.		
Carolina Muffler; 223 E. Center Street	*UST Database*	Equal/Higher Elevation; Northeast of the subject property	Does not appear to pose risk to the re-development area.
	All tanks were noted as containing various petroleum products, and appear to have been removed; the USTs associated with this property do not appear to pose risk to the re-development area.		
Davidson County Garage; 301 E. Center Street	*UST Database*	Lower Elevation; East-Northeast of the subject property	Does not appear to pose risk to the re-development area.
	The tank was noted as containing gasoline and gasoline mixture products, and appears to have been removed in 2001; the USTs associated with this property do not appear to pose risk to the re-development area.		
Lexington Home Brands Plant 1 411 S. Salisbury Street	*US BROWNFIELDS*	Equal/Higher Elevation; West of the subject property	Potential Risk
	Site being managed under the United States Environmental Protection Agency Brownfields Assessment Cooperative Agreement; the City of Lexington, NC received a letter of Eligibility to enter the site into the North Carolina Brownfields Program on December 15, 2006; The city of Lexington, NC purchased the site on May 15, 2007 and combined all parcels associated with the environmental issue into a single parcel 6725-02-75-9974; the site currently has no soil restrictions, whereas groundwater restrictions have been expanded to the entire parcel;		

Site Name and Address	Database	Location in relation to subject property	Risk category
	Description		
	Property operated as a furniture manufacturer, with processes including wood drying, finishing, and shipping; A Phase I and Phase II EA has been performed onsite.		
Lexington Furniture Industries 411 S. Salisbury Street	*RCRA-NonGen*	Equal/Higher Elevation; West of the subject property	Potential Risk
	Former generator of large quantities of hazardous wastes, including ingnitable hazardous wastes such as lacquer thinner (Waste Code D001), methyl ethyl ketone (Waste Code D035), spent non-halogenated solvents comprising 10 percent or more of the waste mixture and one or more solvent within Waste Codes F001, F002, F004 an F005 (Waste Code F003), spent non-halogenated solvents comprising 10 percent or more of the waste mixture and one or more solvent within Waste Codes F001, F002 and F004 (Waste Code F003); the facility has received several notices of violation (NOVs) spanning from 1984 through 1990.		
Lexington Furniture Industries 411 S. Salisbury Street	*IMD:* Incident Management Database	Equal/Higher Elevation; West of the subject property	Potential Risk
	Facility identification number 17353 designated for the facility; incident discovered on April 4, 1997, and subsequent assessment activities determined the presence of contaminated soil and groundwater as a result of site activities; contaminants of concern (COCs) appear to be: thinner, naphtha and gasoline constituents. The gasoline constituents appear to have entered the subsurface from a leaking UST for storing gasoline and diesel.		

Notes:

RCRA-CESQG: Conditionally Exempt Small Quantity Generators; facilities that generate less than 100 kilograms (kg) of hazardous waste or less than 1 kg of acutely hazardous waste per month.

State and tribal leaking underground storage tank (LUST) list: State inventory of reported leaking UST incidents. The data was provided by the North Carolina Department of Environment and Natural Resources (NCDENR).

UST Database: NCDENR database of registered USTs.

US BROWNFIELDS: EPA's list of Brownfields properties from the 'Cleanups in My Community' program.

RCRA-NonGen: Properties listed within the RCRA database, but do not currently generate hazardous wastes.

IMD: Incident Management Database

The following **Table 3-21** identified sites from the records review are located between one-eighth and one-quarter mile from the proposed site of the Lexington Depot District re-development area. The sites are also shown in **Figure 3-16 above**.

Table 3-21: Potential Hazardous Sites (one-eighth to one-quarter mile)

Site Name and Address	Database	Location in relation to subject property	Risk category
	description		
The Dispatch Publishing Company, Inc.; 30 E. First Avenue	*RCRA-CESQG*	Equal/Higher Elevation; North of subject property	Potential Risk
	Owned and operated by the New York Times Company, the facility generates ignitable and spent non-halogenated solvent wastes under waste codes D001 and F003, respectively. The facility received a written, informal notice of violation (NOV) in October of 1995, and achieved compliance in November of 1995.		
John Schwartz; 70 N. Church Street	*RCRA-CESQG*	Lower Elevation; East-northeast of the subject property	Low
	The facility received written, informal NOVs in January 1997, December 1984 and May 1984, of which ultimately resulted in compliance.		
Cecil Evans Shell Service; 500 S. Main Street;	*LUST*	Equal/Higher Elevation; West of the subject property	Potential Risk
	Based upon a Phase I environmental site assessment (ESA), groundwater and soil contamination in excess of gross contamination levels (GCLs) for gasoline and diesel constituents were determined to be present beneath the facility property, with semi-annual groundwater monitoring events occurring since May of 2001. Facility was filed under UST incident number 19470.		
Leonard H. Craver; 528 S. Main Street;	*LUST*	Equal/Higher Elevation; West of the subject property	Potential Risk
	Groundwater and soil contamination determined beneath the property as a result of UST operations. Incident number 6135 was given to the property upon receipt of a notice of regulatory requirements (NORR) in June of 1990, and does not appear to be a closed case.		
Firestone Complete Auto Care; 402 S. Main Street	*LUST*	Equal/Higher Elevation; West-northwest of the subject property	Does not appear to pose a risk to the site.
	Soil contamination discovered at the property, and site was designated Incident number 37878 as a result of operations from UST number WS-8615. Source appears to be from the use of hydraulic lifts at the property. Risk Classification is low.		
Etna Self Service #2-Lexington; 905 S. Talbert Avenue	*LUST*	Equal/Higher Elevation; Southwest of the subject property	Does not appear to pose a risk to the site

Site Name and Address	Database	Location in relation to subject property	Risk category
	description		
	under Incident Number 16258, issue was discovered in 1996, during removal of a kerosene UST; incident closed out in 1997; additional incident number designated to site (22344) upon discovery of soil and groundwater contamination beneath the property, of which this incident number is still open; Site has been granted a low risk classification, and issue is now closed out as of July of 2001.		
Lexington Electric – Garage; 907 Talbert Boulevard	*LUST*	Equal/Higher Elevation; Southwest of the subject property	Does not appear to pose a risk to the site.
	Soil impacts found upon removal of gasoline/diesel USTs under Incident Numbers 13098 and 13312; Risk Classification of low was granted to site.		
Tenneco #56031-Direct Sta.; 700 S. Main Street	*LUST*	Equal/Higher Elevation; West-southwest of the subject property	Potential Risk
	Incident number 5246 designated for the property in 1989, upon discovery of groundwater contamination deriving from petroleum UST operations; Site was granted an intermediate risk classification, based upon high concentrations of petroleum constituents in groundwater, and initial detection of free product in the subsurface; incident is still considered an open case.		
First Evangelical Lutheran Church; 320 S. State Street	*LUST*	Equal/Higher Elevation; Northwest of the subject property	Does not appear to pose a risk to the site.
	Incident number 37323 given to the site in 2008, with closure achieved in 2009.		
Gobble's Service Station; 1 Fairview Drive	*LUST*	Lower Elevation; East of the subject property	Low Risk
	Incident number 6161 given to the site, based upon soil contamination discovered during gasoline UST closure in 1990; groundwater and soil contamination present onsite; issue does not appear to be closed.		
City of Lexington Garage Department; 827 Talbert Boulevard	*LUST*	Lower Elevation; South of the subject property	Does not appear to pose a risk to the site.
	Incident number 13950 given to the site in 1995 as a result of a leaking motor oil UST product line leak; issue was closed out in 2002.		
Pantry #3184; 905 South Talbert Boulevard	*LUST TRUST*	Equal/Higher Elevation; Southwest of the subject property	Potential Risk
	Leak discovered by automatic line leak detector May of 2000, and was		

Site Name and Address	Database	Location in relation to subject property	Risk category
	description		
	granted Site ID 22344 based upon the presence of groundwater contamination.		
Tenneco #56031-Direct Sta.; 700 S. Main Street	*LUST TRUST*	Equal/Higher Elevation; West-southwest of the subject property	Potential Risk
	Incident number 5246 designated for the property in 1989, upon discovery of groundwater contamination deriving from petroleum UST operations; Site was granted an intermediate risk classification, based upon high concentrations of petroleum constituents in groundwater, and initial detection of free product in the subsurface; incident is still considered an open case.		
City of Lexington Garage Department; 827 Talbert Boulevard	*LUST TRUST*	Lower Elevation; South of the subject property	Does not appear to pose a risk to the site.
	Incident number 13950 given to the site in 1995 as a result of a leaking motor oil UST product line leak; issue was closed out in 2002.		
Autozone Site – Welborn Property; 501 South Main Street	*LAST*	Equal/Higher Elevation; West of subject property	Potential
	Incident number 16459 given for site, although comments state in the EDR report that contamination onsite may be from upgradient sources.		
Gerald's Detail Shop; 113 North Salisbury Street	*LAST*	Equal/Higher Elevation; North-northeast of subject property;	Potential Risk
	Incident number 95152 given to site, based upon discovery of waste oil dumping onsite, and subsequent soil contamination; issue has not yet received closure.		
Young's BP Service; 521 South Main Street	*UST*	Equal/Higher Elevation; West of subject property	Does not appear to pose a risk to the site.
	Four Gasoline USTs, with one being permanently closed on January 31, 1992.		
Firestone Store 06KT/003050; 402 South Main Street	*UST*	Equal/Higher Elevation; West-northwest of subject property	Does not appear to pose a risk to the site.
	Gasoline UST, removed in 1982; waste oil UST, removed in 1993; Gasoline UST, removed in 1982.		
Master Service Station; 301 South Main Street	*UST*	Equal/Higher Elevation	Does not appear to pose a risk to the site.
	Northwest of subject property; Five USTs; three gasoline USTs, removed		

Site Name and Address	Database	Location in relation to subject property	Risk category
	description		
	in 1988, and two used oil USTs, also removed in 1988.		
Lexington Tel. – Central Office; 18 East Second Avenue	*UST*	Equal/Higher Elevation; North-northwest of subject property	Does not appear to pose a risk to the site.
	Two USTs – one heating oil and one fuel oil – removed in 1996 and 1994, respectively.		
Kimbrells Furniture; 201 South Main Street	*UST*	Equal/Higher Elevation; North-Northwest of the subject property	Does not appear to pose a risk to the site.
	One heating oil UST currently in use at the site.		
Pantry 3184; 905 South Talbert Boulevard	*UST*	Equal/Higher Elevation; Southwest of subject property	Does not appear to pose a risk to the site.
	Two former gasoline USTs, two former diesel USTs and two former kerosene USTs; two currently operating gasoline USTs, one currently operating diesel UST and one currently operating kerosene UST.		
City of Lexington; 907 Talbert Boulevard	*UST*	Equal/Higher Elevation; Southwest of subject property	Does not appear to pose a risk to the site.
	One gasoline and one diesel UST, both of which were removed in 1990.		
City of Lexington; City Hall	*UST*	Equal/Higher Elevation; North of subject property	Does not appear to pose a risk to the site.
	One fuel oil UST, removed in 1960.		
City of Lexington Police Department; 106 North Main Street	*UST*	Equal/Higher Elevation; North of subject property	Does not appear to pose a risk to the site.
	One gasoline UST, removed in 1992		
United Globe Corp., Plant 200; Elk Street	*UST*	Equal/Higher Elevation; South-southwest of subject property	Does not appear to pose a risk to the site.
	One gasoline UST, removed in 1980.		
S&K express; 700 South Main Street	*UST*	Equal/Higher Elevation; West-southwest of subject property	Does not appear to pose a risk to the site.

Site Name and Address	Database	Location in relation to subject property	Risk category
	description		
	Three gasoline USTs, all currently in use.		
Gobble's Service Station; 1 Fairview Drive	*UST*	Lower Elevation; East of the subject property	Does not appear to pose a risk to the site.
	Three gasoline USTs and one diesel UST, all removed in 1990.		
City of Lexington Garage Department; 827 Talbert Boulevard	*UST*	Lower Elevation; South of the subject property	Does not appear to pose a risk to the site.
	Three former and one current gasoline USTs; two current and two former diesel USTs; one former used oil UST.		
CMT Corporation; 904 Talbert Boulevard	*RCRA-NonGen*	Equal/Higher Elevation; Southwest of subject property	Potential Risk
	Formerly produced spent non-halogentated wastes onsite; site operations do not currently involve the generation of theses wastes.		
Leonard Cleaners; 406 East Center Street	*RCRA-NonGen*	Lower Elevation; East of subject property	Low Risk
	Formerly used halogenated solvents for dry cleaning operations;		
Lexington Furniture Industries; 200 N. Church Street	*RCRA-NonGen*	Lower Elevation; East-northeast of subject property	Low Risk
	Formerly produced spent ignitable and non-halogentated wastes onsite; site operations do not currently involve the generation of theses wastes.		
Autozone Site – Welborn Property; 501 South Main Street	*IMD*	Equal/Higher Elevation; West of subject property	Potential Risk
	Groundwater contamination detected at the property, with gasoline and diesel constituents present; issue appears to be on-going.		
Cecil Evans Shell Service; 500 S. Main Street	*IMD*	Equal/Higher Elevation; West of the subject property	Potential Risk
	Phase I Environmental Site Assessment (ESA) included follow-up groundwater sample collection, resulting in detection of groundwater contamination from gasoline constituents contained in underground sources; ; issue appears to be on-going.		
Etna Self Service #2-Lexington; 905 S. Talbert Avenue	*IMD*	Equal/Higher Elevation; Southwest of the subject property	Does not appear to pose a risk to the site.
	Minor soil contamination confirmed during the removal of a kerosene UST; issue is closed.		
Pantry 3184; 905 South Talbert Boulevard	*IMD*	Equal/Higher Elevation; Southwest of subject property	Potential Risk
	Groundwater contamination detected, based upon a release		

Site Name and Address	Database	Location in relation to subject property	Risk category
	description		
	determined by an automatic line leak detector associated with a fueling system; no updates in the database since 2000, so it is inconclusive as to the status of the issue at this property.		
Lexington Electric – Garage; 907 Talbert Boulevard	*IMD*	Equal/Higher Elevation; Southwest of the subject property	Does not appear to pose a risk to the site.
	Release determined upon results of soil sampling during underground waste oil, gasoline and diesel UST removals in 1990 and 1992; groundwater contamination determined to have derived from waste oil tank; Issues were closed out for gasoline/diesel soil issue in 1997, waste oil issue in 2001 and gasoline/diesel groundwater issue in 2002.		
Lexington Sunoco; South Main Street	*IMD*	Equal/Higher Elevation; North of subject property	Potential Risk
	Contamination determined in 1990 upon removal of used oil UST at the site; issue appears to be open, with no updates since 1992.		
Tenneco #56031-Direct Sta.; 700 S. Main Street	*IMD*	Equal/Higher Elevation; West-southwest of the subject property	Potential Risk
	Leak from a gasoline UST detected in 1989 at site, based upon groundwater sample results; issue appears to still be open, with most recent update being 1998.		

Notes:

RCRA-CESQG: Conditionally Exempt Small Quantity Generators; facilities that generate less than 100 kilograms (kg) of hazardous waste or less than 1 kg of acutely hazardous waste per month.

State and tribal leaking underground storage tank (LUST) list: State inventory of reported leaking UST incidents. The data was provided by the North Carolina Department of Environment and Natural Resources (NCDENR).

UST Database: NCDENR database of registered USTs.

US BROWNFIELDS: EPA's list of Brownfields properties from the 'Cleanups in My Community' program.

RCRA-NonGen: Properties listed within the RCRA database, but do not currently generate hazardous wastes.

IMD: Incident Management Database.

The remainder of properties identified in the database search are located at distances greater than one-quarter mile from the subject property and the COL does not expect that they will impact the property, given the distance and prevailing subsurface conditions of clay soils and lack of a shallow aquifer in the Project Area. In addition, no spills or other incidents of concerns have been recorded for the property, and no known landfill sites are within one-half of a mile of the property (NTH 2002).

In addition to the 2012 database survey, in 2014 a Phase I and Phase II Environmental Site Assessment and an Asbestos and Lead Paint Survey at the former Lexington Candy Factory building, which is part of the LHB Plant 1. Based upon a survey of this one building, there is the presence of asbestos-containing material (ACM) and lead-based paint (LBP) on site.

Impacts

No Build

The No Build alternative would have no impact on public safety.

Build Alternative

Based on the results of the database review and area evaluation, the Lexington MMTS does not appear to have been significantly environmentally impacted by previous operations on the subject property. Based upon a more detailed survey of a portion of the LHB Plant 1, there is presence of asbestos-containing material (ACM) and lead-based paint (LBP) on site.

Mitigation

Once final design plans are developed, the COL will develop a plan to manage potentially contaminated soils and groundwater. Several areas surrounding the subject property are considered RECs to the subject property - specifically, areas that formerly operated as the Dixie Furniture Company and the Elk/United Furniture Company. Construction activities have the potential to discover previously unknown hazards, and ongoing monitoring will be considered under the direction of the COL. Prior to construction activities, the COL or others will conduct additional contamination investigations, including pre-demolition/ pre-renovation surveys of building and undertake the necessary abatement or removal of ACM and LBP. The COL has recently completed Phase I and Phase II investigations. Moreover, the COL, as part of its Brownfield Agreement, is committing to develop a "Living Environmental Management Plan" with any physical redevelopment of the property (NCDENR/City of Lexington Draft Brownfield Agreement, 2015).

3.20 Recreational Opportunities

Description and Methods

Existing general Land Use data and mapping information were obtained from several sources including COL Office of Business & Community Development and Engineering Departments, COL Land Use and Land Development Ordinances, COL and Davidson County GIS websites.

Existing Conditions

No formal parks or recreational facilities currently exist within the Depot District or within proximity to the Project site.

Impacts

No Build

The No Build Alternative would not impact parks or recreation areas.

Build Alternative

The Build Alternative would not adversely impact parks or recreational areas. The Build Alternative would create additional park and open space with improved pedestrian and bike routes for the positive benefit of citizens and visitors to the COL and provide additional venues for local cultural events.

Mitigation

No mitigation is required.

3.21 Historic, Archeological, Architectural, or Cultural Significance

This section discusses cultural resources that could potentially be affected by the proposed Project. Cultural Resources is an inclusive term that consists of the sub-sets of historic resources, historic properties, archaeological resources and traditional cultural properties. Historic resources consist of all properties that are primarily non-archaeological in nature and can include such diverse properties as residential buildings, farmhouses, sheds, barns, industrial structures, mills, commercial buildings, objects, markers and bridges. Archaeological resources can be either prehistoric or historic in nature. Historic properties specifically refer to those properties that are listed in, or eligible for listing in, the National Register of Historic Places (NRHP). Archaeological resources are those properties that require excavation or in-depth study to obtain data. Traditional cultural property is a term that refers to any prehistoric or historic neighborhood, community, location, or object generally defined as associated with cultural practices or beliefs.

Description and Methods

Historic structures fieldwork and research was conducted by an architectural historian meeting the Secretary of the Interior's Professional Qualifications Standards for Architectural History. As put forth in Section 106 of the National Historic Preservation Act (Section 106) of 1966 (NHPA), an Area of Potential Effect (APE) was established for the Project. The APE of a project consists of "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking" (36 CFR §800.16(d)). For the purposes of the current study, an APE was developed in consultation with the North Carolina State Historic Preservation Office (SHPO) and is depicted in **Figure 3-17**.

Initially, researchers reviewed existing data and previously completed reports to gain an understanding of resources in the Project area. A search for archival documentation on the APE was performed. Archival research was conducted to identify resources requiring initial or further investigation as well as to locate previously evaluated historic resources, districts, markers, cemeteries, bridges and culverts, and NRHP records to determine if any NRHP-listed or previously documented buildings, structures, objects, or state historic markers lie within or near the proposed APE.

In March and October 2012, a reconnaissance survey was performed that identified 56 potential cultural resources in the APE. At a meeting on October 25, 2012, the survey results were presented to SHPO

staff, who recommended an intensive-level inventory be conducted to determine eligibility of 20 of those 56 resources.

During historic resources surveys, the identified resources are evaluated by applying the four NRHP criteria of eligibility. The four criteria are defined in the Secretary of the Interior guidelines published under the authority of the NHPA. To be considered eligible for inclusion in the NRHP, a resource must meet at least one of the four criteria. The Secretary of the Interior guidelines state that:

> *The quality of significance in American history, architecture, archeology and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:*
>
> *(a) that are associated with events that have made a significant contribution to the broad patterns of your history; or*
>
> *(b) that are associated with the lives of persons significant in your past; or*
>
> *(c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
>
> *(d) that have yielded, or may be likely to yield, information important in prehistory or history (36 CFR § 60.4).*

In historic resources surveys, the seven aspects of integrity defined by the National Park Service for use in assessing National Register eligibility are applied to the evaluation of the integrity of historic-age resources. These seven aspects are integrity of location, design, setting, materials, workmanship, feeling and association.

The level of integrity required for NRHP eligibility is different for each of the four NRHP Criteria of Significance. If a resource is being assessed for significance because of its association with an event, then integrity of setting, feeling and association are more important. If a resource is being assessed for significance as an example of design, then integrity of location, design, materials and workmanship are more important. See How to Apply the National Register Criteria for Evaluation (National Park Service 1997) for a full explanation of how the criteria are applied. The Intensive-Level Historic Architectural Analysis was submitted to the SHPO for review and concurrence on June 7, 2013. By letter dated November 4, 2013, SHPO responded concurring with all but four of the recommendations. SHPO also recommended two new historic districts, described below. The November 4, 2013 letter from SHPO is included in **Appendix B**.

Existing Conditions

The reconnaissance survey of historic-age resources resulted in the identification of 56 historic age resources within the Project APE. Initially, SHPO selected 20 of these resources for intensive-level investigations; however, during that research an additional three resources were identified as sub-resources of the 20 resources and were also included in the analysis for National Register eligibility, for a total of 23 resources surveyed.

One resource was identified within the APE that is currently listed in the NRHP: Grace Episcopal Church, 419 South Main Street. Other identified resources recommended in the report are shown in **Table 3-22.**

The Table also lists the SHPO concurrence with the recommendation, or an alternative recommendation from the SHPO. **Table 3-23** shows those resources recommended as not eligible, and the SHPO concurrence or alternative recommendation. Descriptions of the eligible resources follow Table 3-20. Some resources were combined in the final survey report and are thus combined in Tables 3-19 and 3-20. More detailed information on each resource, including maps, historic and existing condition photographs, can be found in the April 2013 survey in **Appendix D.**

Potential historic resources within APE inventoried at intensive level, identified by URS survey numbers:

1. United Furniture Industries
2. Lexington Chair Company
3. Elk Furniture Company/United Furniture Company
4. Wennonah South Side Mill Village
5. Wennonah Cotton Mills
6. South Salisbury Street Houses
7. Dixie Furniture Company

7A. Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices

7B. North Carolina Candy Company

8. Lexington Southern Railway Freight Depot
9. Lexington City Light and Water Office
10. Siceloff Manufacturing Company
11. Eureka Trouser Company
12. Lexington Shirt Corporation
13. Wellborn Building
14. Sink, Taylor & Evans Auto Sales and Service Building
15. W.T. Grant Department Store/Kimbrell's Furniture Building
16. Redwine's Grocery and Clodfelter's Market
17. Family Shoe Center
18. Expansion of Uptown Lexington Historic District

18A. Hedrick Building

19. Grace Episcopal Church
20. Floyd Lee Berrier VFW Post No. 3074

LEXINGTON MMTS ENVIRONMENTAL ASSESSMENT

FIGURE 3-17 POTENTIAL HISTORIC RESOURCES

Lexington Depot District

LEGEND

- POTENTIAL HISTORIC RESOURCE
- APE
- RAILROAD
- STREAM
- BUILDING
- PARK
- PARCEL

N

1 INCH = 1,000 FEET

0 375 750

Feet

Table 3-22: Historic Resources Recommended as Eligible for National Register Listing

Resource	Recommendation	SHPO Response
Grace Episcopal Church	NHRP-listed, remains eligible	Concur
Wennonah South Side Mill Village*	Eligible	Concur*
Wennonah Cotton Mills*	Eligible	Concur*
Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices	Eligible	Recommended for Lexington Industrial Historic District contributing resource
North Carolina Candy Company	Eligible	Recommended for Lexington Industrial Historic District contributing resource
Lexington Southern Railway Freight Depot	Eligible	Recommended for Lexington Industrial Historic District contributing resource
Lexington City Light and Water Office	Eligible	Recommended for Lexington Industrial Historic District contributing resource
Siceloff Manufacturing Company	Eligible	Recommended for Lexington Industrial Historic District contributing resource
Eureka Trouser Company	Eligible	Recommended for Lexington Industrial Historic District contributing resource
Expansion of Uptown Lexington Historic District to include five resources: W.T. Grant Department Store/Kimbrell's Furniture Building; Redwine's Grocery and Clodfelter's Market; Hedrick Block; Family Shoe Center; and Sink, Taylor, and Evans Auto Sales and Service Building.	Eligible	Concur for W.T. Grant Department Store/Kimbrell's Furniture Building; Redwine's Grocery and Clodfelter's Market; and Hedrick Block only; Non-concurrence for Family Shoe Center; and Sink, Taylor, and Evans Auto Sales and Service Building (determined not eligible)
Hedrick Building/Block (URS survey #18A)	Eligible	Concur

* Also recommended by SHPO to be combined into a single Wennonah Cotton Mill and Mill Village Historic District.

Table 3-23: Historic Resources Recommended as Not Eligible for National Register Listing

Resource	Recommendation	SHPO Response
United Furniture Industries	Not eligible	Concur
Lexington Chair Company	Not eligible	Concur
Elk Furniture Company/United Furniture Company	Not eligible	Concur
South Salisbury Street Houses	Not eligible	Concur
Dixie Furniture Company**	Not eligible	Non-Concurrence – recommended as contributing resource to the Lexington Industrial Historic District and to include the other resources noted
Lexington Shirt Corporation	Not eligible	Non-Concurrence -- recommended as contributing resource to the Lexington Industrial Historic District
Wellborn Building	Not eligible	Concur
Floyd Lee Berrier VFW Post No. 3074	Not eligible	Concur

**Described in other sections of this EA as the Lexington Home Brands (LHB) Plant 1

As seen in Tables 3-19 and 3-20, SHPO did not concur with all of the recommendations. In their November 4, 2013 letter, SHPO recommended that eight resources be combined into a SHPO-proposed Lexington Industrial Historic District. Moreover, SHPO staff recommended that three additional resources be included as contributing resources within the SHPO-proposed Lexington Industrial Historic District:

- the railroad ROW,
- the one-lane tunnel under the railroad connecting Railroad Street and Elk Street, and
- the enclosed elevated passage over Railroad Street between Buildings 16 and 23.

Description of Resources

Grace Episcopal Church (National Register Listed in 2006) – (description taken from Phillips, 2006): Located at 419 South Main Street in Lexington, North Carolina, the 1901-1902 Grace Episcopal Church is a west-facing, red brick Late Gothic Revival-style building. It exhibits such typical features of the style as a steeply pitched gable roof, lancet-arched doors and windows, buttresses, and a front corner tower. Atypical features include the detailing of the tower and the polygonal narthex that projects from the front of the church. Side and rear additions to the church dating from 1951, 1957, and 1964 are sensitively placed, attached, and designed.

The property, forming a rectangle composed of the church with its additions and parking lot, constitutes part of the current church tax parcel. The remainder of the property extends southward to East Fifth Street and eastward to South Salisbury Street, excluding a rectangular quarter-acre house lot at the corner of East Fifth and South Salisbury streets. The non-nominated portion of the church property contains the detached 1987 church, located south of the 1901-1902 church.

Grace Episcopal Church retains the significance, integrity, and boundaries described in its National Register nomination. It retains a high degree of integrity for all seven elements of integrity. Its

boundaries, which encompass less than one acre, remain the same as those described in the nomination.

Wennonah South Side Mill Village (Determination of Eligibility 2013) – Located at 927-939 South Salisbury Street and 936-958 Wenco Drive, twenty-one of the 23 houses that comprise this resource first appear on a Sanborn fire insurance company map of March 1896. All 23 of the South Side dwellings are very similar. All are one-story tall, frame, and gable-ended, with three bays—a window to either side of the entry—across their front facades. All have replacement modern porches that are only as wide as their entries or that extend across all three bays but not the full façade. All are sided with vinyl and stand on concrete-block foundations that do not appear to be original. All or almost all have modern one-over-one sash. The houses can be divided into two groups, however, that vary by roof pitch, the symmetry of their facades, and original presence or absence of rear ells. Twelve houses—the four eastern houses on South Salisbury Street (927, 929, 931, and 933), and the eight behind (south of) them on either side of Wenco Avenue (936, 938, 940, and 942 on the north and 937, 939, 943, and 945 on the south)—have relatively steeply pitched gables, clearly asymmetrical front elevations, and no original ells. The other ten houses—935, 937, and 939 South Salisbury and 946, 947, 948, 949, 950, 951, and 958 Wenco—have shallower gable pitches, symmetrical front elevations, and original shed-roofed ells, which are visible on the Sanborn maps. The only exception is 953 Salisbury, which has an off-center front door that may have been shifted.

The 23 houses of the Wennonah South Side Mill Village are National Register-eligible under Criterion A for their significance as a very early mill village and a very early example of worker housing in Lexington, regardless of how questions about their ownership might be resolved. They retain sufficient integrity of all seven aspects of National Register integrity to support this significance, in spite of their alterations. Due to the alterations of siding, sash, and porches, however, the group of houses does not retain sufficient integrity to support eligibility under Criterion C for their architecture. The period of significance for the houses is ca.1886-1896. The boundaries of the resources contain three parcels, encompassing approximately four acres.

Wennonah Cotton Mills (Determination of Eligibility 2013) – Located at 800 South Salisbury Street, the principal buildings currently standing within the Wennonah Cotton Mills complex date from its earliest construction. Mill No. 1 on the west, the first built, remains a long, massive, two-story, brick building. It retains its corner quoins, three-story stair towers, and ornately corbelled cornices, pilasters, and arched bays. An original one-story picker house also remains affixed to its south end. Virtually all of the mill's many bays, which once provided copious amounts of natural light to the interior, have been bricked in or otherwise sealed. Additionally, it has lost the mansard roof that once topped its east stair tower, as well as two soaring squared chimneys. A series of one-story dye and machine-related buildings that were erected between ca.1886 and 1948 adjacent to part of its long west elevation have also been removed. A few small, later additions have been appended to the mill.

East of and perpendicular to Mill No. 1 stands Mill No. 2, which was built within a few years of the first mill. It too is a long, rectangular, two-story, brick factory building with arched bays divided by pilasters and three-story stair towers. Its cornices are corbelled, but less elaborately than those of its predecessor. It retains an imposing 110'-tall brick stack at its southeast. Like Mill No. 1, its bays have been filled and it has picked up additions, notably at its east end. The historic ones date from ca.1896-1902, ca.1929-1948, and ca.1949-1959. There are also two relatively small modern additions at the east and west. The complex also retains six early detached buildings. To the south of Mill No. 1 is a rectangular, one-story, brick Cotton Storage building erected contemporaneously with that mill. Its bays have been bricked in, but it retains the segmental arch of a former opening and parapet walls. To the

east of Mill No. 1 is a one-story brick-veneered building that originally served as Cotton Warehouses and Opening Room. The three warehouses, which are divided by decorative parapet firewalls, were erected between 1896 and 1902. The opening room was added between 1929 and 1948. Its angled southeast elevation reflects the former presence of a railroad spur. Opposite (south of) the opening room, on what would have been the other side of the tracks, is an individual, one-story, brick Cotton Warehouse that was also erected between 1929 and 1948. The former Wennonah Office stands to the north of Mill No. 1 and Mill No. 2 at the complexes' principal Salisbury Street entrance. Its central brick portion was erected between 1886 and 1896 and retains corbelled arches at its windows. Between ca.1949 and 1959, additions were made on its north and south elevations. Just across the entry drive from the former office, adjacent to Mill No. 1, is a one-story, brick, gable-end Warehouse that dates from ca.1902-1907. It retains a segmental arch over one filled window bay. Affixed to its west end is a long, one-story, metal-sided, brick Stock Room. Half of it, divided from the warehouse by a parapeted firewall, was erected between 1929 and 1948. It was extended further to the west between ca.1949 and 1959. Other smaller detached buildings that once stood near the two mills, along with a dye house complex partially attached to the west side of Mill No. 1, are no longer extant.

The Wenonah Cotton Mills complex is recommended for National Register listing under Criterion A for its association with the textile industry in Lexington and Davidson County from the late nineteenth century into the mid-twentieth century, and under Criterion C as an excellent example of industrial architecture from that period in the city and the county. The complex is unusually intact, retaining almost all of its original late nineteenth-century buildings, including its two mills, its office, and a cotton storage building. The integrity of the complex is sufficiently intact to support its eligibility under Criteria A and C. Its period of significance is ca.1886-1959, by which date it was almost completely built out. Its boundaries are those of its 10.45-acre lot — which encompasses all of its buildings and the land that has historically surrounded them.

Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices (Determination of Eligibility 2013) -- The Mountcastle Knitting Company factory was opened in late 1928, founded by George Williams (G.W.) Mountcastle (1871-1945), who was a major industrialist and financial figure in late nineteenth and early twentieth-century Lexington. In the early or mid-1950s, however, the Dixie Furniture Company acquired the Mountcastle building as part of its rapid post-war expansion in the area. When Dixie purchased the former knitting factory from Mountcastle, it converted it into offices and showrooms. Located on the south side of South Salisbury Street between East 4th Avenue and East 5th Avenue, the Mountcastle Knitting factory block is a long, well-lit, brick building. Due to the uneven terrain, the building was three stories tall on the south where it fronted on Railroad Avenue and two stories and a basement tall on the north where it faced Salisbury Street. Three of the block's four elevations appear to be relatively little changed since construction. Along the west side elevation of the principal block at Railroad Avenue, Mountcastle had also erected a smaller two-story (or one-story and basement) brick wing that held the washing room and boiler room. Dixie Furniture likely added an additional two stories, which are windowless, above this wing in the 1950s when it acquired the factory.

The most notable change to the original factory building, visually and in terms of architectural design, is the airy, three-story-tall, glass extension that Dixie commissioned Voorhees and Everhart to design as the face of its new company offices in the mid-1950s. It is dominated on the exterior by an innovative tilt-up curtain wall of metal posts and glass, and on the inside by a soaring open space, a floating stair, flush pale wooden paneling, and a floor of gray stone blocks. An openwork brick wall at the west was later added. Although the building is vacant and water damage is apparent, the addition appears to be unchanged since its construction, other than the placing of a framed-in glass entry beneath the

cantilevered roof of its original entryway. The lawn and landscaping that separate the Modernist front from Salisbury Street are contemporary with the façade.

The former Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices building is a largely intact example of an early twentieth-century factory in Lexington and of a mid-century Modernist building facade. Almost all of its windows remain in place and are not boarded up and its Modernist façade is also almost entirely intact. It retains all seven elements of National Register integrity, which support its significance and eligibility for National Register listing under Criterion A for its association with early twentieth-century manufacturing in Lexington and under Criterion C as an excellent example of industrial architecture during the time. It is also eligible under Criterion C for its notable mid-century Modernist façade, which was designed by the prolific High Point firm of Voorhees and Everhart. As many of the firms' buildings are still extant in High Point and elsewhere in the state, the building is not believed to be eligible under National Register Criterion B for its association with it. The resource's period of significance extends from its 1928 date of construction to the 1957 date of construction of its mid-century Modernist façade. This encompasses the period it functioned as a knitting factory and its two principal dates of construction. The resource's National Register boundaries are recommended as those of its historic footprint and the property extending north of its façade to Salisbury Street. This excludes the later buildings to either side of the building and includes the historic landscaped lawn that buffers it from Salisbury Street. This boundary takes in less than one-acre of the building's current lot, which covers 18 acres and is owned by the City of Lexington.

North Carolina Candy Company (Determination of Eligibility 2013) -- The main body of the two-story brick North Carolina Candy Company factory building, erected in 1928 utilizing parts of earlier walls, remains largely intact. Its south-facing (Railroad Street) elevation retains its segmental-arched bays. While these have been bricked over at the first story, all but two at the second story remain open and continue to hold their original or early sash. The original, one-story, brick wing at the block's east is also in place. It has been altered more than the main block through the filling in or replacement of its bays, but it retains its angled corner entryway and a raised soldier course of bricks just beneath its flat roof. The uppermost portion of the main block, which is notable for its parapet front on Railroad Street and a long clerestory window, dates from between 1923 and 1928. The windows and metal framework of the clerestory appear to be an intact feature dating from 1928. The one-story wing at the main block's west elevation also dates from 1928, although its bays have been filled or altered.

The former North Carolina Candy Company Factory building is a largely intact and rare example of an early twentieth-century candy factory in North Carolina. Its period of significance is its dates of construction, ca.1919-1928. Although many of its bays have been bricked in, it retains its brickwork, the arches of its bays, and a steel-truss-supported clerestory window that appears to retain its original glass. It therefore has sufficient integrity of all seven National Register elements of integrity to support National Register listing under Criterion A for its association with early twentieth-century candy manufacturing in Lexington, and perhaps North Carolina, and under Criterion C as an excellent example of industrial architecture during the time in Lexington. The resource's National Register boundaries are recommended as those of its historic footprint and the small amount of land to its west and north with which it was historically associated. This excludes the later buildings to the immediate west and north that were not associated with its historic significance. This boundary takes in less than one-acre of the building's current lot – at the northwest corner of South Railroad Avenue and East 3rd Avenue —which covers 18 acres and is owned by the City of Lexington.

Lexington Southern Railway Freight Depot (Determination of Eligibility 2013) – Located at the south side of South Railroad Avenue just east of intersection with East 2nd Avenue, the Lexington Southern

Railway Freight Depot. The depot has changed little since its construction and certainly little since Touart photographed it in 1987 during a previous survey. (Functionally, it is now home to a seasonal farmers' market and owned by the City of Lexington.) It retains three bays at its east office end and two bays at its west end. Its north side elevation is marked by three window bays that once served the freight office and nine large freight-door bays crowned by flat concrete lintels. Its south side elevation has two rather than three window bays at the office and ten rather than nine freight bays that are topped by glass transoms that once lit the interior of the freight portion of the building. A gabled roof of tiles, possibly of concrete, continues to top the depot. The only notable alteration is the filling in of the office bays. A modern ramp that provides handicapped access connects to the south elevation. A concrete platform pad to the depot's west covers an area smaller than that of the original covered platform that extended out from the building's west gable end. Its size and construction indicate that it was not the platform historically associated with the depot. It appears to be less than 50 years old, although its basic poured concrete construction makes it difficult to date with precision. In spite of the loss of the covered platform, the freight depot—with its freight bays and location adjacent to two unused spur tracks and to the main rail line beyond—clearly retains its association with its original function.

The significance of the Lexington Southern Railway Freight Depot is similar to that of the North Wilkesboro Southern Railway Depot, a freight and passenger depot listed in the National Register in 2004 (Phillips). The Lexington depot is the only surviving depot in Lexington—an industrial city that required rail service to thrive—and the most tangible rail-related building in the city. It is largely intact and retains all seven elements of National Register integrity. It is therefore eligible for National Register listing under Criterion A in the area of significance of transportation. Its largely intact design and form are notable surviving representatives of railroad depot design in small communities—such as Lexington, Morganton, Shelby, and Asheboro—and it is therefore also eligible for National Register listing under Criterion C for its architecture. The depot's period of significance is 1930, its date of construction.

The Lexington Southern Railway Freight Depot National Register boundaries are recommended as the building's footprint as well as the sidewalk to its east side that borders an adjacent parcel; the sidewalk to its north that borders on Railroad Street; a strip of land to its west that takes in its associated concrete platform; and a strip of land to its south that includes the two moribund railroad spurs that once served it.

Lexington City Light and Water Office (Determination of Eligibility 2013) -- The ca.1922 Lexington City Light and Water Office is a solid, ornately finished building well fitted to its original function as the city's utilities office and power plant. It is a boxy building, about 30-feet across and 40-feet deep, with a tall first story set over a basement. Its brick walls are structural and highly decorative. The building is divided in Beaux Art fashion into three horizontal bands: a basement, a main body or piano nobile, and an attic or cornice. A concrete-floored platform at the rear elevation appears to be original or early; its brick foundation is hidden by a veneer of large regular blocks that give it the appearance of having been constructed of stone. Pipe railings at the platform are early though likely not original features. While the brickwork, form, and stolidity of the building remain intact, its bays have been altered. The front and rear (south) doors are not original, nor is any of the sash. Further, some of the bays may have been shortened and perhaps the building initially had small window openings beneath the cornice or plans for such openings. The lower, flat-roofed, one-story, brick wing to the main block's west is a later addition, possibly dating to about 1950.

The Lexington City Light and Water Office building is a largely intact and rare example of an early twentieth-century utilities building, a domestic and industrial need provided in Lexington by the city

since 1903. Its period of significance is ca.1922, its approximate date of construction. Although its bays have been altered, it retains its ornate brickwork, three-part form, and stolidity, all of which were appropriate to its important role in city life. It therefore retains sufficient integrity of all seven National Register elements of integrity to support National Register listing under Criterion A for its association with the local provision of utilities and under Criterion C as an excellent example of Beaux Arts-style architecture during the time in Lexington. The resource's National Register boundaries are recommended as those of its historic footprint and a portion of the open parking area to its south that was historically associated with it. The boundaries include the ca.1950 addition to the building's west. Although it does not contribute to the building's integrity, it is an integral part of the building and its plain finish does not unduly detract from the architectural integrity of the main block. The boundaries exclude more modern city buildings that occupy the remainder of the parcel to the south.

Siceloff Manufacturing Company (Determination of Eligibility 2013) -- The Siceloff Manufacturing Company complex at 200 East 2nd Avenue consists of buildings erected and altered during at least five phases of construction that occurred in 1915, ca.1923-1929, 1939, ca.1946-1948, and ca.1954. The original 1915 factory is a two-story brick building topped by a clerestory. A ca.1946 photograph depicts the building with segmental-arched openings at its front and side bays. The front (north) elevation had seven bays at its first store, seven above, end pilasters, and a parapet roof. The side elevations also had rows of segmental-arched bays at its two stories. Between 1923 and 1929 the building was extended by a two-story brick addition to its rear (south). The addition was a bit shorter than the original factory and lacked a clerestory, but its bays were also segmental-arched.

In 1939 an additional two-story-and-basement brick ell was added to the rear of the 1920s addition, extending the factory clear through from Pugh to Railroad Street. It was served by large casement windows that remain in place, but for the basement bays on the south rear elevation, which have been bricked over. When the addition went up, some of the bays on at least the west side elevation of the original factory were replaced with similar casement windows. Subsequently all bays of the east side elevation of the original factory were similarly altered, as were the second-story bays of the 1920s addition on the east elevation. Additionally, the clerestory was removed and all sash was updated. Therefore, the only intact components of the original factory and 1920s addition are their walls and the segmental arches of the front elevation of the original building and the east side second-story elevation of the addition. Between 1946 and 1948 the factory was extended by a long two-story-and-basement wing on Pugh Street that reached all the way to 2nd Avenue. Its finish matches that of the 1939 addition; it is a straightforward industrial building served by large casement windows. By ca.1948, therefore, the factory complex was essentially L-shaped with its hinge located at the original building.

About 1954 the complex received one final and extensive build-out. A one-story frame warehouse depicted on the 1948 map and in the historic photograph was replaced by a two-story brick building with a much larger frontage on Railroad Street. A photograph from the 1950s captures the build-out on Railroad Street, probably not long after its completion. Additions were also made to the south side of the long Pugh Street addition. These additions were, again, functional, two-story, brick buildings lit by expansive casement windows.

The former Siceloff Manufacturing Company is a rare local example of a largely intact factory complex that was constructed over the course of much of the first half of the twentieth century—from 1915 to ca. 1954—and which was utilized as a textile factory from 1915 until ca.1970. The complex is National Register eligible under Criterion A for its association with this significant industrial history and its period of significance is that of its building episodes, 1915 to ca. 1954. Its 1915 and ca.1923-1929 buildings were much altered during major building episodes in 1939, ca.1946-1948, and ca.1954. The complex as

a whole, however, retains sufficient integrity of all seven aspects of National Register integrity to support its historical significance under Criterion A. The alterations, however, have had a negative impact on the integrity of design, material, and workmanship of the 1915 factory and its 1920s addition, and the post-World War II additions are commonplace and not architecturally notable. The complex therefore does not have sufficient integrity or significance to support National Register eligibility for its architecture under Criterion C. The resource is also not eligible under Criterion B, for D.S. Siceloff and Leonard Craver, although locally notable, were not significant persons in terms of the requirements of that Criterion. The resource's recommended National Register boundary is all of its lot.

Eureka Trouser Company (Determination of Eligibility 2013) -- The former Eureka Trouser Company building likely looks little different than it did in 1906. It remains a rectangular, two-story, brick building fronting on East 2nd Avenue. Its front (west) façade has five bays enframed by pilasters at either end along with decorative brickwork beneath a flat cornice. The window bays have been boarded up, but retain their projecting brick sills and segmental-header-laid brick arches. The two central front entries—one with a single door, the other doubled—have wooden doors, each with five flat panels, that are original to the building or early additions. The window bays that march down the north and south sides of the building are framed by the same minimally decorative brickwork as those of the front façade. They have been boarded up, but are otherwise almost entirely intact. At the rear of the north elevation, one bay and part of a second have been hidden by an infill of concrete block. (The building once connected here with the Siceloff factory complex immediately to the north.) Near the center of the south elevation, at the first story, a later entry that displaced two window bays has been sealed with metal and concrete. The rear elevation still retains its five window bays at each story, intact, even though a storage building is shown abutting it on the 1948 Sanborn. Its addition and removal left no mark on the rear of the building.

The former Eureka Trouser Company factory building is a remarkably intact example of an early twentieth-century factory and of industrial architecture in Lexington. Its windows are boarded up and a few of its bays have been damaged, but it essentially looks much like it must have in 1906. It retains all seven elements of National Register integrity and is eligible for National Register listing under Criterion A for its association with early twentieth-century manufacturing in Lexington and under Criterion C as an excellent example of industrial architecture during the time. Its recommended period of significance is its 1906 date of construction. Its recommended National Register boundaries encompass its entire lot, or 0.13 acres, located at 210 East 2nd Avenue.

Expansion of Uptown Lexington Historic District (National Register Listed, 1996; Determination of Eligibility for expansion 2013) – The Uptown Lexington Historic District was listed in the National Register in 1996. It extends along the spine of North and South Main Street from East 2nd Street on the east to West 3rd Avenue on the west, between Marble Alley on the south and State Street on the north. It includes 56 contributing resources and 12 noncontributing resources on Main Street, 1st Street, Center Street, 1st Avenue, 2nd Avenue, and 3rd Avenue.

SHPO concurs with the expansion of the Historic District to include these properties: the **W.T. Grant Department Store/Kimbrell's Furniture Building** at 201 South Main Street; **Redwine's Grocery and Clodfelter's Market** at 207 South Main Street; and the **Hedrick Block**, 211-215 South Main Street.

> **W.T. Grant Department Store/Kimbrell's Furniture Building -** The current building first appears in the city directory of 1959-1960, which identifies it as the W.T. Grant Co. Department Store. It was therefore likely erected between 1948 and 1959. It became home to its current tenant, a branch of the Kimbrell Furniture Company chain, about 1982 according to the directory of that

year. The one-story Lexington store has an angled principal entry at the corner of Main and 2nd Avenue. The building is believed to retain its integrity; it has no notable alterations other than the addition of the plastic Kimbrell letters. It has no particular historic or architectural significance, however, and is therefore recommended as not individually eligible for National Register listing. As discussed further below, though, the building is recommended as a contributing part of an addition to the Uptown Lexington Historic District.

Redwine's Grocery and Clodfelter's Market - This building was likely erected between 1937 and 1941-1942. In the 1942 city directory, it is identified as Redwine's Grocery and Clodfelter's Market. The former store is currently occupied by Real Life Photography. A long, narrow, one-story building, it is likely little altered from when it was erected, but for the replacement of signage. It retains a recessed entry flanked by plate-glass windows and a recessed brick panel above that now bears a large "PHOTOGRAPHY" sign. The building has no particular historic or architectural significance and is therefore recommended as not individually eligible for National Register listing. As discussed further below, though, the building is recommended as a contributing part of an addition to the Uptown Lexington Historic District.

Hedrick Block - Built in 1947, is an unusual local example of the Art Moderne style clad in Carrara structural glass panels. It is recommended as individually eligible for National Register listing (see below), and is additionally recommended as a contributing part of an addition to the Uptown Lexington Historic District. More information on it and additional images can be found below at its individual entry below.

Hedrick Block (Determination of Eligibility 2013) -- The Hedrick Block is a two-story-tall brick building. It is a straightforward functionally designed building but for its façade along Main Street, which is a late example of the Art Moderne style popular in the 1930s. This façade is original and little changed, as evidenced by a comparison of its current appearance with historic photographs from 1948 and 1950 that include views of much of it.

The façade is marked by three plate-glass store fronts and a central entry, which opens to a stair to the second floor. Sheathing the façade are distinctive panels of thick, structural, peach-pigmented, mirror-finish glass. Further accenting the elevation are similar panels in maroon that flank the entry, outline one of the second-story windows, and limn the cornice. These are thicker than the beige panels, measuring about one-third of an inch deep. The panels are Carrara Structural Glass, a trade name of the Pittsburgh Plate Glass Company. The building also includes at least a few thinner maroon panels of a plastic or plastic-like material. These are likely later replacements, for as panels have pulled away from the brick walls, chipped, or broken, they have been replaced with jerry-rigged materials, including wooden boards painted beige.

The Hedrick Block is an unusual, if belated, local example of the Art Moderne style. Some of its Carrara structural glass panels have broken or fallen, but it is otherwise little altered and, in terms of the seven elements of National Register integrity, intact. The building is eligible under Criterion C as a good, local, representative example of the Art Moderne style. The recommended National Register boundary is all of the resource's lot, which covers less than one-quarter of an acre. As noted above, the building is also recommended as contributing to an expanded Uptown Lexington Historic District.

Lexington Shirt Corporation (Determination of Eligibility as part of SHPO-proposed Lexington Industrial Historic District 2013) -- The ca.1937 block of the factory, at 205 East 3rd Avenue and which fronts on 2nd Avenue, is a functional, two-story, brick industrial building. Its east façade retains a minimal stepped-parapet edged by concrete. The bays at this elevation are set in slightly recessed panels. All but

two pairs of the elevation's casement windows have been boarded up or partially bricked in. The original entry has also been bricked over. The block's south side elevation retains wide casement windows at its second story. A few such windows remain at the first story, but most have been supplanted by rolling garage-type doors added when the building was converted in part into a mini storage warehouse. The windows at the north side elevation of the block have either been bricked in or replaced by roll-up doors for the storage business. The 1950s-era wing of the building is also two stories tall and sided with brick and has been altered in similar fashion. It retains its second-story casement windows at its south elevation, but its first story windows there have been boarded over. At its north side elevation, its first-story windows have been replaced by garage doors and its second-story windows filled with brick. Its functional rear elevation retains a loading dock and a few doors.

The April 2013 survey found that the former Lexington Shirt Corporation building is not eligible for National Register Listing under any of the Register's Criteria. It has no known historical or architectural significance. Its ca.1937 and 1950s-era blocks form a workmanlike industrial building that is not notable. Further, the building has been altered by the filling of numerous window bays and the addition of sliding garage doors. SHPO, however, in its November 4, 2013 letter, found that the property would be a contributing resource as part of SHPO-proposed Lexington Industrial Historic District. Therefore, it is included under the Section 106 review in this EA.

Dixie Furniture Company (Determination of Eligibility as part of the SHPO-proposed Lexington Industrial Historic District 2013) – Consisting of 25 buildings, dating from 1913 to 1980, the Dixie Furniture Company site total base square footage of the buildings is 738,000 square feet. Of this, 340,000 or 46 percent of the total base footage is encompassed by buildings erected in 1962 or later; 398,000 or 54 percent of the base square footage is encompassed by buildings that pre-date 1962.

The *Depot District Building Survey & Assessment* report prepared by the City of Lexington in 2010 identifies about 28 independently constructed buildings in the Dixie Furniture Company complex—based upon the Davidson County tax parcel database—to which it assigns the numbers 25-01 through 25-28. (Two pairs of buildings that can be sub-numbered 25-14A and 25-14B, and 25-28A and 25-28B, are combined as single buildings in the database. There are other buildings as well with individual numbers that were built in multiple stages.) Two resources within the complex that are recommended as individually eligible for listing in the National Register—the former Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices and the former North Carolina Candy Company —are discussed and assessed in greater detail at their individual entries above. The remaining buildings are described in greater detail in the 2010 City of Lexington Report, and in the April 2013 survey, which is included as **Appendix D**.

The April 2013 survey found that the site was not eligible for National Register listing because so much of the complex was erected within the past 50 years and does not satisfy the "exceptional importance" exception of National Register Criterion Consideration G. The total base square footage of the complex's buildings is 738,000 square feet. Of this, 340,000 or 46 percent is encompassed by buildings erected in 1962 or later, most of them from the late 1960s to the early 1980s. Due to the large numbers of buildings built well within the past 50 years and the relatively common and workmanlike nature of such buildings, the Dixie complex does not have the exceptional importance necessary for it to have achieved significance within the past 50 years. Its many less-than-50-year-old buildings are not remarkable for their architecture or history and, at the current date, the complex does not meet any of the Criteria/Criteria Considerations—historical, personal associational, or architectural—required for National Register listing.

The report also noted that the complex is not eligible under Criterion B for its association with Dixie president Henry Talmadge Link. Link was a significant figure in the furniture industry and, although he presided over a company with factories other than this Dixie complex, the complex was connected with his historic contributions. However, significance for Dixie's connection with Link runs into the same Criterion Consideration G obstacles of exceptional importance and significant accomplishments within the past 50 years. For his association with a complex of buildings almost half of which dates from the past 50 years, he would have to have been of exceptional importance within the past 50 years. Further, any evidence of his mechanization efforts in the 1940s has been physically lost, for the buildings that stood at that date, have been altered inside and out over time: they now stand as vacant shells. It should be further noted that two intact components of the complex—the former **North Carolina Candy Company** and the former **Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices**—are recommended above as individually eligible for National Register listing.

In their November 4, 2013 letter, however, SHPO found that the Dixie site is a contributing resource in a SHPO-proposed Lexington Industrial Historic District. Therefore, the property is included as an eligible resource in the Section 106 review in this EA, as described below. A copy of this letter is in **Appendix B**.

Lexington Industrial Historic District (Determination of Eligibility by SHPO, described in November 4, 2013 letter) – Historically, the northwestern side of the NCRR, centered along Railroad Street, contained the highest concentration of industrial buildings in Lexington, ranging from factories, mills, bottling plants, water and power infrastructure, and rail-related sites. SHPO considers that the remaining industrial sites in this area offer the best opportunity to convey the significance of manufacturing to the development and economy of Lexington, and are prime examples of local industrial architecture and design. Therefore, SHPO determined that a historic district encompassing the early- to mid-twentieth century industrial, infrastructural, and rail related sites is eligible for listing in the National Register under Criterion A for industry and Criterion C for architecture.

The Lexington Industrial Historic District includes the following properties as contributing resources: the Dixie Furniture Company (URS Survey #7); the Mountcastle Knitting Company/Dixie Furniture Company Showroom (URS Survey #7A); the North Carolina Candy Company (URS Survey #7B); the Lexington Southern Railway Freight Depot (URS Survey #8); the Lexington City Light and Water Office (URS Survey #9); the Siceloff Manufacturing Company (URS Survey #10); the Eureka Trouser Company (URS Survey #11); and the Lexington Shirt Company (URS Survey #12). The period of significance for this District begins in 1906 with the construction of the earliest extant resource, the Eureka Trouser Company, and extends to 1963.

The proposed boundaries and the contributing resources for this historic district are shown in **Figure 3-18**. A key describing the resources in the proposed district (including identifying numbers for the resources) is included in a table following Figure 3-18.

This district also includes the one-lane tunnel under the railroad connecting Railroad Street and Elk Street, and the enclosed elevated passage over Railroad Street between Buildings 16 and 23 as contributing resources. The tunnel is shown as early as the 1923 Sanborn Map and this elevated passage is shown on the 1948 Sanborn Map update, both within the period of significance. Finally, the existing streetscapes are also contributing resources within the NRHP-eligible district.

Impacts

No Build

No changes to existing conditions would occur in the No Build Alternative scenario; therefore, no impacts to Historic Resources would be anticipated with the No Build Alternative.

Build Alternative

The Build Alternative would not result in an adverse effect to any individually eligible or listed resource. The Build Alternative, however, will result in adverse effects to two potentially eligible historic resources, identified by SHPO as contributing resources to the SHPO-proposed Lexington Industrial Historic District (see **Figure 3-18**):

- the existing tunnel structure connecting Railroad Street and Elk Street under the NCRR ROW, and
- the existing Streetscapes within the NRHP-eligible district.

The specific impacts and potential mitigation are discussed on the pages after Figure 3-18.

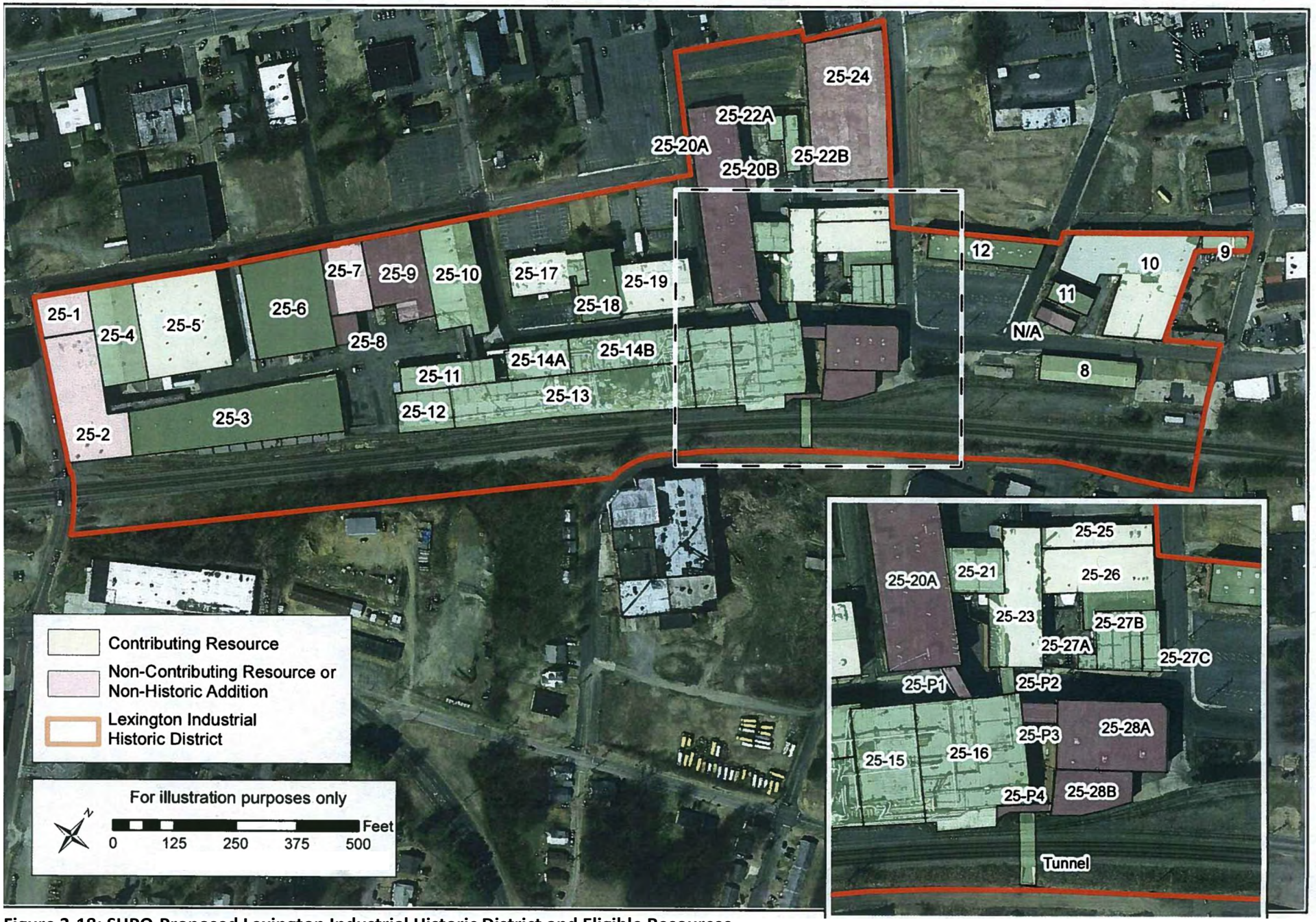


Figure 3-18: SHPO-Proposed Lexington Industrial Historic District and Eligible Resources

Source: SHPO (letter dated November 4, 2013)

Key to Buildings in **Figure 3-18**
SHPO-Proposed Lexington Industrial Historic District

URS Survey No.	Site Name/Use	Contributing Status
8	Lexington Southern Railway Freight Depot	Contributing
9	Lexington City Light and Water Office	Contributing
10	Siceloff Manufacturing Company	Contributing
11	Eureka Trouser Company	Contributing
12	Lexington Shirt Company	Contributing
7	Dixie Furniture Company Complex	Contributing
Bldg. 25-1	Storage	Non-Historic Addition
Bldg. 25-2	Storage	Non-Historic Addition
Bldg. 25-3	Storage	Contributing
Bldg. 25-4	Storage	Contributing
Bldg. 25-5	Storage	Contributing
Bldg. 25-6	Finished Product Storage	Contributing
Bldg. 25-7	Garage	Non-Historic Addition
Bldg. 25-8	Garage	Non-Historic Addition
Bldg. 25-9	Wood Processing	Non-Historic Addition
Bldg. 25-10	Warehouse and Kilns	Contributing
Bldg. 25-11	Wood Parts Storage	Contributing
Bldg. 25-12	Woodworking	Contributing
Bldg. 25-13	Wood Sanding	Contributing
Bldg. 25-14	(A/B) Woodworking and Boiler Room	Contributing
Bldg. 25-15	Woodworking, Gluing, and Cutting	Contributing
Bldg. 25-16	Packing, Cutting, and Gluing	Contributing
Bldg. 25-17	Office and Showrooms	Contributing
Bldg. 25-18	Office and Showrooms (Mountcastle Knitting)	Contributing
Bldg. 25-19	Office	Contributing
Bldg. 25-20	(A/B) Finishing and Spraying Room	Non-Contributing
Bldg. 25-21	Finishing	Contributing
Bldg. 25-22	(A/B) Laundry (Shoaf-Sink Hosiery Mill Warehouse)	Contributing
Bldg. 25-23	Finishing (Shoaf-Sink Hosiery Mill Knitting Room)	Contributing
Bldg. 25-24	Storage and Parking Deck	Non-Contributing
Bldg. 25-25	Finishing	Contributing
Bldg. 25-26	Finishing	Contributing
Bldg. 25-27	(A/B/C) Finishing (North Carolina Candy Co.)	Contributing
Bldg. 25-28	(A/B) Packing, Rubbing and Trim	Non-Contributing
Bldg. 25-P1	Elevated Passageway (Bldg. 16 to 20A)	Non-Contributing
Bldg. 25-P2	Elevated Passageway (Bldg. 16 to 23)	Contributing
Bldg. 25-P3	Elevated Passageway (Bldg. 16 to 28A)	Non-Contributing
Bldg. 25-P4	Elevated Passageway (Bldg. 16 to 28B)	Non-Contributing
n/a	Southern Railway Corridor	Contributing
n/a	Tunnel under Southern Railway	Contributing
n/a	216 East Second Avenue	Non-Contributing

Source: SHPO letter, November 4, 2013 (see Appendix B)

Existing Tunnel Structure

Per SHPO's letter, the existing tunnel structure is a contributing resource to the NRHP-eligible Lexington Industrial Historic District. The existing tunnel structure provides the only grade separated crossing of the NCRR corridor within the main part of the Depot District. (Center Street, which borders the Depot District, is also grade separated over the railroad tracks.) This existing tunnel has no sidewalks, lighting or other pedestrian amenities. While the existing tunnel structure is a contributing element to the SHPO-proposed Lexington Industrial Historic District, its current configuration does not provide an inviting and safe atmosphere for pedestrians, and does not serve the Project needs of improved pedestrian connectivity to the proposed Lexington MMTS and would not help in the redevelopment of the Depot District in its current form. The Project impacts include closing and abandoning the current use of the tunnel structure to build the realigned railroad tracks, dual side platforms, and passenger concourse from the MMTS to the platforms. The Project also will construct a new public access pedestrian tunnel below the NCRR corridor connecting the MMTS and Elk Street.

Sections of Adjacent Primary Access Street Streetscapes

Per meetings with SHPO, the existing Primary Access Streets (including sections of South Railroad Street, East 2nd Avenue, East 3rd Avenue, and Tunnel Street) located within the property that is determined eligible for inclusion in the NRHP are designated as contributing resources to the Lexington Industrial Historic District.

Consistent with the former predominant manufacturing land use and development pattern, and combined with the length of NCRR railroad ROW frontage, the current block structure within and surrounding the Depot District is delineated by extremely large block sizes defined by irregular geometries and containing buildings with massive footprints. Consequently, overall connectivity and walkability is reduced in the Depot District. Furthermore, there are currently several irregular street intersections within the Depot District defined by off-set street approaches and confusing traffic signage and roadway striping. Some areas of extreme topography along with limited sidewalk accessibility and poor as-built construction conditions also challenge connectivity within the Depot District, and sections of the existing Primary Access Streets outlined above generally have minimal or no basic streetscape and pedestrian amenities such as streetlights, street trees, crosswalks, benches, and waste receptacles. While the COL recognizes that the existing streets and streetscape are contributing elements to the SHPO-proposed Lexington Industrial Historic District, not only do the current condition and configuration of these elements limit their utility for both pedestrians and vehicles, they do not serve the Project needs of improved pedestrian and vehicular connectivity to the proposed Lexington MMTS and would not help in the redevelopment of the Depot District in their current form.

As part of the Project, the COL will implement streetscape improvements in accordance with a Complete Streets program to facilitate multimodal access throughout the Project area and to be consistent with the SAP Site Plan. Accordingly, sections of the following streets located within the Project Boundary will be impacted as outlined below. All streetscape improvements will include at a minimum the following elements:

- repair and/or installation of new utility infrastructure including: water, sewer, stormwater, electrical, gas, tele/com, etc.;
- repair and/or resurfacing of existing roadway;
- repair and/or replacement of existing curb and gutter;
- installation of accessible ramps;
- replacement and/or installation of new striping at roadway traffic lanes and intersection crosswalks;

- improvements to existing streetscape including new sidewalks, streetlights, street trees, and/or pedestrian furniture (benches, waste receptacles, etc.); and,
- replacement and/or installation of new traffic and wayfinding signage.

South Railroad Street: Section 'A'
South Railroad Street streetscape will be impacted along approximately 400 linear feet of 25-foot wide public street ROW and adjacent sidewalks as defined by Section 'A'.

South Railroad Street: Section 'B'
South Railroad Street streetscape will be impacted along approximately 270 linear feet of 35-foot wide public street ROW and adjacent sidewalks as defined by Section 'B'. Impacts include street realignment between East 2nd Avenue and East 3rd Avenue to facilitate safer vehicular and pedestrian access at intersections, and new on-street parking.

South Railroad Street: Section 'C'
South Railroad Street streetscape will be impacted along approximately 590 linear feet of 31-foot wide public street ROW and adjacent sidewalks as defined by Section 'C'. Impacts include street realignment at approach to East 2nd Avenue and improvement at East 1st Avenue to facilitate safer vehicular and pedestrian access at intersections, and new on-street parking.

East 2nd Avenue
East 2nd Avenue streetscape will be impacted along approximately 300 linear feet of 31-foot wide public street ROW and adjacent sidewalks. Impacts include new on-street parking.

East 3rd Avenue
East 3rd Avenue streetscape will be impacted along approximately 300 linear feet of 37-foot wide public street ROW and adjacent sidewalks. Impacts include new on-street parking.

Tunnel Street
Tunnel Street streetscape will be impacted along approximately 275 linear feet of 19-foot wide public street ROW and adjacent sidewalks.

Mitigation

The COL has been working with FRA, NCDOT Rail Division, and the SHPO to conduct this Section 106 review as part of the EA, during which the COL developed proposed mitigation for the adverse effects to the two contributing resources to the Lexington Industrial Historic District. As discussed with the SHPO, potential mitigation measures include photo documentation of the impacted contributing resources in accordance with the Historic Structures and Landscape Recordation Plan.

In addition, the COL will preserve the north/west portion of the tunnel structure, including the headwall arch opening and adjacent length of tunnel space, to the extent possible as determined by a certified structural inspection and integrity report. The remaining south/east portion of the tunnel structure will be closed to public access as required to construct the Project.

The COL will incorporate the preserved portion of the tunnel structure into an area of the Project (defined by the SAP as a community plaza space), and implement a Public Interpretive Installation with specific measures at the tunnel opening.

Furthermore, the Project will incorporate a new, open (non-gated) pedestrian tunnel structure (underpass) connection crossing below the NCRR ROW, providing safe public access for pedestrians and cyclists only, will be designed and constructed to replace current use of the existing vehicular Tunnel Street and structure. The pedestrian underpass length will be minimized (per required head wall locations determined by clearances for realignment of two mainline tracks and future track expansion above) and width will be maximized to increase daylight and provide an inviting pedestrian experience. In addition, within and around the pedestrian underpass entrances, adequate lighting and emergency call boxes will be installed to maximize security. The walls of the pedestrian underpass will also offer an opportunity for the integration of a unique linear Public Interpretive Installation, which connects both sides of the railroad corridor with public access to an interpretive exhibit of lasting value that documents, memorializes, and reflects the character of other historic buildings within the Project's Area of Potential Effects.

Upon agreement of the mitigation, the COL has developed a draft MOA with FRA, NCDOT Rail Division, and SHPO explaining that the Project will adversely impact the contributing resources and outlining the agreed proposed mitigation strategies. A copy of this draft MOA is included in **Appendix E**.

Because of the Project's adverse effects on historic resources, a Section 4(f) evaluation must also be completed. Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 grants special protection to publicly owned parks, recreational areas, and wildlife refuges, as well as historic sites that are listed on or eligible for the NHRP. Section 4(f) requires that publicly owned parks, recreational lands, wildlife and waterfowl refuge area, or historic sites of national, state, or local significance may not be used for USDOT-funded projects unless there is no feasible and prudent alternative to the use of such land, and such projects must include all possible planning to minimize harm to these lands.

The Section 4(f) Evaluation, which includes a discussion on avoidance alternatives, identification of uses/impacts, identification of mitigation measures, and information on coordination with agencies, local government and the public, is included in **Chapter 5** - Section 4(f) Evaluation.

3.22 Acquisitions and Displacements

Description and Methods

The Consultant Team reviewed the concept plans for the Project (including the Lexington MMTS, mainline track realignment, platforms, and Primary Access Streets) and compared them against the various properties and parcels as identified in the Davidson County GIS maps to determine possible easements and/or acquisitions (total and partial) that may be required.

Existing Conditions

A majority of parcels located within the Limits of Construction (see **Figure 2-2**) are either owned by the COL or Davidson County, or are within the NCRR ROW. A few parcels along Elk Street are privately held.

Impacts

No Build

The No Build alternative would not impact any privately-held or public property, and would not require any construction within the NCRR ROW.

Build Alternative

The Project would require partial acquisition of four privately-held parcels located along Elk Street between East 5th Avenue and East 1st Avenue Extension.

- 151 East Street (Parcel ID 1107500010001)
- 203 East 3rd Avenue (Parcel ID 11075000D0001)
- 134 Elk Street (Parcel ID 11077000E0021)
- 130 Elk Street (Parcel ID 110770000005A)

Each of the four parcels currently has buildings or structures that front Elk Street. According to the Project SAP (see **Figure 2-9),** the Project will construct a new passenger rail platform mostly within the existing NCRR ROW, approximately where the existing Elk Street is located. Although the platform will be within the railroad ROW, construction of the platform will require a construction easement that will extend into these parcels. The construction of the platform and associated vertical circulation elements will require partial acquisition of the parcel at 151 East Elk Street, along with demolition of a portion of the building; it will also require partial acquisition of the parcels at 203 East 3rd Avenue, 131 Elk Street, 134 Elk Street, and potentially partial demolition of the buildings on these parcels.

The Project also proposes realigning Elk Street to be parallel to the new platform from East 5th Avenue to East 1st Avenue Extension. Construction of this new street would require partial acquisition of all four parcels, as well as demolition of some or all of the buildings on the parcels. Structures that are slated to be demolished as part of the Project construction are indicated in **Figure 3-3** above. None of the buildings shown for demolition are NHRP eligible properties under Section 106.

Two additional privately-owned parcels may require construction easements or small takings as part of the improvements to East 5th Avenue: 201 East 5th Avenue Ext., Parcel ID 11075000A0001; and 203 East 5th Avenue Ext., Parcel ID 11075000A0002. 201 East 5th Avenue Ext. is a vacant parcel; 203 East 5th Avenue Ext. has five single-family houses. The exact impacts will be determined during later stages of design.

The remaining portions of the Project will be constructed either on COL or Davidson County owned property or within the NCRR ROW. At this time, the Project's plan to reconstruct the two existing mainline tracks will be within the existing NCRR ROW. However, the track work may require temporary construction easements to access the railroad ROW.

Mitigation

The COL will continue to evaluate the property impacts as the Project moves into more detailed design. Should property acquisitions be required, the COL will follow Federal and North Carolina requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). The Uniform Act ensures that people whose real property is acquired, or who move as a result of projects receiving Federal funds, will be treated fairly and equitably and will receive relocation

assistance. Article 9 of Chapter 136 of the General Statutes of North Carolina also governs property acquisitions by municipal and state governments.

3.23 Construction Period

Description and Methods

A review of possible construction methods and the possible Project staging was undertaken to determine the temporary impacts from constructing the Lexington MMTS and associated improvements.

Impacts

No Build

The No Build Alternative would not create construction impacts.

Build Alternative

The Build Alternative will have temporary construction impacts, many of which are described in the previous sections of this chapter. The impacts may include:

- Temporary impacts to transportation (traffic) routes
- Solid waste accumulation
- Use of energy resources
- Noise and vibration

Mitigation

Impacts from construction of the Build Alternative will be temporary. These temporary impacts of construction activities will cease immediately after the Project is completed.

Construction of the Build Alternative will not have permanent impacts on resources. The Build Alternative will create temporary construction impacts to air, water, vibration and noise during construction. The COL will ensure that the construction contract specifications require that the contractor adhere to appropriate federal, state, and local noise abatement and control requirements. Additionally, the COL will ensure the contract uses BMPs for sediment and erosion control to minimize water quality impacts during construction. Proper traffic control methods will be used for rail, vehicular and pedestrian traffic to minimize impacts on businesses and residences.

Proper implementation and maintenance of control measures will minimize the temporary impacts. These minor temporary impacts will cease upon completion of construction.

3.24 Secondary and Cumulative Impacts

Description and Methods

A review of the Project was made with regards to guidance by NCDENR on secondary and cumulative impacts. NCDENR defines secondary impacts as “indirect impacts caused by and resulting from a specific activity that occur later in time or further removed in distance than direct impacts, but are reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced

changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." An example would be changes in land use and development made possible by increased accessibility. Cumulative impacts are "environmental impacts resulting from incremental effects of an activity when added to other past, present, and reasonably foreseeable future activities regardless of what entities undertake such other actions. Cumulative impacts are the reasonably foreseeable impacts from individually minor but collectively significant activities." (NCDENR, 2015). FRA defines "reasonable foreseeable future actions" as those that are both planned and funded.

Impacts

No Build

The No Build would limit the availability of alternative transportation choices for the residents and businesses in Lexington, and would not create the projected ridership and revenue increases for Amtrak. It would also delay the redevelopment of the Depot District. Under the No Build, the Project will not augment NCDOT's ongoing Piedmont Improvement Program, which is composed of several construction projects and enhancements designed to modernize the railways to make train travel safer and more reliable along the railroad corridor between Charlotte and Raleigh. Specifically, the Project will not supplement the improvements for the NCDOT Piedmont Improvement Program Thomasville to Lexington project, which includes railroad roadbed grading and trackwork, railroad and highway stream crossings (including a new bridge over nearby Abbotts Creek), and double track construction.

Build Alternative

Secondary impacts – The Build Alternative will improve mobility options and accessibility, and allow some drivers to switch to transit and rail, thereby improving the quality of life by providing an option that avoids the stress of traveling by automobile. The Project will also encourage redevelopment of the underutilized properties in the Depot District, which should have a positive impact on the local economy. The Project will also increase employment opportunities. Currently the COL is constructing a new amphitheater and stage within the Depot District that will be used for concerts and festivals, and a new microbrewery is expected to open in the Depot District. The Project will also increase the mobility for transit-dependent residents, and improve access to community facilities and employment opportunities. Finally, the Project could reduce air pollution by encouraging trips to be made via transit and rail.

Cumulative impacts – The Build Alternative will encourage greater use of local and regional transit by constructing a Lexington MMTS that will provide a central connecting point for PART and DCTS buses. The Project also will be a community anchor that can be a focal point for public events. In addition, the Project will augment NCDOT's ongoing Piedmont Improvement Program, which is composed of several construction projects and enhancements designed to modernize the railways to make train travel safer and more reliable, enhance opportunities for greater job growth and commercial development, and improve connections and train capacity along the railroad corridor between Charlotte and Raleigh and communities in between. Specifically, the Project will supplement the improvements for the NCDOT Piedmont Improvement Program Thomasville to Lexington project, which includes railroad roadbed grading and trackwork, railroad and highway stream crossings (including a new bridge over nearby Abbotts Creek), and double track construction. Currently there are no other planned and funded transportation projects in the area. NCDOT previously completed a Traffic Separation Study in Lexington, which recommended the closure of the existing roadway/rail at-grade crossing at East 7th Avenue and a

grade separation of either East 7th Avenue or East 5th Avenue. The Project may encourage the re-evaluation of this at-grade crossing closure and grade separation. The Project should have no significant cumulative impacts of other actions on natural resources.

Mitigation

No mitigation is needed. The Project is anticipated to create positive secondary and cumulative impacts.

4.0 AGENCY COORDINATION AND PUBLIC PARTICIPATION

This chapter describes the agency coordination and public participation undertaken as part of this EA.

4.1 Agency Coordination

Several meetings were held among the COL, FRA, the NCDOT Rail Division, and the Consultant Team to discuss the Project and details associated with the Lexington MMTS and the SAP. The Consultant Team and the COL also presented the Project to the LRC for their input. The COL also coordinated with NCRR, who owns the railroad ROW where the track and platforms will be constructed and which is included within the Depot District. Letters were also sent to the State Clearinghouse[27] to gather information regarding rare and unique natural features, historical resources, and threatened and endangered species within the Project area. Coordination with the SHPO was also undertaken to determine the presence of potential architectural or archeological resources listed or eligible for the NRHP. All comments received as a result of the agency coordination process are provided in **Appendix B**.

The Project recognizes the following relationships between the involved railroad agencies/parties:

North Carolina Railroad (NCRR), a state owned private company that owns the property/ROW, including existing and any future tracks. Because NCRR leases the property to another railroad (NS), it has an interest in maintaining the value and usefulness of the existing 200-foot wide corridor for freight rail.

Norfolk Southern Railroad (NS) maintains the track infrastructure and has a lease agreement with NCRR to use the property. This agreement was recently renewed and expires in 2029.

City of Lexington (COL) has been the leading the Lexington MMTS and SAP planning efforts, will own and maintain the platform, concourse, and the Lexington MMTS building.

Amtrak and NCDOT Rail Division jointly operate the *Piedmont* and the *Carolinian* on the tracks operated by NS and on the ROW and tracks owned by NCRR.

NCDOT Rail Division is overseeing improvements to the Southeast Corridor. NCDOT Rail Division is the primary review and approval agency for SAP Site and Lexington MMTS Building Program and Schematic Design along with supplemental review and approval by Amtrak and FRA.

Federal Railroad Administration (FRA) provided funding for the EA and SAP through a TIGER II Planning Grant, is assisting in the grant management and administration, and is providing general oversight and technical assistance for the Project. FRA is also the lead Federal agency for the NEPA process.

[27] The North Carolina Department of Administration maintains a Clearinghouse to which documents prepared pursuant to the State Environmental Policy Act (SEPA) must be submitted. The State Clearinghouse in the NC Department of Administration is responsible for daily implementation and administration of the SEPA review process. See http://www.doa.state.nc.us/clearing/faq.aspx

The Consultant Team and COL coordinated regular planning strategy and design review meetings directly with NCDOT Rail Division. NCDOT Rail Division facilitated several meetings with NCRR in which the Consultant Team and COL had the opportunity to share design progress and seek insight on planning and continuing design development, and NCDOT Rail Division has met internally with NCRR, NS, and Amtrak representatives to introduce the Project and share engineering concepts. In addition, the COL has provided regular quarterly progress reports to FRA and met with representatives together with the Consultant Team.

In addition, on November 20, 2013, the City of Raleigh and NCDOT Rail Division hosted a North Carolina Train Station Summit with the purpose of convening North Carolina station cities together to share individual experiences related to train station operations, maintenance, funding, and sustainability. This inaugural event held in Raleigh was modeled after the "Nation's Station Planning Committee" event recommended by FRA and held on September 24, 2013 in Washington Davidson County, and envisioned as mutually beneficial to the success of all North Carolina station cities.

4.2 Public Participation

An important aspect of the planning process coordinated by the Consultant Team was assisting the COL in determining the course it wishes to take that best reflects the needs, goals, aspirations and capabilities of the community at large. Accordingly, in collaboration with the COL and LRC, the Consultant Team initiated an extensive public input strategy throughout the preliminary planning process for the Project that included direct, in-person interviews with Key Stakeholders and Affinity Groups and several community-wide surveys, outreach events and activities, along with three public participation workshops. In addition, the LRC conducted Regular Meetings (open to the Public) typically once a month, during which time the Consultant Team presented a Project Update.

Building upon the previous city-led public Depot District Visioning Workshop, several community workshops, surveys, and outreach activities were coordinated to inform the community about the Project and achieve insights from citizens representing a broad range of demographic backgrounds:

Oct 14, 2008	**Depot District Visioning Workshop [Prior to TIGER II Planning Grant]**
Nov 17, 2011	**TIGER II Kick-Off with John Robert Smith, former Mayor of Meridian, MS and CEO of Reconnecting America**
Jan 21 - Mar 8, 2012	**Community Survey #1: Strengths, Weaknesses, Opportunities, Threats (SWOT)**
Jan 27, 2012	**Depot District Web Splash Page**
Jan 30 - Feb 29, 2012	**Lexington Key Stakeholders Interviews & Affinity Group Meetings**
Mar 8, 2012	**Workshop #1 "This is Your Lexington"**
Mar - Jun, 2012	**Community Survey #2: Opportunity Topic Cluster Categories**
Apr - May, 2012	**Lexington Senior High School - LSHS Student Survey - Senior Class 2012**
Apr 25 & 30, 2012	**Davidson County Community College - Campus Visit & Student Field Survey**
May 3, 2012	**Workshop #2 "Your Possibilities"**
May 5, 2012	**16th Annual Multicultural Festival**

May 10, 2012	**Lexington Depot District Web Site**
May 12, 2012	**National Train Day - Lexington "Passenger Rail Day"**
Aug 7, 2012	**City of Lexington - National Night Out**
May 11, 2013	**National Train Day - Lexington "Passenger Rail Day"**
Jul 1, 2013	**Richard Childress Racing & Vineyards**
Jul 22, 2014	**City Council Meeting & Final TIGER II Project Public Presentation**

In combination, these workshops and activities established an open and inclusive dialogue between the community and the Consultant Team, together with the COL and SAP Team, focused on advancing a vision for the Project within the context of the SAP and redevelopment of the Depot District.

The COL will make the draft EA and draft Section 4(f) evaluation (including the draft MOA for historic resources) available for public review and comment to allow the public the opportunity to provide input on the Project, its impacts, and any proposed mitigation. If the COL receives any comments on the EA, FRA will address those comments in the Finding of No Significant Impact.

5.0 SECTION 4(F) EVALUATION

5.1 Purpose of Section 4(f) Evaluation

The COL prepared this Section 4(f)[28] evaluation in conjunction with the planning and environmental analysis for the Lexington MMTS in Lexington, North Carolina. The COL proposes to construct a train station and transit center and make adjacent track, platform and tunnel and vertical circulation improvements (see **Figure 2-14** in chapter 2 for a visual depiction of the station area and nearby track and platform configuration).

This chapter discusses the use by the Project of the historic resources identified in the 2013 historic resources survey completed by URS for this Project (Intensive-Level Historic Architectural Analysis for the Lexington MMTS, April 2013 in **Appendix D**) and through consultation with the North Carolina SHPO. In the URS survey, 23 properties or historic districts located within the Project APE assessed during the investigation have either been listed in the National Register of Historic Places (NRHP), or were determined eligible for listing; the survey also recommended expanding the existing Uptown Lexington Historic District to include five additional resources. By a letter dated November 4, 2013 the SHPO concurred with a portion of the findings of the 2013 historic resources survey, but also noted other areas of non-concurrence with the recommendations. On September 5, 2014 the COL, SHPO and FRA met to review the effects of the Build Alternative on all of the historic resources. At that meeting, SHPO determined that the Build Alternative (at that time) would have an adverse effect on some eligible and proposed resources. The COL and the Consultant Team then revised the Build Alternative to avoid impacts to two of the resources, but was unable to avoid impacts to a one-lane tunnel structure that connects Railroad Street and Elk Street, which SHPO has determined is a contributing resource to one of the proposed historic districts. The Project will also impact the existing Streetscapes within and adjacent to several contributing resources. To mitigate the adverse effects, the COL, FRA and SHPO have developed a draft MOA which is included in **Appendix E**. More detail on the effects on the resources and proposed mitigation measures is described in this chapter. More detail on the historic resources survey and agency coordination is described in Chapter 3.

COL prepared the EA in accordance NEPA and FRA's Procedures for Considering Environmental Impacts, the North Carolina State Environmental Policy Act, and the National Historic Preservation Act (NHPA) of 1966, as amended. Because the Project falls under the jurisdiction of the US Department of Transportation (USDOT) Act of 1966, this section has also been prepared per legislation (commonly referred to as "Section 4(f)")that governs USDOT projects and their impacts on publicly owned parks, wildlife and waterfowl refuges, recreation areas, or public or private historic sites. The Section 4(f) requirements are now codified at 23 U.S.C. § 138 and 49 U.S.C. § 303.

[28] Section 4(f) of the U.S. Department of Transportation Act of 1966. 23 CFR Part 774. https://www.environment.fhwa.dot.gov/section4f/overview.aspx

5.2 Applicability of Section 106 and of Section 4(f) to the Project

5.2.1 Section 106 Applicability

Section 106 of the NHPA requires that if a federally funded, licensed, or permitted project has an adverse effect on a property listed in, or potentially eligible for listing in, the NRHP, the Advisory Council on Historic Preservation (ACHP), SHPO, and other consulting parties must be given reasonable opportunity to comment on such undertakings.[29] To assist in this review, NCDOT has undertaken an evaluation of effects on the historic resources identified in the earlier investigative survey. The evaluations of effects presented in the EA are based on the regulations implementing Section 106 of the NHPA. Federal undertakings are considered to have adverse effects if they will damage, destroy, or encroach upon land from a historic property or otherwise alter the qualities that make the resource eligible for the NRHP. Specifically, adverse effects may be caused by the following conditions:

- Physical destruction/damage
- Alteration of a property
- Removal of a property from its historic location
- Change of the character of a property's use or of physical features within a property's setting that contribute to its historical significance
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of a property's significant historic features
- Neglect of a property that causes its deterioration

Adverse effects may result from the direct actions of the project, as in the case of property acquisitions, or they may be the consequence of indirect and cumulative impacts. Changes in zoning, increased needs for parking and market demands for new development are all examples of the types of indirect effects that may result from federal undertakings. Both direct and indirect impacts have been assessed.

For this Project, 13 of the 23 properties surveyed within the APE were determined eligible for, or are listed in, the NRHP, either individually or as eligible historic districts. Of those properties, the Project will have an "adverse effect" on the one-lane road tunnel connecting Railroad Street and the Dixie Furniture Company site with Elk Street (referred to as the tunnel structure), as well as the streetscapes adjacent to the Project. These resources are not individually eligible for the NRHP, but SHPO has found that the tunnel and the streetscapes are contributing resources of the SHPO-proposed Lexington Industrial Historic District.

5.2.2 Section 4(f) Applicability

The COL prepared this evaluation to meet the requirements set forth in Section 4(f) of the USDOT Act of 1966. A Section 4(f) evaluation is required when a federally funded transportation action uses or has the potential to use a public or private historic resource, or a publicly owned park, recreational area, or

[29] See https://www.environment.fhwa.dot.gov/4f/4fpolicy.asp

wildlife or waterfowl refuge.[30] A historic resource is defined as a property that is listed in, or eligible for listing in, the National Register of Historic Places. Section 4(f) mandates that publicly owned parks, recreation lands, wildlife and waterfowl refuge areas, or historic resources of national, state, or local significance may not be used for USDOT-funded projects unless there is no feasible and prudent alternative to the use of such land, and that such projects include all possible planning to mitigate harm to these lands. A "use" occurs when: (1) land is permanently incorporated into the transportation facility through property acquisition or a permanent easement; (2) there is a temporary occupancy, in whole or in part, of land that is adverse to the preservation purpose of Section 4(f); or (3) there is a constructive use, which involves no actual physical use of the Section 4(f) property but proximity impacts that result in substantial impairment to the Section 4(f) property's activities, features, or attributes that qualify the property for protection under Section 4(f).

This evaluation provides the necessary information for the FRA to make a Section 4(f) determination. The FRA must determine whether there are feasible and prudent alternatives to the use of Section 4(f) resources by the proposed federal action. If there are no feasible and prudent alternatives, then the project must include all possible planning and mitigation measures to minimize harm resulting from such use.

5.3 Description of Section 4(f) Resources

5.3.1 Description of Resources

Based on a search of records, surveys, and GIS data, the COL has determined that there are no publicly owned parks, recreation lands, or wildlife and waterfowl refuge areas affected by the Project. Therefore, only the 13 properties identified during the historic resources surveys and subsequent SHPO coordination within the APE were evaluated under Section 4(f). Below in **Table 5-1** is a list of the Section 4(f) resources identified in the survey of the Project Study Area and identified by SHPO's review of the survey (letter dated November 4, 2013). Descriptions of each resource can be found in Section 3.21.

[30] Parks and recreational areas are discussed in Section 3.20. There are no wildlife or waterfowl refuge areas in or near the Study Area. The only Section 4(f) resources within the Study Area are cultural and historic resources. Likewise, there are no properties in the Study Area acquired using grants under Section 6(f) of the Land and Water Conservation Fund Act of 1965 (16 USC § 460); therefore, the project has no Section 6(f) impacts.

Table 5-1: Section 4(f) Resources

Resource	Findings by SHPO
1. Grace Episcopal Church	NHRP-listed, remains eligible
2. Wennonah South Side Mill Village	NHRP eligible, and recommended by SHPO to be combined into a proposed Wennonah Cotton Mill and Mill Village Historic District
3. Wennonah Cotton Mills	
4. Mountcastle Knitting Company/ Dixie Furniture Company Showroom-Offices	NHRP eligible, and recommended for SHPO-Proposed Lexington Industrial Historic District contributing resource
5. North Carolina Candy Company	
6. Lexington Southern Railway Freight Depot	
7. Lexington City Light and Water Office	
8. Siceloff Manufacturing Company	
9. Eureka Trouser Company	
10. Lexington Shirt Corporation	Contributing resource to SHPO's proposed Lexington Industrial Historic District
11. Dixie Furniture Company[31]	Main contributing resource to SHPO's proposed Lexington Industrial Historic District
12. Expansion of Uptown Lexington Historic District	Concur for adding W.T. Grant Department Store/Kimbrell's Furniture Building; Redwine's Grocery, Clodfelter's Market; and Hedrick Block
13. Hedrick Block/Building (URS survey #18A)	NHRP eligible

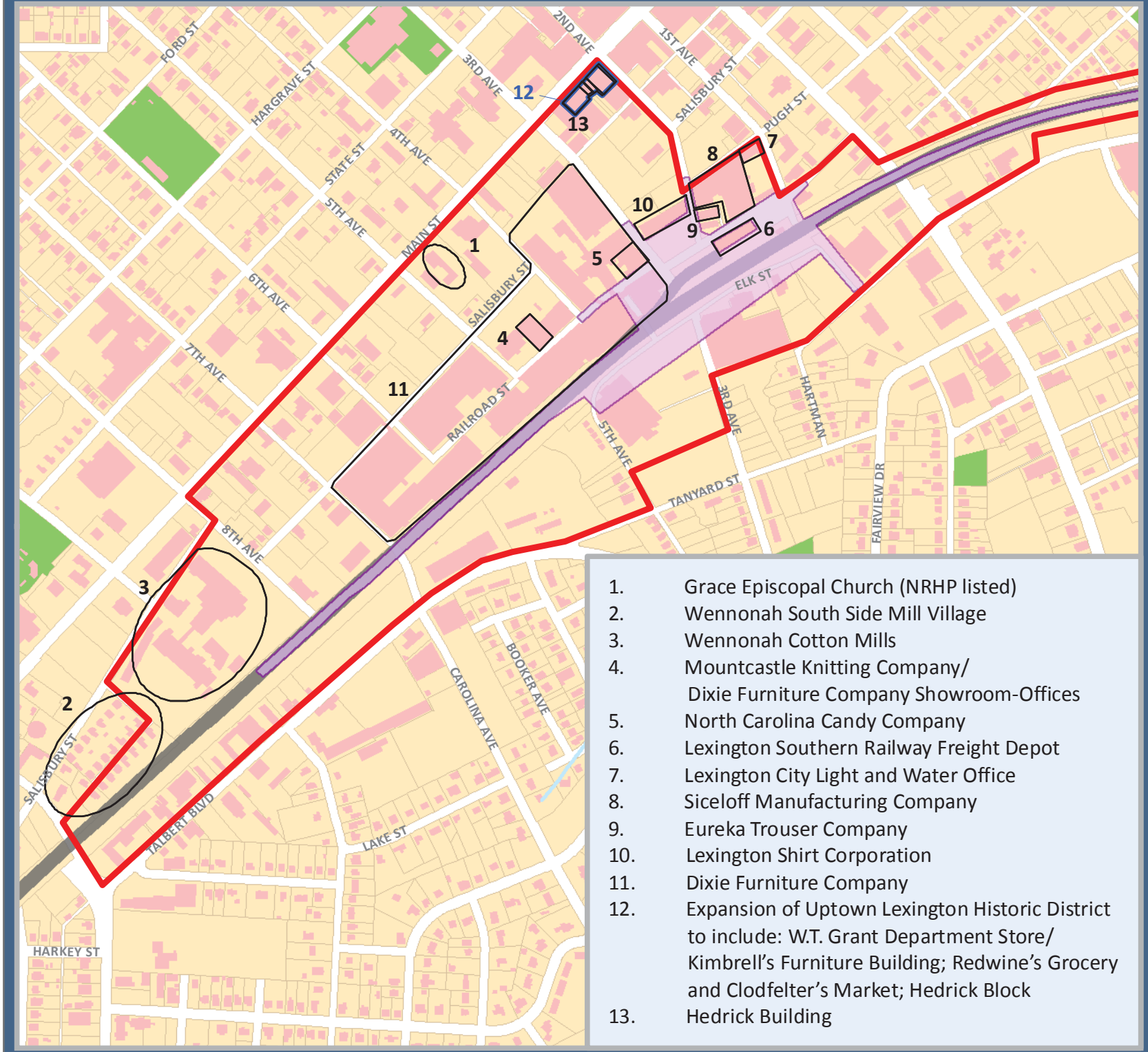
For resources nos. 4 through 11, SHPO has proposed these be incorporated into a single Lexington Industrial Historic District.

The Lexington Industrial Historic District includes the following properties as contributing resources: the Dixie Furniture Company (URS Survey #7); the Mountcastle Knitting Company/Dixie Furniture Company Showroom (URS Survey #7A); the North Carolina Candy Company (URS Survey #7B); the Lexington Southern Railway Freight Depot (URS Survey #8); the Lexington City Light and Water Office (URS Survey #9); the Siceloff Manufacturing Company (URS Survey #10); the Eureka Trouser Company (URS Survey #11); and the Lexington Shirt Company (URS Survey #12)..

This district also includes the one-lane tunnel under the railroad connecting Railroad Street and Elk Street, and the enclosed elevated passage over Railroad Street between Buildings 16 and 23 as contributing resources. Finally, the existing streetscapes are also contributing resources within the NRHP-eligible district.

Figure 5-1 shows the historic resources within and adjacent to the Project construction limits. **Figure 5-2** shows the resources within the SHPO-proposed Lexington Industrial Historic District.

[31]The Dixie Furniture Company buildings are also collectively known as the Lexington Home Brands (LHB) complex.



1. Grace Episcopal Church (NRHP listed)
2. Wennonah South Side Mill Village
3. Wennonah Cotton Mills
4. Mountcastle Knitting Company/ Dixie Furniture Company Showroom-Offices
5. North Carolina Candy Company
6. Lexington Southern Railway Freight Depot
7. Lexington City Light and Water Office
8. Siceloff Manufacturing Company
9. Eureka Trouser Company
10. Lexington Shirt Corporation
11. Dixie Furniture Company
12. Expansion of Uptown Lexington Historic District to include: W.T. Grant Department Store/ Kimbrell's Furniture Building; Redwine's Grocery and Clodfelter's Market; Hedrick Block
13. Hedrick Building

LEXINGTON MMTS ENVIRONMENTAL ASSESSMENT

FIGURE 5-1
POTENTIAL HISTORIC RESOURCES

Lexington Depot District

LEGEND

- POTENTIAL HISTORIC RESOURCE
- APE
- LIMITS OF CONSTRUCTION
- RAILROAD
- STREAM
- BUILDING
- PARK
- PARCEL

N

1 INCH = 600 FEET

0 375 750

Feet

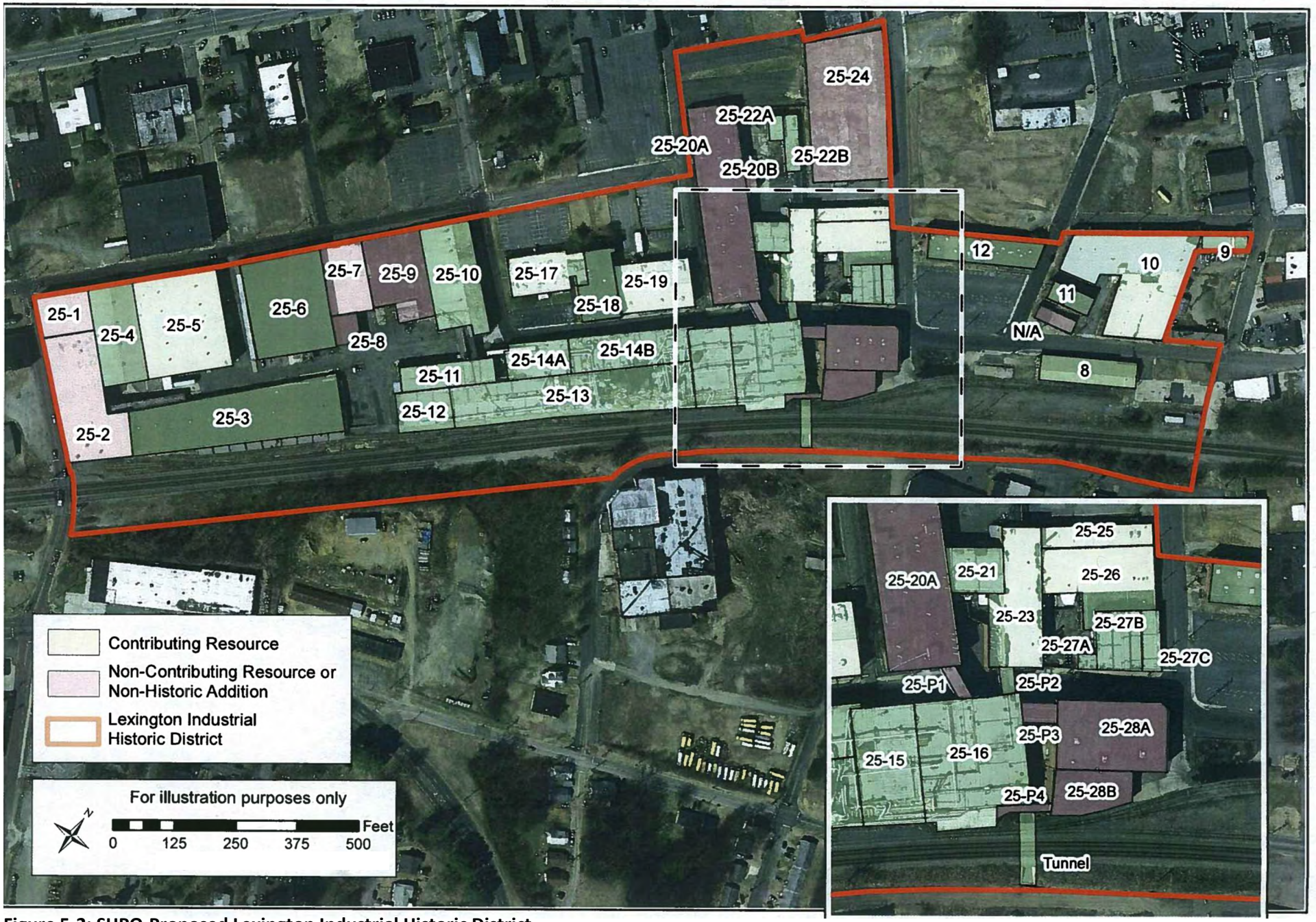


Figure 5-2: SHPO-Proposed Lexington Industrial Historic District

Source: SHPO (letter dated November 4, 2013)

Key to Buildings in **Figure 5-2**
SHPO-Proposed Lexington Industrial Historic District

URS Survey No.	Site Name/Use	Contributing Status
8	Lexington Southern Railway Freight Depot	Contributing
9	Lexington City Light and Water Office	Contributing
10	Siceloff Manufacturing Company	Contributing
11	Eureka Trouser Company	Contributing
12	Lexington Shirt Company	Contributing
7	Dixie Furniture Company Complex	Contributing
Bldg. 25-1	Storage	Non-Historic Addition
Bldg. 25-2	Storage	Non-Historic Addition
Bldg. 25-3	Storage	Contributing
Bldg. 25-4	Storage	Contributing
Bldg. 25-5	Storage	Contributing
Bldg. 25-6	Finished Product Storage	Contributing
Bldg. 25-7	Garage	Non-Historic Addition
Bldg. 25-8	Garage	Non-Historic Addition
Bldg. 25-9	Wood Processing	Non-Historic Addition
Bldg. 25-10	Warehouse and Kilns	Contributing
Bldg. 25-11	Wood Parts Storage	Contributing
Bldg. 25-12	Woodworking	Contributing
Bldg. 25-13	Wood Sanding	Contributing
Bldg. 25-14	(A/B) Woodworking and Boiler Room	Contributing
Bldg. 25-15	Woodworking, Gluing, and Cutting	Contributing
Bldg. 25-16	Packing, Cutting, and Gluing	Contributing
Bldg. 25-17	Office and Showrooms	Contributing
Bldg. 25-18	Office and Showrooms (Mountcastle Knitting)	Contributing
Bldg. 25-19	Office	Contributing
Bldg. 25-20	(A/B) Finishing and Spraying Room	Non-Contributing
Bldg. 25-21	Finishing	Contributing
Bldg. 25-22	(A/B) Laundry (Shoaf-Sink Hosiery Mill Warehouse)	Contributing
Bldg. 25-23	Finishing (Shoaf-Sink Hosiery Mill Knitting Room)	Contributing
Bldg. 25-24	Storage and Parking Deck	Non-Contributing
Bldg. 25-25	Finishing	Contributing
Bldg. 25-26	Finishing	Contributing
Bldg. 25-27	(A/B/C) Finishing (North Carolina Candy Co.)	Contributing
Bldg. 25-28	(A/B) Packing, Rubbing and Trim	Non-Contributing
Bldg. 25-P1	Elevated Passageway (Bldg. 16 to 20A)	Non-Contributing
Bldg. 25-P2	Elevated Passageway (Bldg. 16 to 23)	Contributing
Bldg. 25-P3	Elevated Passageway (Bldg. 16 to 28A)	Non-Contributing
Bldg. 25-P4	Elevated Passageway (Bldg. 16 to 28B)	Non-Contributing
n/a	Southern Railway Corridor	Contributing
n/a	Tunnel under Southern Railway	Contributing
n/a	216 East Second Avenue	Non-Contributing

Source: SHPO letter, November 4, 2013 (see Appendix B)

As described above, under Section 106 of the NHPA, COL, FRA and SHPO evaluated whether the Project would have no effect, no adverse effect, or an adverse effect on historic properties. No effect means that the project would result in no alteration to the characteristics of the historic property. An adverse effect occurs when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register. With adverse effects, the alterations brought by the federal action diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register, as defined in 36 CFR 800.5. A finding of no adverse effect means that the project would impact or alter the historic property, but the alteration would not have an adverse effect as defined in 36 CFR 800.

5.3.2 Evaluation of Resource Impacts

The Project is comprised of the Lexington MMTS, plus a plaza, station platforms, canopies, relocated Mainline tracks, pedestrian and baggage tunnel and vertical circulation, parking, and associated street improvements. The COL evaluated whether each of these components would adversely affect the identified historic resources. The evaluation concluded that the Project would have either no effect or no adverse effect on the 13 individual historic resources surveyed (resources with an asterisk are eligible individually and as portion of the SHPO-proposed Lexington Industrial Historic District):

1. Grace Episcopal Church (no effect): The Project is outside of the NRHP boundaries for this resource.
2. Wennonah South Side Mill Village: (no effect): The Project is outside of the proposed NRHP boundaries for this resource.
3. Wennonah Cotton Mills (no adverse effect): The Project limits for the track improvements are near this resource; however, these track improvements are within the railroad ROW and will not affect this resource.
4. Mountcastle Knitting Company/Dixie Furniture Company Showroom-Offices* (no effect): The Project is outside of the proposed boundaries for this resource.
5. North Carolina Candy Company* (no adverse effect): The Project will construct the station opposite this resource and make necessary street improvements to ensure safe and accessibility compliant with the Americans with Disabilities Act (ADA). However, these improvements will not make changes to the proposed National Register boundaries for this resource and will not impact the resource.
6. Lexington Southern Railway Freight Depot* (no adverse effect): The Project proposes street improvements, including ADA-compliant sidewalks and crosswalks, and on-street parking that are adjacent to the resource.
7. Lexington City Light and Water Office* (no effect): The Project is outside of the proposed National Register boundaries for this resource.
8. Siceloff Manufacturing Company* (no adverse effect): The Project proposes street improvements, including ADA-compliant sidewalks and crosswalks, and on-street parking that are adjacent to the resource.

9. Eureka Trouser Company* (no adverse effect): The Project proposes street improvements, including ADA-compliant sidewalks and c*rosswalks, and on-street parking that are adjacent to the resource.
10. Lexington Shirt Corporation (no adverse effect): The Project proposes street improvements, including ADA-compliant sidewalks and crosswalks, and on-street parking that are adjacent to the resource.
11. Dixie Furniture Company (no adverse effect): The Project proposes street improvements, including ADA-compliant sidewalks and crosswalks, and on-street parking that are adjacent to the resource.
12. Expansion of Uptown Lexington Historic District to include: W.T. Grant Department Store/Kimbrell's Furniture Building; Redwine's Grocery and Clodfelter's Market; Hedrick Block (no effect): The Project is outside of the proposed NRHP boundaries for this resource.
13. Hedrick Block/Building (no effect): The Project is outside of the proposed NRHP boundaries for this resource.

*Resource eligible individually and as portion of the SHPO-proposed Lexington Industrial Historic District.

The COL and FRA also evaluated the above historic resources under Section 4(f) and determined that the Project will not use, nor have the potential to use, these resources: no land from these resources will be permanently incorporated into the transportation facility; there will be no temporary occupancy that is adverse to the preservation purpose of Section 4(f); nor will there be a constructive use of any of the properties. Therefore, COL removed these 12 resources from further evaluation under Section 4(f).

The SHPO advised that the Project will have an adverse effect to the SHPO-proposed Lexington Industrial Historic District. Specifically, the Project construction will have an adverse effect on the tunnel structure and selected Streetscapes within the SHPO-proposed Lexington Industrial Historic District along South Railroad Street, East 2nd Avenue, East 3rd Avenue and Tunnel Street (the Streetscapes). **Figure 5-3** shows the existing condition of the Tunnel, and **Figure 5-4** illustrates the existing streetscapes within the resource area. The draft concurrence form for the assessment of effect to be signed by SHPO and COL is included in **Appendix E**.

Figure 5-3: Existing Tunnel Structure and Street

Figure 5-4: Existing Streetscapes

The Project will result in a 4(f) use of this historic resource through the closure and abandonment of the tunnel structure connecting Railroad Street and Elk Street and in the alteration of the existing Streetscapes. In an email to the COL, and during a meeting on June 22, 2012, with the COL and the Consultant Team, the NCDOT Rail Division determined that the existing tunnel structure would not support the proposed relocated tracks and proposed passenger platforms. Alternations to the existing Streetscapes are necessary to ensure the streets meet ADA requirements, have proper sight lines, and for other safety improvements. As required by Section 4(f), the COL undertook an additional evaluation of other potential Project alternatives, all of which focused on avoiding impacts to the Tunnel and Streetscapes. These alternatives are described in Section 5.4. A description of the Project use of the 4(f) resource, as well as measures to minimize or mitigate harm, is included in Section 5.5.

5.4 Description of Alternatives Considered

As noted in Chapter 2, COL considered various alternatives during the planning and design of this Project and evaluated these alternatives further, pursuant to Section 4(f) requirements, as "avoidance alternatives."

NCDOT evaluated these potential avoidance alternatives to determine if they would be feasible and prudent. Federal Highway Administration (FHWA) guidelines on implementing Section 4(f) note that an alternative is considered feasible and prudent if the alternative "avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweigh the importance of protecting the Section 4(f) property" (FHWA Section 4(f) Policy Paper, July 20, 2012). The FHWA guidelines also note that a potential avoidance alternative is not feasible if it cannot be built as a matter of sound engineering judgment or prudent if:

1. It compromises the project to a degree that it is unreasonable to proceed in light of the project's stated purpose and need;
2. It results in unacceptable safety or operational problems;
3. After reasonable mitigation, it still causes severe social, economic, or environmental impacts; severe disruption to established communities; severe or disproportionate impacts to minority or low-income populations; or severe impacts to environmental resources protected under other Federal statutes;
4. It results in additional construction, maintenance, or operational costs of extraordinary magnitude;
5. It causes other unique problems or unusual factors; or
6. It involves multiple factors as outlined above that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

5.4.1 No Build Alternative

Description of Alternative: Under the No Build Alternative, a new MMTS for Lexington would not be built. The major actions associated with the construction of a new transportation facility—Lexington MMTS building, passenger platforms, parking, other site improvements, track improvements—would also not be undertaken.

Evaluation: Under the No Build Alternative, a new train station would not be built, resulting in no additional ridership for Amtrak. The No Build Alternative would not improve connections for intercity

rail and local and regional transit, pedestrian and bicycle networks. Moreover, the No Build Alternative would not create an anchor for redevelopment and economic redevelopment of the Depot District.

Finding: The No Build Alternative is feasible because it does not require any construction. This alternative would not meet the Project purpose and need as described in Chapter 1, specifically to create a Lexington MMTS that provides the Lexington region with passenger rail service, improved multi-modal connections, and an anchor for redevelopment of the Depot District. With these limitations, COL determined that the No Build Alternative was feasible but not prudent, and this option was eliminated from further consideration.

5.4.2 Alternative Station Location

Description of Alternative: Section 2.2 describes how the COL evaluated two station location alternatives and seven platform and track alternatives for the proposed Lexington MMTS. All of these Lexington MMTS building/passenger platform and track alternatives were within the Depot District and are adjacent to or within the NCRR ROW. Two of the alternatives (Preliminary Alternatives A-V.1 and A-V.2) were proposed south of the current proposed Lexington MMTS building site, and thus would not propose passenger platforms above the current tunnel structure. These two alternatives would be along the approximate location of the "A" alternative shown in **Figure 5-5**. Five additional alternatives – Preliminary Alternatives B-V.1, B-V.2, B-V.3, B-V.4 and Alternative C –would be along the location alternative "B" in **Figure 5-5** and would all have the same impacts to 4(f) resources as the preferred Build Alternative.

For the purposes of the 4(f) Evaluation, COL re-evaluated these two Lexington MMTS Preliminary Alternatives A-V.1 and A-V.2. The approximate locations of the two Lexington MMTS building and passenger platform "A" options are shown in **Figure 5-5**, which is taken from the 2012 SAP evaluation.

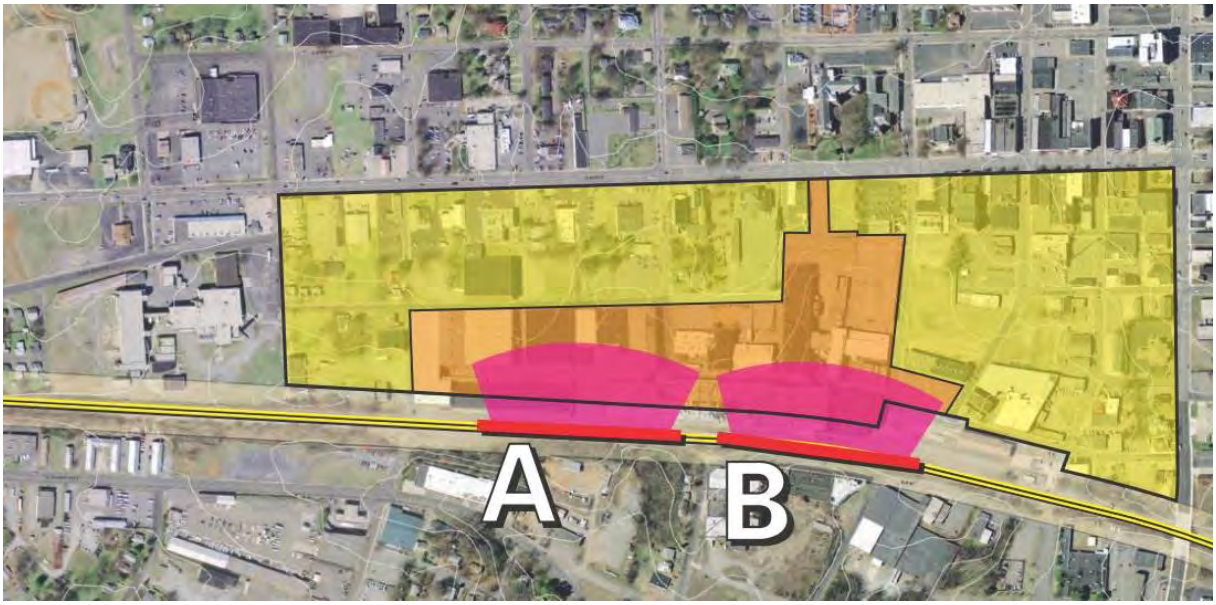


Figure 5-5: Station and Platform Site Alternatives

Evaluation: Both station location alternatives A-V.1 and A-V.2 would not provide the same level of pedestrian, bicycle and transit connections to Uptown Lexington, and thus would not help with the redevelopment of Uptown Lexington. The Lexington Redevelopment Commission (LRC) passed a resolution (found in Appendix B) that strongly endorsed location Alternative B, due its connectivity and development potential. Finally, any Alternative A site could also result in the use of other 4(f) resources, such as the Dixie Furniture Company buildings, and still result in the uses of the tunnel structure and Streetscapes within the SHPO-proposed Lexington Industrial Historic District.

Finding: A site along Alternative A may be feasible, but would not fully meet the Project purpose and need -- specifically to create a station that provides the Lexington region with improved multi-modal connections, and redevelopment of the Depot District. Furthermore, moving the station and platforms south to an Alternative A site would likely use other 4(f) resources such as the Dixie Furniture Company buildings while still requiring use of the tunnel structure and Streetscapes within the SHPO-proposed Lexington Industrial Historic District. With these limitations, COL determined that such an alternative location was not prudent, and COL eliminated this option from further consideration.

5.4.3 Alternative Station Site Design

Description of Alternative: During planning of the Lexington MMTS building layout and site plan , the COL received a letter from SHPO dated November 4, 2013 explaining that SHPO considered several structures, existing streetscapes and the tunnel within the Dixie Furniture Company site as contributing resources to the SHPO-proposed Lexington Industrial Historic District. (See SHPO letter in Appendix B). A portion of the map developed by SHPO showing the contributing and non-contributing resources to this proposed historic district is included in **Figure 5-6**. As a result, the COL and Consultant Team developed modifications to the Build Alternative in part to avoid impacts to some of the contributing resources by eliminating surface parking at the proposed lower level transit plaza; additional parking is available in other locations to the east and north of the proposed station building.

Contributing Resources:
- *25-15 Woodworking, Gluing, and Cutting Bldg*
- *25-16 Packing, Cutting, Gluing Bldg*
- *25-21 Finishing Bldg*
- *25-23 Finishing (Shoaf-Sink Hosiery Mill Knitting Room)*
- *25-25 Finishing*
- *25-26 Finishing*
- *25-27A/B/C Finishing (NC Candy Co.)*
- *25-P2 (Elevated Passageway (Bldg 16 to 23)*
- *Tunnel*
- *Existing streetscapes*

Non-Contributing Resources:
- *25-20A Finishing and Spraying Room*
- *25-P1 Elevated Passageway (Bldg 16 to 20A)*
- *25-P3 Elevated Passageway (Bldg 16 to 28A)*
- *25-P4 Elevated Passageway (Bldg 16 to 28B)*
- *25-28A/B Packing, Rubbing and Trim*

Source: SHPO

Figure 5-6: Select Contributing and Non-Contributing Resources as part of SHPO-Proposed Lexington Industrial Historic District

Evaluation: Under an early rendering of the Build Alternative, the Lexington MMTS would require demolition of non-contributing resources 25-28A, 25-28B, 25-P3, 25-P4 and contributing resources 25-16 and 25-P2 (see **Figure 5-6**)., the COL modified the Build Alternative by eliminating the surface parking from the lower level transit plaza, thus avoiding demolition of contributing resources 25-16 and 25-P2. This modified Build Alternative will still include Complete Street improvements that will affect the existing streetscapes, as well track and platform improvements that will impact the tunnel structure.

Finding: The modified Build Alternative requires fewer Section 4(f) resources while still meeting the Project Purpose and Need. Therefore, this modified Build Alternative is the Project Build Alternative evaluated in this document.

5.4.4 Build Alternative

Description of Alternative: The Build Alternative (Alternative C) is the Lexington MMTS and associated area improvements, as described in Chapter 2. The Build Alternative includes the following components:

- Construction of the new Lexington MMTS Building
- Lexington MMTS Plaza
- Surface parking
- Two tracks (relocation of the existing tracks), with provisions to allow two additional tracks under a separate project
- Dual low-level side passenger platforms with canopies
- Below grade passenger concourse connecting the Lexington MMTS building and the platforms with ramps and elevators
- Baggage tunnel and baggage ramps to the platforms
- New public access pedestrian tunnel connecting the MMTS and Elk Street
- Complete street improvements to primary access streets around the proposed Lexington MMTS building

5.5 Description of Impacts to 4(f) Resources

5.5.1 Tunnel Structure and Associated Streetscape

Probable Use of Section 4(f) Property

The SHPO has advised that the tunnel structure and Streetscapes are contributing resources to the SHPO-proposed Lexington Industrial Historic District.

The potential impacts would include closure and abandonment of the current use of the existing tunnel structure as a vehicular only access below the NCRR ROW along with the closing (total or partial) of the tunnel to build the Project components including new track alignment, dual side passenger platforms, and passenger concourse. As noted above, the existing tunnel structure would not support the proposed relocated tracks and proposed passenger platforms. The Project will incorporate a new, open (non-gated) pedestrian tunnel structure (underpass) connection crossing below the NCRR ROW, providing safe public access for pedestrians and cyclists only, and will be designed and constructed to replace current use of the existing vehicular Tunnel Street and structure. The pedestrian underpass length will be minimized (per required head wall locations determined by clearances for realignment of two mainline tracks and future track expansion above) and the width will be maximized to increase daylight and provide an inviting pedestrian experience. In addition, within and around the pedestrian underpass entrances, adequate lighting and emergency call boxes will be installed to maximize security.

Currently, most of the streets within the SHPO-proposed Lexington Industrial Historic District have no sidewalks, crosswalks, poor lighting, and poor signage. The Project will impact sections of adjacent Primary Access Street Streetscapes (including sections of South Railroad Street, East 2nd Avenue, East 3rd Avenue, and Tunnel Street) through the installation of sidewalks, crosswalks, lighting and signage to meet safety, sight-line and ADA requirements; and, a section of South Railroad Street (Section 'B') will be realigned between East 2nd Avenue and East 3rd Avenue to provide safer, accessible intersections. Additional impacts will include the integration of on-street parking along with the relocation, upgrade,

and extension of existing utilities and/or installation of new utilities as required to provide adequate service to the Project. Specific impact areas along each street section are as follows (note, section naming does not correspond to the Alternative naming):

South Railroad Street: Section 'A'	Streetscape Length: Approximately 400 linear feet Street ROW Width: Approximately 25 feet
South Railroad Street: Section 'B'	Streetscape Length: Approximately 270 linear feet Street ROW Width: Approximately 35 feet
South Railroad Street: Section 'C'	Streetscape Length: Approximately 590 linear feet Street ROW Width: Approximately 31 feet
East 2nd Avenue	Streetscape Length: Approximately 300 linear feet Street ROW Width: Approximately 31 feet
East 3rd Avenue	Streetscape Length: Approximately 300 linear feet Street ROW Width: Approximately 37 feet
Tunnel Street	Streetscape Length: Approximately 275 linear feet Street ROW Width: Approximately 19 feet

Mitigation Measures

As mitigation, the COL has proposed to undertake a recordation plan to document the tunnel structure and existing streetscapes around the proposed MMTS within the SHPO-proposed Lexington Industrial Historic District. This recordation will be submitted to SHPO for review and acceptance. A MOA among COL, FRA, SHPO, and potentially the ACHP will be completed as part of the Section 106 Consultation Process.

The COL will also ensure that the north/west portion of the tunnel structure, including the headwall arch opening and adjacent length of Tunnel space, is preserved to the extent possible as determined by a certified structural inspection and integrity report. The COL will incorporate the preserved portion of the tunnel structure into an area of the Project (defined by the SAP as a community plaza space), and implement a public interpretive installation at the Tunnel opening.

The walls of the new pedestrian underpass will also offer an opportunity for the integration of a unique linear "public interpretive installation", with public access to an exhibit that documents, memorializes, and reflects the character of other historic buildings within the Project area.

For the impacts to the existing streetscapes, COL will undertake a recordation plan to document the streetscapes, as outlined in the MOA.

5.6 Conclusion

Based upon the Section 4(f) evaluation of the Project, the COL has identified uses of historic resources and measures to minimize harm, as outlined below.

Tunnel Structure and Adjacent Streetscapes

Uses: The construction of dual side passenger platforms and the associated track improvements/relocation will require closing and filling in of most of the existing tunnel structure connecting Railroad Street and Elk Street. Street improvements, including ADA-compliant sidewalks and crosswalks, and on-street parking will alter the existing relationship of the streets to the buildings.

Measures to minimize harm: As detailed in the MOA, with the closing and filling in of the existing tunnel, COL will undertake mitigation documentation of the tunnel structure, including a historic essay, measured drawings, and photographic documentation of the structure, as well as construction of a public interpretive installation near the preserved tunnel entrance that will be incorporated as part of the Lexington MMTS plaza. The COL will also investigate the possibility of including a second public interpretive installation in the new pedestrian tunnel connecting the station, platforms and Elk Street, which would document, memorialize, and reflect the character of other historic buildings within the Project area. For the impacts to the existing streetscapes, COL will incorporate context-sensitive design elements and coordinate with SHPO to allow SHPO to review and comment through each phase of design.

5.7 Public and Agency Coordination

The following is a timeline of the coordination between the COL and Consultant Team and the North Carolina SHPO.

March 30, 2012 Members of the Consultant Team met with SHPO staff to have an initial/early coordination review of the Project and next steps for evaluating the resources within the Project area of potential effects (APE).

April 25, 2012 The COL and members of the Consultant Team met with the local Lexington Historic Preservation Commission to discuss initial considerations for the Project in the context of the Depot District area.

May 3, 2012 On behalf of the Historic Preservation Commission (HPC), the COL requested a technical assistance visit from SHPO in order to guide and inform the Commission in providing feedback to the Lexington Redevelopment Commission relative to the historic significance certain buildings within Lexington's Depot planning district may or may not have.

May 2012 The COL initiated agency coordination for the Project with a letter and a map noting the Project Study Area/area of potential effect.

June 19, 2012 At the request of the City of Lexington HPC, the SHPO was invited to join in a walking tour of the current property and structures owned by the City of Lexington [the former Lexington Home Brands (LHB) property]. After the tour, all attendees reconvened for a discussion of general observations and considerations relative to development of the SAP Project within the overall redevelopment master planning area.

October 25, 2012 In consultation with SHPO, URS Corporation established the APE and subsequently presented the results of a reconnaissance-level survey of the APE to SHPO. Upon review, SHPO requested an intensive-level inventory to

	determine the National Register eligibility of 20 of the 56 resources and include the findings of that effort in a report.
April 2013	URS Corporation completed the Intensive-Level Historic Architectural Analysis for MMTS, City of Lexington, Davidson County, North Carolina (referred here as the April 2013 report).
July 30, 2013	SHPO sent a letter that concurred with a portion of the findings and recommendations in the April 2013 report. However, SHPO did not concur with the report's finding regarding the Dixie Furniture Company and determined the property (together with several other nearby properties) is best evaluated as a historic district – proposed as the "Lexington Industrial Historic District", rather than as an individual site.
September 12, 2013	The COL, the Consultant Team, SHPO, and NCDOT Rail Division held a meeting to review the April 2013 report and SHPO's July 30, 2013 letter. In addition, the Consultant Team introduced the Project and presented preliminary planning and alternatives considered.
November 4, 2013	SHPO submitted a letter, which replaced SHPO's July 30, 2013 letter in its entirety. In the November 4, 2013 letter, SHPO again concurred with some of the findings in the April 2013 report. However, SHPO also determined that some resources recommended as eligible for inclusion in the expanded Uptown Lexington Historic District were non-eligible. SHPO also reinforced their recommendation for the creation of two new historic districts in Lexington (**Wennonah Cotton Mill and Mill Village Historic District** and **Lexington Industrial Historic District**) and provided map exhibits depicting proposed district boundaries and identifying contributing and non-contributing resources within each district. SHPO also recommended that the one-lane tunnel under the railroad connecting Railroad Street and Elk Street, the railroad ROW, and one of the enclosed elevated passage over Railroad Street connecting the buildings also were contributing resources. SHPO concurred with the recommendations that the remaining properties listed in the April 2013 report are not eligible for listing in the National Register. **Tables 3-19 and 3-20 in chapter 3** document the differences in the findings between the URS April 2013 report and the November 4, 2013 letter from SHPO.

September 2, 2014 The COL developed a draft MOA for review by SHPO that outlined the impacts to the historic resources and mitigations, which is included in **Appendix E.** The COL's draft MOA outlines impacts to the following contributing resources:

- SHPO Identification: **25-16** (Portion of LHB Building Complex)
- SHPO Identification: **25-P2** (Overhead Enclosed Bridge Structure)
- SHPO Identification: **Tunnel** (Existing tunnel structure)

September 5, 2014 The COL, the Consultant Team, FRA, NCDOT Rail Division and SHPO met to review the current Project design progress along with potential impacts and possible mitigation.

October 31, 2014 SHPO prepared a draft MOA in response to the COL DRAFT MOA that outlined several alternate stipulations for mitigation based upon the potential impacts and adverse effects to contributing resources as outlined in the COL's draft MOA and in accordance with the current SAP site plan.

November 21, 2014 The COL, the Consultant Team, FRA, and SHPO met to review the Project and discuss a new Alternative C per new design criteria for the passenger platform and associated track realignment. Alternative C also includes revisions to the SAP site plan to avoid use of portions of the LHB building/Dixie Furniture Company complex determined to be a contributing resources as well as determine possible effects on other eligible and listed resources.

The Alternative C avoidance alternative proposes dual side load passenger platforms and associated track realignment together with a revised SAP site plan that eliminates the surface parking area from the Lower Transit Plaza and avoids impacts to the contributing resources (25-16, Packing, Cutting, Gluing building and 25-P2, elevated passageway connection buildings 16 and 23). However, it was determined that the Project would still have an adverse effect on the tunnel structure connecting Railroad Street and Elk Street. In addition, SHPO determined the Project would impact the Streetscapes that front the Project boundary and adjacent contributing resources.

November 17, 2015 The COL and SHPO reached an agreement on a revised draft MOA for the Alternative C avoidance alternative, which is included in **Appendix E**. The COL's revised draft MOA outlines impacts to the following contributing resources:

- SHPO Identification: Tunnel (Existing tunnel structure)
- SHPO Identification: Streetscapes (segments of Existing Streetscapes around the proposed MMTS)

Next Steps

The COL has prepared a revised SAP site plan per Alternative C, and draft MOA, for review by SHPO, which outlines the current reduction of impacts per the SAP avoidance plan for the Alternative C. The COL's draft MOA outlines impacts to the following contributing resources:

- SHPO Identification: **Tunnel** (Existing tunnel structure)
- SHPO Identification: **Streetscape** (Sections of Adjacent Primary Access Street Streetscapes)

The COL, the Consultant Team, FRA, and SHPO will meet to review the current SAP site plan for avoidance of contributing resources per Alternative C along with the COL's revised draft MOA per reduction of impacts. This draft MOA is included in **Appendix E** of this EA/draft Section 4(f) Evaluation for public review and comments.

As part of the EA, FRA will also submit the 4(f) determination to Department of Interior (DOI) for review and concurrence.

Upon completion of the draft EA and draft Section 4(f) Evaluation, COL will submit the documents to agencies and the public for review. The public will be invited to review and comment on the draft EA, draft Section 4(f) Evaluation, and draft MOA for the Project.

6.0 REFERENCES AND SOURCES CITED

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APPENDICES

A. List of Preparers and Consultant Team Members

B. Agency Coordination

C. Hazardous Materials Summary

D. Determination of Eligibility Report

E. Proposed Memorandum of Agreement on Historic Resources

F. Commonly Used Terms and Acronyms

G. Station Alternatives