September 4, 2015

Mr. David A. Charters, Jr., PE
Manager, Design & Engineering
Go Triangle

Dear Mr. Charters,

I am responding to your request for comments regarding the Durham-Orange Light Rail Transit Project – Draft Environmental Impact Statement in Durham and Orange Counties, NC. These comments are based on the documents submitted to the Division of Parks and Recreation on August 25, 2015. Based on the project as proposed the Division has no objections.

Please let me know if you need additional information.

Sincerely,

Justin Williamson
Environmental Review Coordinator
North Carolina Division of Parks and Recreation
MS CAROLYN PENNY
CLEARINGHOUSE COORDINATOR
DPS - DIV OF EMERGENCY MANAGEMENT
FLOODPLAIN MANAGEMENT PROGRAM
MSC # 4218
RALEIGH NC

REVIEW DISTRIBUTION
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DEPT OF CULTURAL RESOURCES
DEPT OF TRANSPORTATION
DPS - DIV OF EMERGENCY MANAGEMENT
TRIANGLE J COG

PROJECT INFORMATION
APPLICANT: Triangle Transit
TYPE: National Environmental Policy Act
Draft Environmental Impact Statement

DESC: Proposed is a DEIS for the Durham-Orange Light Rail Transit Project. View documents at http://ourtransitfuture.com/

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☑ COMMENTS ATTACHED

SIGNED BY: .......................... DATE: 09/28/2015
September 9, 2015

State Clearinghouse
N.C. Department of Administration
1301 Mail Service Center
Raleigh, North Carolina 27699-1301

Subject: Intergovernmental Review State Number: 16-E-0000-0065
Durham-Orange Light Rail Transit Project

As requested by the North Carolina State Clearinghouse, the North Carolina Department of Public Safety Division of Emergency Management Risk Management reviewed the proposed project listed above and offers the following comments:

1) A floodplain development permit issued by the local jurisdiction will be required for all construction, grading, development, or the storage of equipment or materials within the Special Flood Hazard Area (SFHA).

2) Page 4-165 (Section 4.8.4.2) of the draft EIS states that, “any increase [in the flood level] of less than 0.1 feet is considered negligible and does not require mitigation.” The EIS shall reference the source of this standard.

3) A hydraulic analysis will be required for new grading, construction, or the storage of equipment or materials within a floodway or non-encroachment area. A No-Rise Certification is required if the proposed element of the project does not increase flood levels during the base flood discharge. A Conditional Letter of Map Revision (CLOMR) will be required if the project results in an increase in flood levels during the base flood discharge. No structures may be impacted by an increase in flood levels.

Thank you for your cooperation and consideration. If you have any questions concerning the above comments, please contact me at (919) 825-2300, by email at dan.brubaker@ncdps.gov or at the address shown on the footer of this document.

Sincerely,

[Signature]
John D. Brubaker, P.E., CFM
NFIP Engineer
Risk Management
cc: John Dorman, Program Manager
    John Gerber, NFIP State Coordinator

William Bradham, Inspections Director, Durham City-County Government
Michael Harvey, Planning Supervisor, Orange County
Sue Burke, Stormwater Management Engineer, Town of Chapel Hill
Ernest Odei-Larbi, Civil Engineer III, Town of Chapel Hill

File
September 10, 2015

David A. Charters
GoTriangle
PO Box 13787
Research Triangle Park, NC 27709

Re: Assessment of Effects for Historic Properties, Durham-Orange Light Rail Transit Project,
Durham and Orange Counties, ER 12-0738

Dear Mr. Charters:

Thank you for your letter of August 11, 1025 and copy of the Preliminary Assessment of Effects for the above-referenced undertaking. We have reviewed the assessment of effects on historic properties in the Area of Potential Effects (APE) for the undertaking and agree with them as presented in the Summary of Effects (Figure 12 on page 5-1 Draft).

GoTriangle has done an excellent job in avoiding adverse effects on historic properties in the APE and should be proud of its work to do so. Our only other comment with regard to the project, the NEPA process, and Section 106; is that the Draft and the Final Environmental Impact Statements should clearly outline the environmental commitments for landscaping and other means proposed to reduce the effects of the undertaking on historic properties. The commitments should include the groups, organizations and/or agencies that will be involved in developing plans for any landscaping or other treatments that will be implemented to ensure that no adverse effects will occur.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Ramona M. Bartos

cc: Stanley A. Mitchell, FTA, Stanley.a.mitchell@dot.gov
Julia Walker, FTA, Julia.walker@dot.gov
MEMORANDUM

TO: Lyn Hardison, Environmental Assistance Coordinator
Division of Environmental Assistance and Outreach, DENR

FROM: Travis Wilson, Highway Project Coordinator
Habitat Conservation Program

DATE: September 16, 2015

SUBJECT: Go Triangle and Federal Transit Authority; Draft Environmental Impact Statement (DEIS) for the proposed Durham-Orange Light Rail Transit Project (DOLRT), Durham and Orange Counties, SCH Project No. 16-0065

Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject DEIS and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

WRC has participated in stakeholder meetings as well as interagency coordination that has occurred during the planning of the DOLRT project. That involvement has allowed us to express concerns involving the potential impacts associated with all the alternatives under consideration. Include the potential to impact portions of Jordan Lake Game Land. Comments made during that coordination are reflected in the identification of preferred alternatives as well as the specific mitigation measures documented in sections 4.6.4 and 6.3.1.1 relevant to the impacts to the Jordan Lake Game Lands.

As the development of the DOLRT project moves forward we will continue to assess the impacts associated with the selected alternative for further avoidance and minimization measures. Thank you for the opportunity to comment. If we can be of any further assistance please contact me at (919) 707-0370.
COUNTY: DURHAM ORANGE  STATE NUMBER:  16-E-0000-0065

F04: MASS TRANSIT  DATE RECEIVED:  08/28/2015

DEPT OF TRANSPORTATION  AGENCY RESPONSE:  09/23/2015

STATEWIDE PLANNING - MSC #1554  REVIEW CLOSED:  09/28/2015

RALEIGH NC

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If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED:  □ NO COMMENT  □ COMMENTS ATTACHED

SIGNED BY:  [Signature]  DATE:  9/18/15
MEMO TO: North Carolina State Clearinghouse  
Department of Administration  
Intergovernmental Review

FROM: Julie B. Bollinger, P.E.  
NCDOT-Transportation Planning Branch

SUBJECT: 16-E-0000-0065 – DEIS for the Durham-Orange Light Rail Transit Project - Located in Durham and Orange Counties

Thank you for allowing the Transportation Planning Branch to review the DEIS for the Durham-Orange Light Rail Transit project.

There are many 2040 Metropolitan Transportation Plan (MTP, formerly called LRTP) projects in which the Light Rail Transit project crosses or is adjacent. I am sure you are already aware of this due to your extensive planning process, so I will not list these MTP projects. The MTP was approved June 2013 by the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO).

The DCHC MPO 2040 MTP report, maps, and project lists are at the following website: [http://www.dchcmpo.org/programs/transport/2040.asp](http://www.dchcmpo.org/programs/transport/2040.asp). Please continue to coordinate and consult with the DCHC MPO ([http://dchcmpo.org/](http://dchcmpo.org/)) on MTP projects and the Durham-Orange Light Rail Transit Project as you continue to move forward.

There are several State Transportation Improvement Program (STIP) projects in which the Light Rail Transit project crosses or is adjacent. I am sure you are already aware of these as well, so I will not list them. STIP documents and funding tables are at the following website: [https://connect.ncdot.gov/projects/planning/Pages/State-Transportation-Improvement-Program.aspx](https://connect.ncdot.gov/projects/planning/Pages/State-Transportation-Improvement-Program.aspx).

If you have any questions, please do not hesitate to call me at 919-707-0945.
Date: September 18, 2015

To: Linda Culpepper, Director
Division of Waste Management

Through: Jim Bateson, Superfund Section Chief

From: Pete Doorn, Special Remediation Branch Head

Subject: NEPA Project #16-0065, Proposed Durham-Orange Light Rail Transit Project, Durham and Orange Counties, North Carolina

The Superfund Section has reviewed the proximity of CERCUS and other sites under its jurisdiction to the proposed Durham-Orange Light Rail Transit (D-O LRT) Project in Durham and Orange Counties. The D-O LRT project is being proposed as a potential high-capacity transit improvement in the Research Triangle region within the Durham-Orange Corridor between Chapel Hill and Durham.

Forty-eight sites were identified within approximately one-mile of the proposed project corridor. The attached figure illustrates the proposed corridor and the table below lists the identified sites. The Draft Environmental Impact Statement for the project states that for contaminated sites, Triangle Transit will perform Phase I and II Environmental Site Assessments for high risk sites following ASTM standards prior to construction. Medium risk properties will have their closure status or current site status reviewed with NCDENR before starting construction. Superfund Section site files can be reviewed at: http://portal.ncdenr.org/web/wm/sf-file-records.

Please contact me at 919.707.8369 if you have any questions.

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**Programs:**
- IHSB – Inactive Hazardous Sites Branch
- DSCA – Dry-cleaning Solvent Cleanup Act Program
- BFA – Brownfields Program
Figure ES-3: NEPA Preferred Alternative
MEMORANDUM

To: Lyn Hardison, Environmental Coordinator, Office of Legislative and Intergovernmental Affairs

Through: Amy Chapman, Supervisor, Transportation Permitting Unit, NC Division of Water Resources

From: Rob Ridings, Transportation Permitting Unit, NC Division of Water Resources

Subject: Comments on the Draft Environmental Impact Statement related to proposed Go Triangle Project, Durham-Orange Light Rail. State Clearinghouse Project No. 16-0065.

This office has reviewed the referenced document received September 3, 2015. The NC Division of Water Resources (NCDWR) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to jurisdictional wetlands, streams, and other surface waters. The NCDWR offers the following comments based on review of the aforementioned document:

Project Specific Comments:

1. For the Final EIS, DWR requests that information related to impacts for any roadway improvements or realignments that are necessary for the project. This may include turning lanes, connectors, entries to park and ride lots, and others.

2. Citizen comments have indicated concerns over possible stormwater runoff in the area of the stated preferred alternative for the Rail Operations & Maintenance Facility (ROMF) at Farrington Road. This particularly includes possible impacts to groundwater that feeds drinking water wells of nearby residents, as well as a large amount of added impervious surface to the watershed. NCDWR requests that all further environmental documentation discuss in detail any avoidance and minimization efforts at any proposed ROMF site, as well as information regarding potential treatment of the stormwater before it drains off the ROMF sites, using Best Management Practices (BMPs). Treatment of stormwater from any new impervious surfaces to prevent downstream pollution and to minimize impact to the watershed, is a requirement in applying for any 401 Water Quality Certification.

3. Streams in the project areas are listed as WS-I-V, NSW or WS-V, NSW waters of the State. The NCDWR is very concerned with sediment and erosion impacts that could result from this project. The NCDWR recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to these waters. Additionally, the NCDWR requests that design plans provide treatment of the stormwater runoff through best management practices. Treatment for road and street stormwater should be designed as detailed in the most recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual.
4. This project is within the Neuse River and Jordan Lake watersheds. Riparian buffer impacts shall be avoided and minimized to the greatest extent possible pursuant to 15A NCAC 2B.0233 and 2B.0267. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B.0233 and 2B.0267. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, coordinated with the North Carolina Division of Mitigation Services, must be provided to the NCDWR prior to approval of the Water Quality Certification. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, coordinated with the North Carolina Division of Mitigation Services, must be provided to the NCDWR prior to approval of the Water Quality Certification.

General Transportation Permitting Comments:

5. The environmental document should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.

6. Environmental impact statement alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives should include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual, which includes BMPs such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.

7. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the applicant is respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands (and streams) to the maximum extent practical. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506(h)), mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The North Carolina Division of Mitigation Services may be available to assist with wetland mitigation.

8. In accordance with the Environmental Management Commission's Rules (15A NCAC 2H.0506(h)), mitigation will be required for impacts of greater than 150 linear feet to any single stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The North Carolina Division of Mitigation Services may be available to assist with stream mitigation.

9. Future documentation, including the 401 Water Quality Certification Application, shall continue to include an itemized listing of the proposed wetland and stream impacts with corresponding mapping.

10. An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Resources Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.

11. The applicant is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, and rip rap to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.
12. Where streams must be crossed, the NCDWR prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, the applicant should not install the bridge bents in the creek, to the maximum extent practicable.

13. Whenever possible, the NCDWR prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges shall allow for human and wildlife passage beneath the structure. Fish passage and navigation by canoists and boaters shall not be blocked. Bridge supports (bents) should not be placed in the stream when possible.

15. Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most recent version of the North Carolina Department of Transportation Stormwater Best Management Practices Toolbox manual for approved measures.

14. Sediment and erosion control measures should not be placed in wetlands or streams.

15. Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.

16. The 401 Water Quality Certification application will need to specifically address the proposed methods for stormwater management. More specifically, stormwater shall not be permitted to discharge directly into streams or surface waters.

17. Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require an Individual Permit application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a formal application by the applicant and written concurrence from the NCDWR. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.

18. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.

19. If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.

20. Unless otherwise authorized, placement of culverts and other structures in waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by the NCDWR. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NCDWR for guidance on how to proceed and to determine whether or not a permit modification will be required.
21. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation, floodplain benches, and/or sills may be required where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.

22. If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3883/Nationwide Permit No. 6 for Survey Activities.

23. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.

24. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of the NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.

25. While the use of National Wetland Inventory (NWI) maps, NC Coastal Region Evaluation of Wetland Significance (NC-CREWS) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.

26. Heavy equipment should be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.

27. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.

28. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.

The NCDWR appreciates the opportunity to provide comments on your project. Should you have any questions or require any additional information, please contact Rob Ridings at rob.ridings@ndenr.gov.

Electronic copy only distribution:
John Thomas, US Army Corps of Engineers, Raleigh Field Office
Dr. Cynthia Van Der Wiele, US Environmental Protection Agency
Juanita Shearer-Swink, Go Triangle
File Copy
The Solid Waste Section has reviewed the Draft Environmental Impact Statement for the proposed Durham-Orange Light Rail Transit Project in Durham and Orange Counties, North Carolina. The review has been completed and has seen no adverse impact on the surrounding community and likewise knows of no situations in the community, which would affect this project from a solid waste perspective.

During construction, the applicant should make every feasible effort to minimize the generation of waste, to recycle materials for which viable markets exist, and to use recycled products and materials in the development of this project where suitable. Any waste generated by this project that cannot be beneficially reused or recycled must be disposed of at a solid waste management facility approved to manage the respective waste type. The Section strongly recommends that any contractors are required to provide proof of proper disposal for all waste generated as part of the project. The nearest permitted facilities to the project are the Orange County C&D Landfill, Chapel Hill, the Waste Management - Chatham County Transfer Station, Siler City, the Stone Court Park Transfer Station, Durham, and the City of Durham Transfer Station, Durham, North Carolina. Additional solid waste facility information for solid waste facilities may be found on the Solid Waste Section portal site at: http://portal.nceedr.org/web/wm/sw/facilitylist.

Please contact Mr. John Patrone, Environmental Senior Specialist, for any questions regarding solid waste management in Orange County and Mrs. Mary Whaley, Environmental Senior Specialist, with questions regarding solid waste management in Durham County. Mr. Patrone may be reached at (336)-776-9673 or by email at john.patrone@ncdenr.gov and Mrs. Whaley may be reached at (910)-693-5023 or by email at mary.whaley@ncdenr.gov.

Cc: Jason Watkins, Field Operations Branch Head
    John Patrone, Environmental Senior Specialist
    Mary Whaley, Environmental Senior Specialist
    Sarah Rice, Compliance Officer
    Dennis Shackelford, Eastern District Supervisor
North Carolina Department of Environmental Quality

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

September 23, 2015

To: Linda Culpepper, Director  
Division of Waste Management

From: Jenny Patterson, Eastern Region Supervisor, Compliance Branch  
Hazardous Waste Section

Subject: Hazardous Waste Section Comments on the Durham-Orange Light Rail Transit Project  
(Durham and Orange Counties)  
Project Number: 16-0065

The Hazardous Waste Section (HWS) has reviewed the subject Draft Environmental Impact Statement for the proposed project which consists of the construction of a light rail system that will traverse Orange and Durham Counties connecting Chapel Hill and Durham.

Any hazardous waste generated from the demolition, construction, maintenance, operation, and/or remediation (e.g. excavated soil) from the proposed project must be managed in accordance with the North Carolina Hazardous Waste Rules. The demolition, construction, maintenance, operation, and remediation activities conducted will most likely generate a solid waste, and the determination must be made on whether it is a hazardous waste. If a project site generates more than 220 pounds of hazardous waste in a calendar month, the HWS must be notified, and the site must comply with the small quantity generator requirements. If a project site generates more than 2200 pounds of hazardous waste in a calendar month, the HWS must be notified, and the facility must comply with the large quantity generator requirements.

Used oil generated from operation or maintenance must be managed in accordance with the standards for the management of used oil described in 40 CFR 279 if recycled. If the used oil is disposed, then a hazardous waste determination must be made on the used oil.

Should any questions arise, please contact me at 336-767-0031.
<table>
<thead>
<tr>
<th>PERMITS</th>
<th>SPECIAL APPLICATION PROCEDURES or REQUIREMENTS</th>
<th>Normal Process Time (statutory time limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit to construct &amp; operate wastewater treatment facilities, sewer</td>
<td>Application 90 days before begin construction or award of construction contracts. On-site inspection. Pre-</td>
<td>30 days (90 days)</td>
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<tr>
<td>system extensions &amp; sewer systems not discharging into state surface</td>
<td>application technical conference usual.</td>
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<td>waters.</td>
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<tr>
<td>NPDES - permit to discharge into surface water and/or permit to operate</td>
<td>Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally,</td>
<td>90.120 days (N/A)</td>
</tr>
<tr>
<td>and construct wastewater facilities discharging into state surface</td>
<td>obtain permit to construct wastewater treatment facility granted after NPDES. Reply time, 30 days after</td>
<td></td>
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<tr>
<td>waters.</td>
<td>receipt of plans or issuance of NPDES permit-whichever is later.</td>
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<tr>
<td>Water Use Permit</td>
<td>Pre-application/technical conference usually necessary</td>
<td>30 days (N/A)</td>
</tr>
<tr>
<td>Well Construction Permit</td>
<td>Complete application must be received and permit issued prior to the installation of a well.</td>
<td>7 days (15 days)</td>
</tr>
<tr>
<td>Dredge and Fill Permit</td>
<td>Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application</td>
<td>55 days (90 days)</td>
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<td></td>
<td>conference usually. Filling may require Easement to Fill from NC. Department of Administration and Federal</td>
<td></td>
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<tr>
<td></td>
<td>Dredge and Fill Permit</td>
<td></td>
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<tr>
<td>Permit to construct &amp; operate Air Pollution Abatement facilities and</td>
<td>Application must be submitted and permit received prior to construction and operation of the source. If a</td>
<td>90 days</td>
</tr>
<tr>
<td>emission sources as per 15A NCAC (2Q.0100 thru 2Q.0300)</td>
<td>permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.013).</td>
<td></td>
</tr>
<tr>
<td>Permit to construct &amp; operate Transportation Facility as per 15A NCAC</td>
<td>Application must be submitted at least 90 days prior to construction or modification of the source</td>
<td>90 days</td>
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<tr>
<td>(2Q.0800, 2Q.0001)</td>
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<tr>
<td>Demolition or renovations of structures containing asbestos material</td>
<td>N/A</td>
<td>60 days (90 days)</td>
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<tr>
<td>must be in compliance with 15A NCAC 20.1110 (a) (1) which requires</td>
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<td>notification and removal prior to demolition. Contact Asbestos</td>
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<tr>
<td>Control Group 919-707-5950.</td>
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<tr>
<td>Complex Source Permit required under 15A NCAC 2D.0800</td>
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<tr>
<td>The Sedimentation Pollution Control Act of 1973 must be properly</td>
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<tr>
<td>addressed for any land disturbing activity. An erosion &amp; sedimentation</td>
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<td>control plan will be required if one or more acres to be disturbed.</td>
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<tr>
<td>Plan filed with proper Regional Office (Land Quality Section) At least</td>
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<td>30 days before beginning activity. A fee of $65 for the first acre or</td>
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<td>any part of an acre. An express review option is available with</td>
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<td>additional fees.</td>
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<tr>
<td>Sedimentation and erosion control must be addressed in accordance with</td>
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<tr>
<td>NCDOT’s approved program. Particular attention should be given to</td>
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<td>design and installation of appropriate perimeter sediment trapping</td>
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<tr>
<td>devices as well as the stormwater conveyances and outlets.</td>
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<tr>
<td>Mining Permit</td>
<td>On-site inspection usual. Surry bond filed with ENS Bond amount varies with type mine and number of acres of</td>
<td>30 days (60 days)</td>
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<td></td>
<td>affected land. Any mine mined greater than one acre must be permitted. The appropriate bond must be received</td>
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<td></td>
<td>before the permit can be issued.</td>
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<tr>
<td>North Carolina Burning permit</td>
<td>On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days</td>
<td>1 day (N/A)</td>
</tr>
<tr>
<td>Special Ground Clearance Burning Permit - 22 counties in coastal</td>
<td>On-site inspection by N.C. Division Forest Resources required “if more than five acres of ground clearing</td>
<td>1 day (N/A)</td>
</tr>
<tr>
<td>N.C. with organic soils</td>
<td>activities are involved. Inspections should be requested at least 10 days before actual burn is planned.”</td>
<td></td>
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<tr>
<td>Oil Refining Facilities</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Dan Safety Permit</td>
<td>If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified</td>
<td>30 days (60 days)</td>
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<td>engineer to prepare plans, inspect construction, certify construction is according to ENS approved plans. May</td>
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<td>also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of</td>
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<td>site is necessary to verify hazard classification. A minimum fee of $200.00 must accompany the application. An</td>
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<td>additional processing fee based on a percentage of the total project cost will be required upon completion.</td>
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</tbody>
</table>

February 11, 2015
### County DURHAM  
**Project Number:** 16-0065  
**Due Date:** 9/23/2015

<table>
<thead>
<tr>
<th>PERMITS</th>
<th>SPECIAL APPLICATION PROCEDURES or REQUIREMENTS</th>
<th>Normal Process Time (statutory time limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit to drill exploratory oil or gas well</td>
<td>File surey bond of $5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.</td>
<td>10 days</td>
</tr>
<tr>
<td>Geophysical Exploration Permit</td>
<td>Application filed with ENR at least 10 days prior to issue of permit. Application by letter. No standard application form.</td>
<td>10 days</td>
</tr>
<tr>
<td>State Lakes Construction Permit</td>
<td>Application fee based on structure size is charged. Must include descriptions &amp; drawings of structure &amp; proof of ownership of riparian property.</td>
<td>15-20 days</td>
</tr>
<tr>
<td>401 Water Quality Certification</td>
<td></td>
<td>60 days (130 days)</td>
</tr>
<tr>
<td>CAMA Permit for MAJOR development</td>
<td>$250.00 fee must accompanies application.</td>
<td>55 days (150 days)</td>
</tr>
<tr>
<td>CAMA Permit for MINOR development</td>
<td>$50.00 fee must accompany application.</td>
<td>22 days (25 days)</td>
</tr>
</tbody>
</table>

Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, NC 27611.

- Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.
- Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.
- Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.
- Catawba, Jordan Lake, Randleman, Tar Pamlico or Neuse Riparian Buffer Rules required.
- Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 8C.0300 et. seq. Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.
- If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section, (919) 707-9100.

Other comments (attach additional pages as necessary, being certain to cite comment authority):

<table>
<thead>
<tr>
<th>Division</th>
<th>Initials</th>
<th>No comment</th>
<th>Comments</th>
<th>Date Review</th>
</tr>
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<tbody>
<tr>
<td>DAQ</td>
<td>ddm</td>
<td></td>
<td></td>
<td>9/14/15</td>
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</tbody>
</table>
| DWR-WQROS (Aquifer & Surface) | ds rb |            | - A project that disturbs 1 acre or greater is required to secure an erosion and sedimentation control plan and must comply with construction stormwater permit conditions (NCG010000).  
- The project is in the Neuse River and Cape Fear Watershed with respectively drain to Falls and Jordan Lakes.  
The USGS Topographic map did depict a blue line stream and crenulations that are within the project boundary. (Note: the soil survey was not reviewed.)  
If wetland, stream or riparian buffer impacts are proposed, this project will need to comply with/secured 404 permit from the USACE, obtain a 404 Water Quality Certification authorization and obtain proper buffer authorization. | 9/18/15  
|                          |          |            |                                                                                                                                          | 9/18/15      |
| DWR-PWS                 | wah      |            | See last two checked boxes                                                                                                            | 9/10/15      |
| DEMLR (LQ & SW)         | JLH      |            | Although mentioned in the reports, the plan requirement item was checked for further details.                                          | 9/24/15      |
| DWM - UST               | MRP      |            |                                                                                                                                          | 9/21/15      |

### REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

February 11, 2015
Asheville Regional Office
2090 US Highway 70
Swannanoa, NC 28778
(828) 296-4500

Fayetteville Regional Office
225 North Green Street, Suite 714
Fayetteville, NC 28301-5043
(910) 433-3300

Mooresville Regional Office
610 East Center Avenue, Suite 301
Mooresville, NC 28115
(704) 663-1699

Raleigh Regional Office
3800 Barrett Drive, Suite 101
Raleigh, NC 27609
(919) 791-4200

Washington Regional Office
943 Washington Square Mall
Washington, NC 27889
(252) 946-6481

Wilmington Regional Office
127 Cardinal Drive Extension
Wilmington, NC 28405
(910) 796-7215

Winston-Salem Regional Office
450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105
(336) 771-9800

February 11, 2015
COUNTY: DURHAM ORANGE

MS RENEE GLEDHILL-EARLEY
CLEARINGHOUSE COORDINATOR
DEPT OF CULTURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
MSC 4617 - ARCHIVES BUILDING
RALEIGH NC

REVIEW DISTRIBUTION
DENR LEGISLATIVE AFFAIRS
DEPT OF AGRICULTURE
DEPT OF CULTURAL RESOURCES
DEPT OF TRANSPORTATION
DPS - DIV OF EMERGENCY MANAGEMENT
TRIANGLE J COG

PROJECT INFORMATION
APPLICANT: Triangle Transit
TYPE: National Environmental Policy Act
Draft Environmental Impact Statement

DESC: Proposed is a DEIS for the Durham-Orange Light Rail Transit Project. View documents at http://ourtransitfuture.com/

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: □ NO COMMENT □ COMMENTS ATTACHED

SIGNED BY: RENEE GLEDHILL-EARLEY
DATE: 9.24.15

SEP 1 1 2015
September 25, 2015

David A. Charters, Jr., PE
GoTriangle
PO Box 13787
Research Triangle Park, NC 27709

Re: Durham-Orange Light Rail Transit Project – Draft Environmental Impact Statement, Durham and Orange Counties, ER 12-0738

Dear Mr. Charters:

Thank you for your letter of August 25, 2015, transmitting the Draft Environmental Impact Statement (DEIS) for our review concerning the above project.

As noted in the document, areas within the project area of potential effect (APE) that have the potential to contain National Register eligible archaeological sites have been identified in consultation between our Office of State Archaeology and your archaeological consultants. As also noted in the DEIS, after selection of the alternative to be constructed, if any of these areas will be affected, appropriate archaeological investigations will be undertaken prior to project implementation.

We look forward to working with you and your consultants on future aspects of this project at the appropriate time.

The DEIS correctly notes the “Findings of Effects” on the twenty-five above-ground historic properties and outlines the steps that will be taken to avoid any adverse effects.

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

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Ramona M. Bartos
1. The DEIS states that this project would have no impacts to mainline railroad tracks, passenger rail service and freight service passing through the corridor.

2. NCDOT Rail Division concurs with the recommendation that the Alston Avenue location for the ROMF not be considered as the NEPA Preferred Alternative. It is noted that this alternative would impact an existing freight customer and would require the relocation of multiple businesses.

3. In Chapter 3, the EIS notes that there is no impact to the future freight grade separation of Blackwell and Mangum Streets because the LRT tracks are at-grade with those crossings. In fact, the addition of embedded light rail tracks at-grade adjacent to Pettigrew St through Blackwell and Mangum Streets will make the grade separation substantially more costly and difficult, if not making it outright impossible, since a change in the grade of Mangum and Blackwell in addition to a change of the grade of the railroad is the only way to accomplish the necessary vertical clearance. I don’t think that is necessarily a problem given that the grade separation of Mangum and Blackwell is unlikely to happen in any event, but it is something to be aware of.

4. The retaining walls built 15’ from the LRT track when the LRT track is 55’ from the existing main should be built to accommodate the grade and loading for the future track. This is especially true of the wall retaining railroad embankment, where it will be impossible to add a future track without disturbing the LRT wall / LRT embedded track to build a wall capable of maintaining that loading. There will only be 25’ from the centerline of a future track to the face of wall, which is just room for the roadbed shoulder and a ditch, so no cut or fill slope will likely be able to be added in between the two to reduce the necessary height. In addition, a future railroad fill wall at minimum distance from the future track would only be 10’ from the LRT wall, so would almost certainly put RR surcharge loading on that wall.

   - At a minimum, the foundations of both the cut and fill walls at 40’ from existing track need to be built accounting for this future loading so the walls can be modified at the time of that future project.
5. Note there are a couple of traffic related issues that may warrant a closer look, particularly the (crash / environmental / delay) impacts to motor vehicles associated with the LRT having preemption priority at traffic signals over all other traffic as well as the potential for false lane capacities at intersections where addition lanes may be added to maintain intersection capacity. However, I understand NCDOT’s Congestion Management Section as well as others in Traffic Engineering are also reviewing these documents and will be providing comments / concerns.

6. It appears good due diligence was exercised to provide grade-separated crossings over most major transportation facilities when feasible. However, where the LRT tracks transitions into the median / center of a roadway at-grade, preference would be for the tracks to clear an intersection overhead rather than bisect an intersection as an at-grade crossing. Bisecting an intersection at-grade will present crossing protection challenges and may impact intersection efficiency (hence presenting crash / environmental / delay impacts). As one example, can the elevated tracks be extended over the intersection then transition to ground level within the median for the intersection of Cameron Road at Erwin Road rather than descending to ground level prior to the intersection?

7. Likewise, there are instances of LRT tracks bisecting intersections where the tracks are not going into the median / center of the road. Preference would be to relocate these at-grade crossings where feasible so as not to bisect the intersection. Two examples are: NS Connector at EW Street C (Alt C1) and Friday Center at intersecting driveways (C2), as well as the traffic circle intersection at Pope Road and Old Chapel Hill Road. Tracks bisecting an intersection present grade crossing warning protection challenges and will require all traffic movements to stop for the light rail train, decreasing intersection efficiency.

8. Though the MUTCD allows a “combination of automatic gates and flashing lights signals, or flashing light only signals, or traffic control signals,” preference would be to provide automatic gates and flashing light signals (or flashing light signals) with very limited use of traffic control signals exclusively. Automatic gates would provide a stronger deterrent to motorists stopping on LRT tracks especially during the approach of the light rail train. Also, automatic gates and flashing light signals, and flashing light
signals meet the typical motorists’ expectation for warning device treatments at a highway-rail at-grade crossing.

9. Where feasible, LRT tracks crossing roadways at a skewed angle should be avoided or the skew minimized (for example at Stancil Drive (alt C2) and George King Road (alt C1A)). Depending on the angle and direction, skewed tracks may hinder vehicular sight distance, present grade crossing protection challenges, and create potential obstacles to bicycles (wheel getting caught in gap between roadway and rail).

10. Where tracks travel between two roadways that form two nearby intersections with a common intersecting roadway and one of the intersections has a traffic signal, consider traffic signalization of both intersections to minimize potential of vehicles queuing on the tracks between the two intersections.

11. In general, for some of the wider roadway cross-sections where at-grade crossings are to be introduced and crossing gates are to be installed, gate length limitations may necessitate island gates to get appropriate lane coverage.

NCDOT Rail Division appreciates the opportunity to comment on the DEIS. We look forward to continued coordination with GoTriangle through the design and construction of this project.
October 5, 2015

D-O LRT Project – DEIS
c/o GoTriangle
Post Office Box 530
Morrisville, NC 27560

To Whom It May Concern:

The NCDOT Division of Bicycle and Pedestrian Transportation appreciates the opportunity to comment on the Draft Environmental Impact Statement for the Durham Orange Light Rail Project. We have two recommendations on additional items for inclusion in the project and EIS.

Light rail must meaningfully integrate pedestrian and bicycle facilities at the stations as well as along the service corridors in order to successfully provide an alternative to driving and to meet the needs of those who are unable to drive. At a minimum, walking and bicycling form the first mile and last mile of any transit trip, as riders must travel from a nearby residence, business, or other facility. **To be truly transformative, the Durham Orange Light Rail Project should integrate walking and bicycling facilities paralleling the entire project corridor.** This will create a complement of multi-modal options that will make the project more flexible and useful than light rail alone.

Development of light rail provides an opportunity to preserve the right of way for a bicycle/pedestrian corridor integrated with the light rail facility. Including a multi-modal network within the project at the outset provides many benefits, including: saving funds on additional right of way and construction costs versus later addition; seamless integration instead of unwieldy and potentially costly retrofits; and support for early ridership through provision of multi-modal connectivity between stations and trip generators from day one.

In North Carolina, the Charlotte Blue Line provides an example of successfully integrating light rail and bicycle/pedestrian infrastructure to form a complete multi-modal system. The Blue Line includes a bicycle/pedestrian path alongside most of the corridor, which connects to bicycle routes and sidewalks along key corridors in Charlotte. Project proponents realized the importance of providing multi-modal access to the light rail from the outset, and planned accordingly. Integrating the two facilities provides a clear network for transit users to access.

Providing access to a similar bicycle/pedestrian corridor adjacent to the D-O Light Rail will have multiple benefits. The bicycle/pedestrian corridor will allow an opportunity for transit users to
choose to bicycle or walk one leg of a trip, stop midway through a trip to run an errand, and continue the trip safely using the light rail and the trail in combination. Importantly, providing complementary multi-modal facilities at the outset will help mitigate the loss of connectivity due to elimination of planned bicycle lanes on Erwin Road and Pettigrew Street, recommended in local plans as key connections as noted in the DEIS. Ultimately, the bicycle/pedestrian corridor will provide a high level of connectivity to key destinations in Durham and Orange Counties, increasing the accessibility for these destinations for those who cannot or choose not to drive personal vehicles, creating a flexible and responsive multi-modal network.

In addition to a complementary bicycle/pedestrian corridor adjacent to the light rail corridor, we recommend inclusion of a strong policy to accommodate bicycles on board the light rail. **Bicycle storage on-board light rail should be a prominent feature of project, and should not be limited unnecessarily.** The DEIS is non-committal about the facilities which will be provided on light rail cars for bicycle storage. While we understand that the specific vehicles have not been selected at this stage, a greater commitment to providing adequate bicycle storage on light rail cars will help ensure that passengers who wish to bicycle at each end of their trip will be accommodated. Some light rail systems do not limit bicycles on board trains to the bike racks provided on board, but allow for additional bicycles to be brought on board if space allows.¹ Recommendation of this policy option to not numerically limit bicycles on board light rail would strengthen the multi-modal component of the project. GoTriangle promotes bicycling as an alternative transportation mode, and thus should facilitate accessing light rail by bicycle by allowing as many bicycles on board as practicable, instead of limiting to the number of spaces in any rack provided.

The Durham Orange Light Rail will be an important amenity for the communities it serves, and has the potential to offer meaningful multi-modal connections. Key details, such as those outlined above, will be critical to maximizing the positive impact of this project. Addressing the need for connected bicycle and pedestrian facilities along the station corridor, and providing for adequate bicycle storage on light rail cars, will help to ensure that the Durham Orange Light Rail Project provides integrated, accessible, and flexible multi-modal transportation options for the communities it serves.

Thank you for consideration of our recommendations. If additional information is required, please let us know.

Sincerely,

Kendra Bridges
Transportation Program Consultant II
Division of Bicycle and Pedestrian Transportation

¹ Several light rail systems nationally do not provide numerical limits for bicycles on board, and instead allow for judgement calls on available space to determine bicycle capacity for each train. Bicycle storage on these systems is allowed outside of the designated racks or storage pads standard in light rail cars, as space allows. Metro Minneapolis-St. Paul, Los Angeles Metro, and Dallas Area Rapid Transit are examples.
October 8, 2015

David Charters, Manager
Design and Engineering, GoTriangle
D-O LRT Project – DEIS
c/o Triangle Transit
Post Office Box 530
Morrisville, NC 27560

RE: D-O LRT PROJECT DEIS/Draft Section 4(f) Evaluation, Comments from The University of North Carolina at Chapel Hill and UNC Health Care System

Dear Mr. Charters,

Thank you for the opportunity to provide comments on the Durham-Orange Light Rail Transit (D-O LRT) Project Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation. We appreciate the cooperation and coordination of Triangle Transit staff as the project has developed and look forward to continued collaboration as the project progresses. The comments below are representative of both the University of North Carolina at Chapel Hill and the UNC Health Care System and reflect our understanding of the project to date. As the project continues to develop we reserve the right to provide additional comments on future phases.

The following comments relate to the DEIS/Draft Section 4(f) Evaluation documentation:

p. 2-33: In addition to the at-grade vehicular crossings noted on Table 2.3-1, we anticipate a need for an at-grade pedestrian crossing as part of the reconstruction of the parking lot south of the Kenan-Flagler Business School. There are currently heavy pedestrian flows to the Business School area from the student family housing on the north side of Mason Farm Road and other residences south of Mason Farm Road. We also request more detailed analysis of the proposed parking lot reconstruction plan to assess impacts to the adjacent undeveloped land and consistency with the Campus Master Plan.
Please note that the GoPass is only available to UNC employees and students who are members of our Commuter Alternative Program (who forego an on-campus parking permit) and that GoPass use is restricted to commuting trips to and from the UNC campus.

The traffic analysis indicates a Level of Service C in 2040 for the NEPA Preferred Alternative in both the a.m. and p.m. peak hours at the proposed Mason Farm Road at East Drive/Jackson Deck signalized intersection. This intersection, and the UNC Hospitals Station, are adjacent to three parking decks on campus. The traffic analysis detailed in Appendix K-4 (UNC Hospitals Traffic Simulation Report) does not include analysis of ingress/egress movements for the three parking decks. For example, one of the main entrances for the Dogwood Deck, which serves hospital visitors and patients, is directly north of the UNC Hospitals Station and the plans include the loss of a dedicated turn-lane on Mason Farm Road into the deck. In the next phase of the project, please provide a more detailed traffic analysis of the impacts to ingress/egress movements for the three parking decks, as well as impacts to circulation on nearby roadways.

Table 3.2-5 does not include the roadway modifications to create the new Mason Farm Road at East Drive/Jackson Deck signalized intersection or the other roadway modifications to develop the UNC Hospitals Station (see Appendix L, Volume 1, Sheet A-01), and page 3-42 notes that “no roadway modification is proposed as part of the NEPA Preferred Alternative at this location.” The traffic analysis in Appendix K-4 notes that the UNC Campus Master Plan shows the proposed Mason Farm Road at East Drive/Jackson Deck roadway realignment and intersection improvement. Please note that these improvements are not currently programmed or funded and thus have no timeline for development. Please clarify that all of the roadway improvements illustrated on Sheet A-01 of the Basis for Engineering plans will be a part of the D-O LRT Project.

Please note that seating capacity of the Smith Center is 21,750, not 24,000. Also note that while the Tar Heel Express service operated by Chapel Hill Transit from park-and-ride lots is popular (about 10-15% of patrons use the service), the majority of patrons to Smith Center events drive or carpool, park on or near campus, and walk to the event.

Figure 4.1-12 (Future Land Uses in the D-O Corridor) erroneously shows the UNC main campus and Friday Center areas as “Mixed Use.” The Chapel Hill 2020 Land Use Plan shows those areas as “University” land use. Please amend the Future Land Uses figure to accurately depict future UNC land use.

Regarding potential impacts to the planned Central Park South open space referenced in Section 4.6.3.1, please note that this open space is of considerable value to the
University. As development of the D-O LRT Project continues we look forward to working with Triangle Transit to protect the integrity and use of the open space area, including maintaining circulation under the elevated portion of the proposed track and siting stormwater mitigations for future development in the area.

Regarding recommended mitigation measures for impacts to Finley Golf Course referenced in Section 4.6.4, please note that during construction of the D-O LRT Project the golf course will remain open and Triangle Transit will be required to coordinate with UNC to minimize disruption to Finley Golf Course users and staff. To supplement the *Finley Golf Course Design Concept Plan* (Fazio, 2014) we request that Triangle Transit produce an independent analysis of the fiscal impacts to Finley Golf Course during the construction period of the project and the golf course mitigations. The fiscal analysis should include the potential loss of revenue during construction as well as a detailed plan for maintaining the playability of the course until the mitigations are in place.

Regarding recommended mitigation measures for impacts to the existing UNC open space adjacent to Finley Golf Course referenced in Section 4.6.4, please note that while the proposed alignment would primarily cross undeveloped wooded land there are gravel paths in the vicinity of the alignment which are used for cross country events and informal UNC and public recreational activities. The proposed mitigation includes the construction of a grade-separated crossing for the gravel path to accommodate continued connectivity for users. Refinements in the D-O LRT design should be made and appropriate mitigation should be developed to minimize potential impacts to the paths and Open Space. Additionally, Triangle Transit should provide UNC with at least 48 hours advance notice before undertaking any activities that may temporarily close or restrict the use of the gravel paths. Triangle Transit should coordinate closely with UNC to communicate any such closures to UNC Open Space and the associated gravel path users.

As noted in the Noise and Vibration Technical Report (Appendix K.24), UNC has a number of medical and research facilities that house highly specialized equipment that is sensitive to vibration. Please continue to coordinate with University and University Hospitals staff as the detailed vibration analysis (see Section 4.10.5.2) in the phase is developed and appropriate mitigations are identified.

As noted in Section 4.13.2, the University would provide electricity to the portions of the project on University property. As the project develops we anticipate more detailed coordination with Triangle Transit and Duke Energy on electrical distribution issues.

Section 4-14 (Acquisitions, Relocations, and Displacements) notes that a complete list and maps of all full and partial property acquisitions for the project are located in Appendix K but our review of Appendix K did not reveal the list and maps. Please
provide current property information to inform our ongoing discussion. Also, the text notes that “full acquisitions entail the purchase of an entire parcel, whereas partial acquisitions entail the purchase of a portion of a parcel.” Please note that our discussions to date with Triangle Transit have assumed use of easements on University property, rather than property or right-of-way purchase.

p. 4-263: As noted in Section 4.15.2, the University has significant utility infrastructure within the portion of the D-O LRT Project study area on University property. As the project develops please continue close coordination with University utility stakeholders, as well as our utility partners that provide service on campus, to minimize project impacts to the utility infrastructure and services.

p. 4-265: As noted in Section 4.15.3, new utility services, such as traction power substations, signal houses, and other station area facilities, will be required to operate the D-O LRT Project. We request that these utility facilities, and any other physical improvements that are part of the project, be designed in close consultation with the University to ensure consistency with the Campus Master Plan and the University’s planning and design objectives.

Ch. 6: Please refer to letter from UNC and UNC Health Care, dated May 22, 2015 and found in Appendix G – Agency Correspondence, for comments about Section 4(f) impacts to University property.

Please continue to coordinate with UNC regarding the proposed D-O LRT Project and any activities that may affect UNC and the UNC Health Care System. We appreciate your efforts to incorporate our comments into project planning and design and look forward to our continued partnership on this important project.

Sincerely,

Matthew M. Fajack
Vice Chancellor for Finance and Administration

cc: Tammy Bouchelle, Triangle Transit
    Meghan Makoid, Triangle Transit
    Gavin Poindexter, AECOM
    Than Austin, UNC
    Patricia Crawford, UNC
    Brad Ives, UNC
    Will Tricomi, UNC
    Anna Wu, UNC
    Karen McCall, UNC Health Care System
October 12, 2015

David A. Charters Jr. PE  
Manager, Design and Engineering  
Go Triangle  
Post Office Box 13787  
Research Triangle Park, NC 27709

Dear Mr. Charters:

The proposed Durham-Orange Light Rail Transit Project is intended to address long-term regional transportation issues related to population growth expected in the Triangle region over the next 30 years. The project focuses on transporting our residents to and from major destinations, with particular emphasis on major employment hubs in our region, including downtown Durham, Duke University and the Duke Medical Center, the University of North Carolina and UNC Hospitals.

While Phase One of this project effectively connects the campuses of Duke University and UNC-Chapel Hill, this effort fails to provide service to either Durham Technical Community College or our higher education neighbor and partner, North Carolina Central University. The project’s planners have cited cost and right-of-way issues as factors in excluding direct access to those institutions in Phase One. Current and former Go Triangle leaders have acknowledged that Phase One does not adequately serve these campuses and in conversations with both college and university leaders have mentioned the possibility of these campuses being served by the project in Phase Two. However, we have received no written confirmation of this possibility and we see no mention of it in the current planning documents.

It is understandable that projects of this scope and magnitude must be planned and developed in phases. As virtually everyone acknowledges Phase One of the Triangle Light Rail Project fails to adequately serve the nearly 20,000 individuals who enroll in at least one class at Durham Tech annually, nor our over 800 full-time and part-time employees, I urge project planners to make a public commitment to include service to both Durham Tech and North Carolina Central University in the project’s second phase.

Sincerely,

[Signature]

William G. Ingram  
President, Durham Technical Community College
September 30, 2015

Mr. David Charters
Triangle Transit
Post Office Box 530
Morrisville, NC 27560

Re: SCH File # 16-E-0000-0065; Proposed is a DEIS for the Durham-Orange Light Rail Transit Project. View documents at http://ourtransitfuture.com/

Dear Mr. Charters:

The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Should you have any questions, please do not hesitate to call.

Sincerely,

Teresa Matthews
State Environmental Review Clearinghouse

Attachments

Cc: Region J
Mr. David Charters  
Triangle Transit  
Post Office Box 530  
Morrisville, NC 27560  

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Should you have any questions, please do not hesitate to call.

Sincerely,

Teresa Matthews  
State Environmental Review Clearinghouse

Attachments

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