

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

March 30, 2022

Jeff Repp Town Manager 4140-A Southport-Supply Road St James, North Carolina 28461

Traffic Noise Analysis and Traffic Noise Contours

NC 211 (Southport-Supply Road) Widening and Grade-Separated Interchanges at NC 906 (Midway Road) and NC 133 (Longbeach Road), Brunswick County STIP Project # R-5021

Dear Mr. Repp:

The North Carolina Department of Transportation (NCDOT) strongly advocates the planning, design, and construction of noise-compatible development and encourages its practice among planners, building officials, developers, and others. Consideration for noise-compatible development is a shared responsibility among local, state, and federal agencies. NCDOT plans its highway construction in consideration of traffic noise impacts it may cause to noise-sensitive land uses. Likewise, local governments ideally plan their noise-sensitive land uses in consideration of existing and known future sources of traffic noise.

As part of that shared responsibility, NCDOT provides information to local officials with responsibility for planning decisions with an estimate of future noise levels on undeveloped lands that are adjacent to DOT's highway project boundaries. This information comes from our project-level traffic noise studies and may be used to help guide land use planning decisions to help minimize future traffic noise impacts and resulting citizen complaints.

NCDOT completed a Traffic Noise Analysis for the subject project. To assist you in your planning efforts, traffic noise level contours were evaluated with the R-5021 project in place and carrying the project's Design Year (2035) traffic volumes. These predicted build-condition traffic noise level contours are not a definitive means by which to assess traffic noise level impacts; however, they can aid in future land use planning efforts in presently undeveloped areas. The table on the following page and on the attached map present information taken from that report. The noise levels shown in the table below and on the attached map represent the threshold at which a traffic noise impact may occur for the given land use based on the NCDOT Traffic Noise Policy. An hourly-equivalent noise level of 66 dB(A) correlates to the NCDOT impact threshold for Noise Abatement Criteria (NAC) "B" and "C" land uses. A 71 dB(A) noise level correlates to the NCDOT impact threshold for an NAC "E" land use. NAC B, C, and E land uses are defined in the table. The rightmost column indicates approximate distance of the noise level contour from NC 211. NCDOT encourages local governments to consider these noise level contours and

develop appropriate noise compatible planning strategies. NCDOT will assist upon request with development of noise control strategies.

2035 Design Year Build Alternative Traffic Noise Level Contours ¹		
Location	Predicted Contour Distances from NC 211 Edge of Proposed Pavement (feet)	
	66 dB(A) ²	$71 \text{ dB}(A)^3$
NC 211	251 ⁴	79 ⁴

¹ The source of this traffic noise information is the STIP R-5021 Traffic Noise Analysis (CDM Smith, October 2015). A copy of this full report is available upon request.

Given the variation in cross sections and elevations in the vicinity of the project, it is recommended that any future development proposed in the area of the project be modeled with accurate survey data to avoid creating incompatible land uses adjacent to the project.

Date of Public Knowledge

cc:

As shown on the attached map, there are two houses on Devonswood Drive that are inside the 66 dB(A) noise contour. These houses are not eligible for noise abatement consideration. When a highway construction project is being planned, NCDOT does noise evaluations for nearby development with building permits issued before the Date of Public Knowledge for the project. In accordance with federal regulations and NCDOT's noise policy, NCDOT is not responsible for noise impacts or noise abatement for development occurring after the Date of Public Knowledge. The Date of Public Knowledge for the R-5021 project is April 26, 2012, the date the Finding of No Significant Impact was approved. According to online property tax records, these houses were built sometime around 2018; therefore, they are not eligible for noise abatement.

Please contact me at (919) 707-2728 or <u>teroberts1@ncdot.gov</u> if you have any questions, need additional information, or to request a copy of the complete noise analysis report.

Sincerely,

Tracy Roberts, AICP

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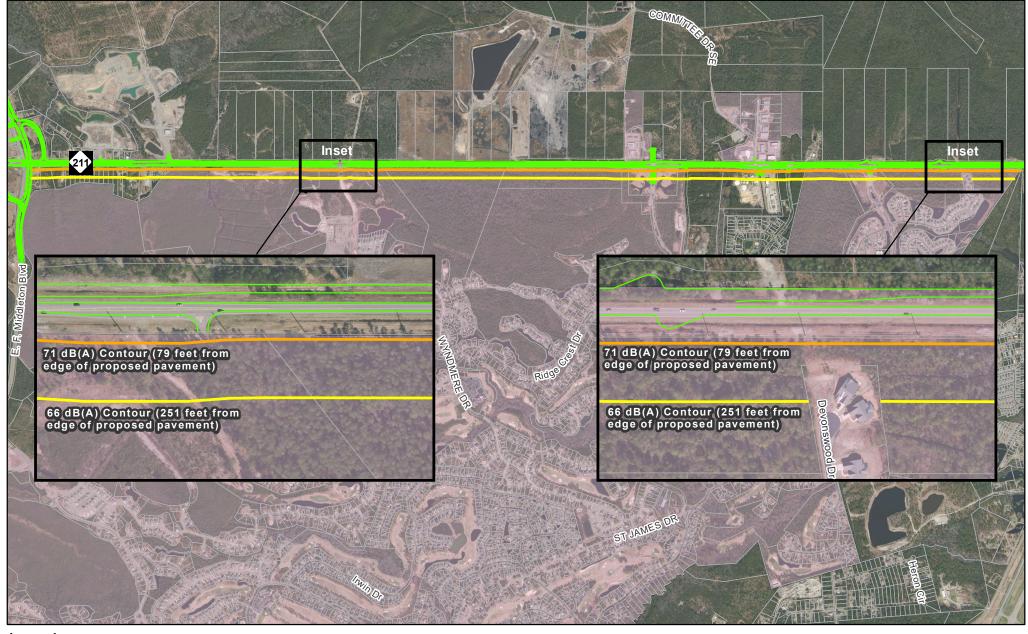
Interim Traffic Noise and Air Quality Group Leader

Chad Kimes, PE, NCDOT Division 3 Engineer

² 66 dB(A) is the impact threshold for Activity Category B (Residential) and Activity Category C (other sensitive outdoor areas such as parks, schools and places of worship)

³ 71 dB(A) is the impact threshold for Activity Category E (noise sensitive outdoor commercial activities such as restaurants, hotels, etc.)

⁴ Contour distances are perpendicular from the edge of pavement on either side of the proposed alignment



Legend

71 dB(A) Contour (NAC E)

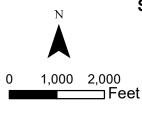
-66 dB(A) Contour (NAC B & C)

- Edge of Proposed Pavement

Property Boundary

Town of St. James





STIP Project No. R-5021 NC 211 Widening and Grade-Separated Interchanges Traffic Noise Contours

Town of St. James Brunswick County