



MEMORANDUM

To: Lee Ainsworth, PE, NCDOT Division 10, District 3 Engineer
Tony Tagliaferri, PE, NCDOT Division 10, Traffic Engineer
Rox Burhans, Town of Indian Trail Planning Director
Todd Huntsinger, Town of Indian Trail Director of Engineering

From: Amy Massey, PE, Kimley-Horn and Associates, Inc.

Date: November 20, 2018

Subject: ***Poplin Development Traffic Impact Analysis Addendum
Traffic Mitigation***

The purpose of this memo is to document required transportation improvements as a result of the Traffic Impact Analysis (TIA) and subsequent coordination with North Carolina Department of Transportation (NCDOT) and Town of Indian Trail staff for the proposed Poplin development located in Indian Trail, North Carolina. The TIA was prepared by Kimley-Horn and Associates, Inc. (6-29-2018).

Build-out of the Poplin development is anticipated to be complete in 2024, with associated developer improvements outlined below:

1. Construct the northbound approach of Access #1/Poplin Road at Unionville-Indian Trail Road with one ingress lane and three egress lanes, with a 300-foot internal protect stem (IPS) and the following improvements:
 - a. Dual northbound left-turn lane with 300 feet of storage each and a shared northbound through-right lane.
 - b. Additional westbound receiving lane that extends to the through lane proposed by Transportation Improvement Program (TIP) project R-2559/R-3329.
 - c. Southbound left-turn lane and southbound through lane with 100 feet of storage each.
 - d. Eastbound right-turn lane with 150 feet of storage.
 - e. Extend the eastbound left-turn lane to the proposed eastbound through lane planned to be constructed with TIP project R-2559/R-3329. Sufficiently sign and mark left lane drop.
 - f. Westbound left-turn lane with 200 feet of storage.
 - g. Install a traffic signal when warrants are met. Installation of the signal shall include the installation of fiberoptic signal communications along Unionville-Indian Trail Road between Access #1/Poplin Road and Secrest Short Cut Road.
2. Construct an exclusive eastbound left-turn lane and westbound left-turn lane along Unionville-Indian Trail Road at N Rocky River Road with 150 feet of storage each.
3. Construct Access #2 with right-in/right-out operation outside of the Control of Access (C/A) area along Unionville-Indian Trail Road, with one ingress lane and one egress lane with an IPS of 125

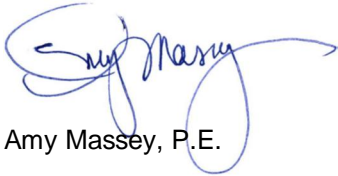
- feet. Construct an eastbound right-turn lane along Unionville-Indian Trail Road at Access #2 with 150 feet of storage.
4. Construct Access #3 along Unionville-Indian Trail Road with one ingress lane and two egress lanes, with an IPS of 100 feet and the following improvements:
 - a. Northbound right-turn lane with 75 feet of storage.
 - b. Eastbound right-turn lane with 75 feet of storage.
 - c. Westbound left-turn lane with 100 feet of storage.
 5. Construct Access #4 along N Rocky River Road with one ingress lane and two egress lanes with an IPS of 150 feet and the following improvements:
 - a. Eastbound right-turn lane with 100 feet of storage.
 - b. Northbound left-turn lane with 100 feet of storage.
 - c. Southbound right-turn lane with 75 feet of storage.

Phasing of the above mitigation measures will be based on additional traffic engineering analysis to be performed subsequent to rezoning, subject to approval by Town and NCDOT staff.

We appreciate the opportunity to be of service. Please contact me if you have any questions.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.



Amy Massey, P.E.