


## MEMORANDUM

DATE: March 25, 2022

TO: Chris Claussen  
Quarry North LLC  
379 Concord Road  
Sudbury, MA 01776

FROM: Robert J. Michaud, P.E. – Managing Principal   
Daniel A. Dumais, P.E. – Senior Project Manager

RE: **Concord Rookery Lane**  
Concord, MA

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MDM Transportation Consultants, Inc. (MDM) has prepared this memorandum to provide a statement of traffic impact relative to buildout of a proposed 6-unit residential development on land in Concord referred to as Concord Rookery Lane. The subject property abuts the approved 274-unit Cold Brook Crossing project located along North Road in Sudbury, Massachusetts. The location of the Site relative to adjacent roadways is shown in **Figure 1**. Access for the subject subdivision will be provided through the roadway network for Cold Brook Crossing which connects to North Road (Route 117) in Sudbury.

This statement of traffic impact is based on prior traffic analysis for the approved Cold Brook Crossing project as provided in the February 2020 Traffic Impact and Access Study (TIAS)<sup>1</sup> prepared by MDM which is incorporated herein for reference. The TIAS concludes that a proposed driveway along Route 117 to serve the Cold Brook Crossing project (and hence the Concord Rookery Lane development) will amply accommodate projected traffic conditions at buildout with minimal delays (Level of Service B or better during peak hours). Likewise, impacts to area intersections are de minimus with no material change in operating levels at buildout of Cold Brook Crossing.

The present subdivision plan for the Concord property includes proposes 6 residential units within Concord. This memorandum provides a trip generation comparison (see **Table 1**) between and the permitted plan for Cold Brook Crossing broken down by unit type and includes the proposed 6 single family homes to be built on the Concord parcel.

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<sup>1</sup>TIAS, *Cold Brook Crossing, North Road, Sudbury, MA*, prepared by MDM, dated February 2020.

**TABLE 1**  
**TRIP-GENERATION COMPARISON<sup>1</sup>**

Peak Hour/Direction	February 2020 TIAS (274 Units) <sup>2</sup>	Cold Brook Crossing (Permitted)			Concord Parcel	Total	Difference (Δ)
		Townhomes (92 Units) <sup>3</sup>	Apartments (101 Units) <sup>4</sup>	Age Restricted (81 Units) <sup>5</sup>	Single Family (6 Units) <sup>6</sup>		
<i>Weekday Morning Peak Hour:</i>							
Entering	27	10	9	6	1	26	-1
Exiting	84	32	27	10	3	72	-12
Total	111	42	36	16	4	98	-13
<i>Weekday Evening Peak Hour:</i>							
Entering	83	15	27	12	4	58	-25
Exiting	52	37	17	9	2	65	+13
Total	135	52	44	21	6	123	-12
<i>Weekday Daily (24 hours)</i>	1,722	674	550	300	58	1,582	-140

<sup>1</sup>Source: ITE *Trip Generation*, Tenth Edition; 2017 and Eleventh Edition, 2021 (for Land Use Code 210).

<sup>2</sup>ITE LUC 220 – Multifamily Housing (Low-Rise) applied to 123 units and ITE LUC 221 – Multifamily Housing (Mid-Rise) applied to 151 units.

<sup>3</sup>ITE LUC 220 – Multifamily Housing (Low-Rise) applied to 92 units.

<sup>4</sup>ITE LUC 221 – Multifamily Housing (Mid-Rise) applied to 101 units.

<sup>5</sup>ITE LUC 252 – Senior Adult Housing – Attached applied to 81 units.

<sup>6</sup>Concord Parcel (By Others): ITE LUC 210 – Single-Family Detached Housing applied to 6 units.

As shown in Table 1, when broken down by unit type to include townhomes, apartments, age-restricted units and the maximum of 6 single family homes, the combined properties within Sudbury and Concord will result in *lower* trip activity than the highly conservative estimates presented in the February 2020 TIAS. Therefore, the findings of the February TIAS remain valid and no further analysis is required.

In conclusion, traffic associated with the proposed 6-unit residential subdivision in Concord falls below the projected trips at buildout for the adjoining Cold Brook Crossing development. Specific trip generation estimates for the Concord development are modest, ranging from 4 to 6 vehicle-trips during peak hours and less than 60 trips daily. As documented in the Cold Brook Crossing TIAS, access serving the subject project along Route 117 in Sudbury will meet all applicable safety requirements for sight lines and will provide adequate capacity to accommodate projected buildout of the combined residential developments with no consequential impact to area roadways.