



EXEMPTION FORM ENGINEERING DEPARTMENT

Request for exemption received from: Coulter Jewell Thames, PA, 111 West Main Street,
Durham, NC 27701 phone: 919-682-0368

Date: April 11, 2017

Type of exemption requested: TRAFFIC IMPACT ANALYSIS (TIA)

Type of justification submitted: a) Written Request with Trip Analysis
b) Site Plan

Key reasons why we support this exemption:

- a) The proposed expansion of the school is expected to generate 50 additional vehicle trips per day.
- b) Meets the Town TIA Guidelines for an Exemption.

Based upon the attached request for exemption and supporting information, we recommend that the Town Manager approve an exemption for:

Montessori Community School

Signed: _____

Traffic Engineer

Date

Approved: _____

Public Works Director

Date

Attachment(s):

- a) Written request from the Applicant/Developer
- b) Site Plan and Fee

RETURN TO ENGINEERING DEPARTMENT WHEN SIGNED



Memorandum

To: Kumar Neppalli
Traffic Engineering Manager
Town of Chapel Hill

Date: April 27, 2016

Project #: 38576.00

From: Steven Epley, PE
VHB

Re: Montessori Community School Trip Generation
Durham, NC

This memorandum provides a trip generation summary for the expansion of the Montessori Community School in Durham, NC. The school currently serves 270 students in grades kindergarten thru eighth grade and plans to expand to 300 students in grades preK thru eighth grade.

The *ITE Trip Generation Manual, 9th Edition* recommends collecting local rates to determine elementary and middle school land uses trip generation rates. The North Carolina Department of Transportation's Municipal and School Transportation Assistance Unit (NCDOT MSTA) has collected data from around North Carolina, and developed a spreadsheet (calculator) that estimates traffic volumes and school queues (stacking) based on the student population. Local data was collected at the school on April 13, 2016. That data was then compared to the *MSTA calculator, version 111015*. The comparison showed that this school generated approximately the same trips as the MSTA calculator estimates shown in Table 1. Therefore, the MSTA calculator will be utilized to determine the increase in projected school traffic volumes. Based on the MSTA calculator, the school expansion is projected to generate 50 additional daily trips, 30 additional AM peak hour site trips (17 entering, 13 exiting) and 16 additional school PM peak hour site trips (8 entering, 8 exiting).

Based on the Town of Chapel Hill Guidelines for Traffic Impact Analysis, a traffic impact analysis would not be required, as the school expansion is projected to generate less than 500 additional trips or 250 additional trips accessing a collector or local road.

Attachments

- Trip Generation Table
- Turning Movement Counts
- MSTA Calculator Spreadsheets



VHB Engineering NC, P.C. (C-3705)
4000 Westchase Boulevard
Suite 530
Raleigh, NC 27607
P 919.829.0328

p: 919-829-0328 f: 919.833-0034

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	Pope Road Southbound				No Approach Westbound				Pope Road Northbound				MCS North Driveway Eastbound						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	7	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	14	14
07:05 AM	0	9	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	16	16
07:10 AM	0	2	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	8	8
07:15 AM	0	10	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	19	19
07:20 AM	0	9	0	0	0	0	0	0	2	6	0	0	0	0	0	1	1	17	18
07:25 AM	0	13	2	0	0	0	0	0	0	9	0	0	0	0	0	0	0	24	24
07:30 AM	0	14	1	0	0	0	0	0	7	13	0	0	0	0	0	0	0	35	35
07:35 AM	0	11	0	0	0	0	0	0	2	15	0	0	0	0	0	0	0	28	28
07:40 AM	0	9	2	0	0	0	0	0	0	20	0	0	0	0	0	0	0	31	31
07:45 AM	0	4	2	0	0	0	0	0	2	17	0	0	0	0	0	0	0	25	25
07:50 AM	0	10	4	0	0	0	0	0	2	20	0	0	0	0	0	0	0	36	36
07:55 AM	0	8	1	0	0	0	0	0	2	13	0	0	0	0	0	0	0	24	24
Total	0	106	12	0	0	0	0	0	18	141	0	0	0	0	0	1	1	277	278
*** BREAK ***																			
08:00 AM	0	18	1	0	0	0	0	0	5	18	0	0	0	0	0	0	0	42	42
08:05 AM	0	6	1	0	0	0	0	0	6	10	0	0	0	0	0	0	0	23	23
08:10 AM	0	18	6	0	0	0	0	0	12	11	0	0	0	0	0	0	0	47	47
08:15 AM	0	8	9	0	0	0	0	0	24	16	0	0	0	0	0	0	0	57	57
08:20 AM	0	9	11	0	0	0	0	0	19	9	0	0	0	0	0	0	0	48	48
08:25 AM	0	18	11	0	0	0	0	0	11	17	0	0	0	0	0	0	0	57	57
08:30 AM	0	7	6	0	0	0	0	0	9	13	0	0	0	0	0	0	0	35	35
08:35 AM	0	11	2	0	0	0	0	0	0	12	0	0	0	0	0	0	0	25	25
08:40 AM	0	12	0	0	0	0	0	0	2	7	0	0	0	0	0	0	0	21	21
08:45 AM	0	11	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	27	27
08:50 AM	0	16	1	0	0	0	0	0	0	9	0	0	0	0	0	0	0	26	26
08:55 AM	0	5	0	0	0	0	0	0	1	10	0	0	0	0	0	0	0	16	16
Total	0	139	48	0	0	0	0	0	89	148	0	0	0	0	0	0	0	424	424
*** BREAK ***																			
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11:35 AM	0	9	1	0	0	0	0	0	5	5	0	0	0	0	0	0	0	20	20
11:40 AM	0	7	1	0	0	0	0	0	2	9	0	0	0	0	0	0	0	19	19
11:45 AM	0	6	0	0	0	0	0	0	3	8	0	0	0	0	0	0	0	17	17
11:50 AM	0	5	1	0	0	0	0	0	3	4	0	0	0	0	0	0	0	13	13
11:55 AM	0	10	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	15
Total	0	44	4	0	0	0	0	0	15	36	0	0	0	0	0	0	0	99	99
*** BREAK ***																			
12:00 PM	0	7	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	18	18
12:05 PM	0	8	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	14	14
12:10 PM	0	5	0	0	0	0	0	0	1	9	0	0	0	0	0	0	0	15	15
12:15 PM	0	8	1	0	0	0	0	0	0	12	0	0	0	0	0	0	0	21	21
12:20 PM	0	7	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	15	15
12:25 PM	0	7	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	13	13
*** BREAK ***																			
Total	0	42	1	0	0	0	0	0	1	52	0	0	0	0	0	0	0	96	96
*** BREAK ***																			
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02:05 PM	0	9	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	16	16

p: 919-829-0328 f: 919.833-0034

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File Name : MCS - Entrance

Site Code :

Start Date : 4/13/2016

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	Pope Road Southbound				No Approach Westbound				Pope Road Northbound				MCS South Driveway Eastbound						
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07:00 AM	0	7	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	14	14
07:05 AM	0	9	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	16	16
07:10 AM	0	2	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	8	8
07:15 AM	0	10	0	0	0	0	0	0	0	9	0	0	0	0	0	1	1	19	20
07:20 AM	0	9	0	0	0	0	0	0	0	7	0	0	0	1	0	0	0	17	17
07:25 AM	0	13	0	0	0	0	0	0	0	10	0	0	0	1	0	0	0	24	24
07:30 AM	0	14	0	0	0	0	0	0	0	21	0	0	0	0	0	1	0	36	36
07:35 AM	0	11	0	0	0	0	0	0	0	15	0	0	0	0	0	1	0	27	27
07:40 AM	0	9	0	0	0	0	0	0	0	16	0	0	0	3	0	1	0	29	29
07:45 AM	0	5	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	27	27
07:50 AM	0	9	0	0	0	0	0	0	0	20	0	0	0	0	0	1	0	30	30
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Total	0	106	0	0	0	0	0	0	0	156	0	0	0	5	0	4	1	271	272
*** BREAK ***																			
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08:10 AM	0	18	0	0	0	0	0	0	0	20	0	0	0	1	0	5	0	44	44
08:15 AM	0	8	0	0	0	0	0	0	0	33	0	0	0	7	0	10	0	58	58
08:20 AM	0	11	0	3	0	0	0	0	0	24	0	0	0	6	0	18	0	59	62
08:25 AM	0	17	0	0	0	0	0	0	0	21	0	0	0	6	0	19	0	63	63
08:30 AM	0	7	0	1	0	0	0	0	0	15	0	0	0	5	0	16	0	43	44
08:35 AM	0	11	0	0	0	0	0	0	0	8	0	0	0	4	0	10	0	33	33
08:40 AM	0	12	0	0	0	0	0	0	0	8	0	0	0	1	0	6	0	27	27
08:45 AM	0	11	0	0	0	0	0	0	0	15	0	0	0	2	0	2	0	30	30
08:50 AM	0	16	0	0	0	0	0	0	0	8	0	0	0	0	0	2	0	26	26
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Total	0	140	0	4	0	0	0	0	0	200	0	0	0	36	0	90	0	466	470
*** BREAK ***																			
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11:35 AM	0	9	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	19	19
11:40 AM	0	7	0	0	0	0	0	0	0	11	0	0	0	0	0	1	0	19	19
11:45 AM	0	6	0	0	0	0	0	0	0	9	0	0	0	2	0	6	0	23	23
11:50 AM	0	5	0	0	0	0	0	0	0	5	0	0	0	1	0	4	0	15	15
11:55 AM	0	10	0	0	0	0	0	0	0	4	0	0	0	2	0	1	0	17	17
Total	0	44	0	0	0	0	0	0	0	46	0	0	0	5	0	14	0	109	109
*** BREAK ***																			
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12:05 PM	0	8	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	11	11
12:10 PM	0	5	0	0	0	0	0	0	0	10	0	0	0	0	0	1	0	16	16
12:15 PM	0	8	0	0	0	0	0	0	0	10	0	0	0	2	0	1	0	21	21
12:20 PM	0	8	0	0	0	0	0	0	0	6	0	0	0	1	0	1	0	16	16
12:25 PM	0	6	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	13	13
Total	0	42	0	0	0	0	0	0	0	45	0	0	0	7	0	4	0	98	98
*** BREAK ***																			
02:00 PM	0	2	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	7	7
02:05 PM	0	9	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	15	15

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(These numbers do not reflect peak hour traffic volumes)

P 43.35% 26.30% 22.00 37.87%
Private & Charter school data is based
on few to no buses and uses the same
percentages for all school types
(elementary, middle, & high).

- Average Queue Length does not include an alternative traffic pattern required for high traffic demand days.
- Average Queue Length does not include the Student Loading Zone.
- Peak traffic volumes at schools normally occur within a 30-minute time period (justifying a PHF of 0.5)

Is this a Typical PUBLIC school?



NC BOARD OF LANDSCAPE
 ARCHITECTS, INC. # C-104

112 Pope Rd.
Durham, NC 27707

2.23.2017

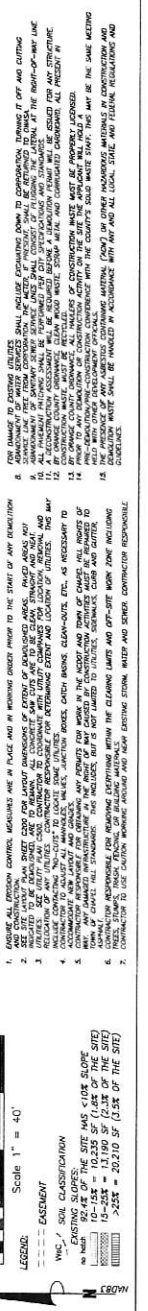
WUR MILK, EDGAR, 11/04/17	
WUR MILK, 2/23/2017	

ECIAL USE PERMIT

analysis plan

C100

WILL BE ADDED ALONG POPC ROAD.
THE ADVERTISED BIRTHPLACE OF THE
FATHER OF THE AMERICAN WEST, THE
COWBOY BUILDING.



BB&T Check Images

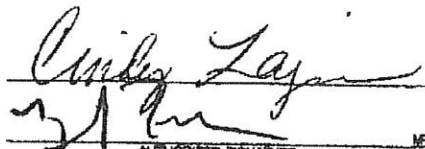
 Close

Check Number	Amount	Date Posted	Account Type	Account Number
32318	\$350.00	05/27/2016	Checking	5111139867

Front

Back

[How to save this image](#)

MONTESSORI COMMUNITY SCHOOL 4512 POPE ROAD DURHAM, NC 27707		BRANCH BANKING AND TRUST COMPANY DURHAM, NC 27702 69-112/531		32318	
		CHECK DATE	CHECK NO		
		5/17/2016	32318		
		CHECK AMOUNT			
PAY		**Three hundred fifty and 00/100 Dollars**		\$** 350.00	
TO THE ORDER OF	Town of Chapel Hill Account Receivable 405 Martin Luther King Jr Blvd Chapel Hill, NC 27514		 AUTHORIZED SIGNATURE		MP
⑈032318⑈ ⑆053101121⑆0005111139867⑈					

Details on Back
Security Features Included

[Click Image to Enlarge](#)