# MILLIS PLANNING BOARD May 12, 2020 MEETING MINUTES VIRTUAL/REMOTE MEETING VIA ZOOM PLATFORM

The remote meeting was called to order at 7:35 p.m. by Mr. Richard Nichols, Chair.

Members present: Richard Nichols, Chair

George Yered, Acting Clerk

James McKay

Bodha B. Raut Chhetry

Joshua Guerrero, Associate Member

Camille Standley – Administrative Assistant

Members Absent: Nicole Riley

Also present: Daniel Merrikin, Legacy Engineering, LLC

Robert Fox, 38 Benjamins Gate, Plymouth. MA

Robert Michaud, P.E., MDM Transportation Consultants, Inc.

# APPLICATION FOR APPROVAL OF DEFINITIVE PLAN, PUB. HEAR., CONT. RIDGE STREET – "EMERSON PLACE" OPEN SPACE SUBDIVISION TD DEVELOPMENT, LLC

The public hearing continuation was opened at 7:35 p.m. with notice being read by Mr. Yered, Acting Clerk.

Mr. Merrikin, representing the applicant, stated that he has been working on addressing comments from the various Town boards and is in the process of revising the plans. The purpose of tonight's hearing, he said, is to present the traffic study.

Mr. Michaud, of MDM Transportation Consultants, presented a Transportation Analysis, dated May 12, 2020 (attached). Under the proposed development plan 43 single family homes will be constructed. Primary access/egress for the project is proposed via a direct connection to the western side of Ridge Street, approximately 250 feet south of Curve Street. The secondary access/egress will be provided along Rolling Meadow Drive. He stated that the Traffic Impact Assessment was done to Industry Standards (TIA). Key findings for the proposed 43-lot subdivision are modest generating traffic use; more than ample capacity. A review of the crash data indicated no immediate safety countermeasures warranted. The project is one of "modest traffic-generating use." They study also includes recommended access improvements. BETA Group has reviewed the study, he said, and provided initial comments. BETA is currently reviewing the response to comments from MDM Transportation Consultants.

Mr. Michaud summarized the existing traffic volumes, speed study results and sight lines on Ridge Street. He presented the site generated trips during "AM" and "PM Peak Hour," and a stopping sight distance summary. They estimated "one vehicle every two minutes; or just over 30 cars per hour" from the new subdivision during morning peak hours, for example. Traffic volume data was presented.

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Mr. Michael Edmonds, 191 Curve Street, questioned the traffic numbers presented and the methodology used. Mr. Michaud stated that they applied an "Industry Standard Trip Rate" methodology which follows all protocols for residential projects. The numbers presented "are modest and consistent with known projects in the Commonwealth," Mr. Michaud said. He stated that methodology used is to apply industry trip rates to the land use – in this case, single family homes. The methodology is subject to peer review, as well. The Traffic Study is posted on the Planning Board's webpage, Mr. Merrikin stated.

The intersections at Ridge Street at Curve Street and Ridge Street at Auburn Road were discussed. Mr. Michaud stated that they would discuss appropriate signage and markings. Mr. Merrikin stated that no street light is proposed at the end of the subdivision road; however, they would put in signage that would be appropriate if the Board wishes.

Mr. Michaud stated that there is no proposal to widen out already existing public ways. "Appropriate signage at certain locations will be important," he said. No off-site improvements are proposed.

Sidewalks were discussed. Mr. Merrikin stated that the applicant has requested a waiver to require a sidewalk on only one side of each proposed roadway in the subdivision. The sidewalk would extend through the development and terminate at Ridge Street. Mr. Merrikin stated that the applicant would submit the equivalent amount of funds for the second sidewalk to the Town's Sidewalk Fund. The Select Board as the roadway commissioners determines an appropriate place for sidewalks throughout the Town, Mr. Merrikin said. Ms. Farrar stated that her development, Ridge Farm Estates, would be interested in the sidewalk funds to install a sidewalk there and asked that the Board take that into consideration. This issue would have to be determined by the Select Board.

Questions from audience members raised were concerns over wear and tear on current roadways and how traffic would impact road quality; specifically Ridge Street. Mr. Michaud stated that they do not anticipate marked impact as the increase is from residential vehicles, not commercial. Pedestrian usage and pedestrian safety concerns over the existing roadways (Ridge St./Curve St.) were expressed.

A motion was made by Mr. McKay, seconded by Mr. Yered, to continue the public hearing at 8:20 p.m. to Tuesday, May 26, 2020, 7:30 p.m. By Roll Call Vote: Nichols – aye; Yered – aye; McKay – aye; Raut Chhetry – aye; Guerrero – aye. The motion passed unanimously.

#### MILLIS PLANNING BOARD MEETING MINUTES

#### May 12, 2020

#### VIRTUAL/REMOTE MEETING VIA ZOOM PLATFORM

#### FORM A APPLICATION APPROVAL NOT REQUIRED PLAN – 29 FOREST ROAD

Mr. DeSimone filed an Application for Endorsement for 29 Forest Road, Lawrence Mastropieri. The plans purpose is to grant a small piece of land to the abutter on the right (25 Forest Road) as they need 40,000 square feet to add a bedroom to the existing home. No frontage change and the area conforms to zoning.

On a motion made by Mr. Nichols, seconded by Mr. Guerrero, it was voted unanimously by roll call vote: Nichols – aye; Yered – aye; McKay – aye; Raut Chhetry – aye; Guerrero – aye, to approve and endorse an ANR plan entitled, "Plan of Land in Millis, MA, Owner: Lawrence G. Mastropieri, 29 Forest Road, Millis, MA 02054" (1 sheet) dated March 9, 2020, stamped and prepared by Paul J. DeSimone, PLS, Colonial Engineering, Inc., 11 Awl Street, Medway, MA 02053, finding the Form A in order and subdivision control not required. The Board endorsed the plan accordingly

#### **OTHER BUSINESS:**

#### **MINUTES**

A motion was made by Mr. Nichols, seconded by Mr. Yered, to approve, as written, the minutes from April 7, 2020. By Roll Call Vote: Nichols – aye; Yered – aye; McKay – aye; Raut Chhetry – aye; Guerrero – aye. The motion passed unanimously.

#### **ADJOURN**

There being no further business, a motion was made by Mr. Nichols, seconded by Mr. McKay, to adjourn the remote meeting at 8:26 p.m. By Roll Call Vote: Nichols – aye; Yered – aye; McKay – aye; Raut Chhetry – aye; Guerrero – aye. The motion passed unanimously.

June 9, 2020 (tentative)

Respectfully submitted,

Scheduled Planning Board Meetings: May 26, 2020

Camille Standley, Administrative Assistant

### Emerson Place - Millis, MA

# **Transportation Analysis**

Millis Planning Board

Robert J Michaud, P.E. – Managing Principal

May 12, 2020

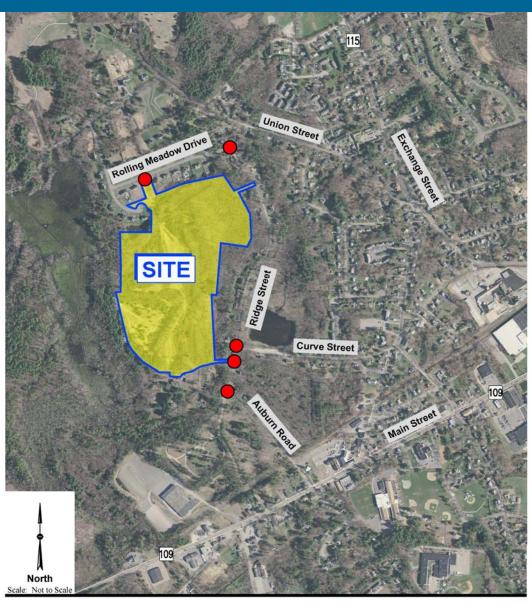


### Overview

- Traffic Impact Assessment (TIA) to Industry Standards
  - Modest Traffic Generator
  - No material impacts to area intersections ample capacity
  - No safety countermeasures required at area roads (low crash experience)
  - Site Access improvements to meet applicable safety Criteria
  - Recommended access improvements
- Independent Peer Review (BETA)
  - Responses submitted per MDM April 14, 2020 technical memo
  - Updated data/analysis confirms findings of original study
  - Concurrence on access improvements/recommendations



## **Study Locations**



## Site Plan



Site Plan Source: Legacy Engineering

### **Existing Traffic Volumes**

TABLE 1
EXISTING TRAFFIC VOLUME SUMMARY
RIDGE STREET SOUTH OF CURVE STREET

				Peak Hour
Daily	Percent	Peak Hour	Peak Flow	Directional
Volume (vpd)¹	Daily Traffic <sup>2</sup>	Volume (vph) <sup>3</sup>	Direction <sup>4</sup>	Volume (vph)
1,160	9%	100	57% NB	57
1,160	9%	105	58% SB	61
	Volume (vpd) <sup>1</sup> 1,160	$\frac{\text{Volume (vpd)}^1}{1,160}  \frac{\text{Daily Traffic}^2}{9\%}$	$\frac{\text{Volume (vpd)}^1}{1,160}$ $\frac{\text{Daily Traffic}^2}{9\%}$ $\frac{\text{Volume (vph)}^3}{100}$	Volume (vpd)1Daily Traffic2Volume (vph)3Direction41,1609%10057% NB

<sup>&</sup>lt;sup>1</sup>Two-way daily traffic expressed in vehicles per day without seasonal adjustment.

<sup>&</sup>lt;sup>2</sup>The percent of daily traffic that occurs during the peak hour.

<sup>&</sup>lt;sup>3</sup>Two-way peak-hour volume expressed in vehicles per hour.

<sup>&</sup>lt;sup>4</sup>NB = Northbound, SB = Southbound

## Measured Travel Speeds – Ridge Street

TABLE 2
SPEED STUDY RESULTS – RIDGE STREET

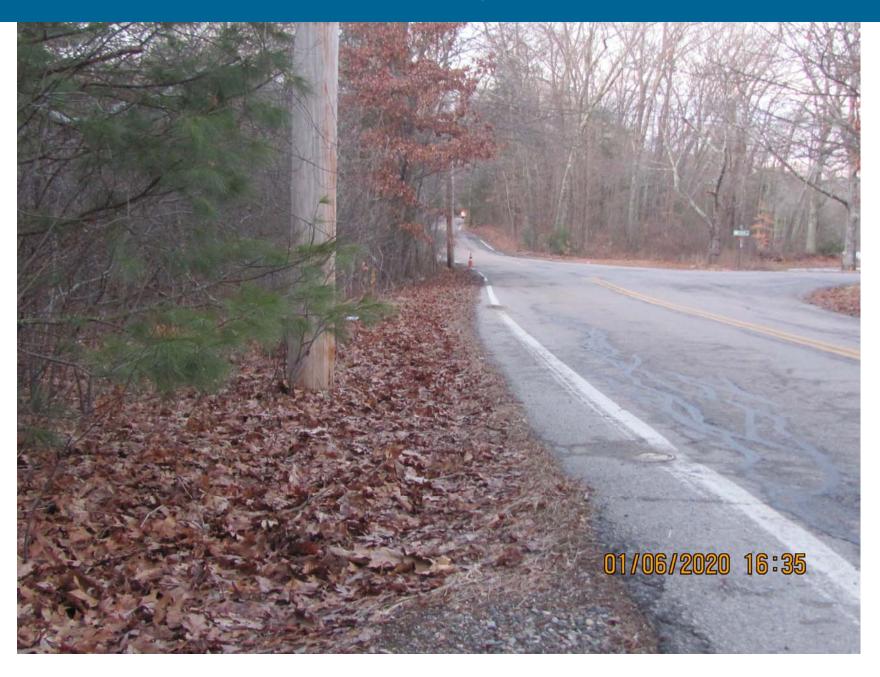
		Travel Speed		
Travel Direction	Regulatory Speed Limit <sup>1</sup>	Average <sup>2</sup>	85 <sup>th</sup> Percentile <sup>3</sup>	
Northbound	n/a	25	28	
Southbound	n/a	26	29	

<sup>&</sup>lt;sup>1</sup>Regulatory Posted Speed in miles per hour (mph).

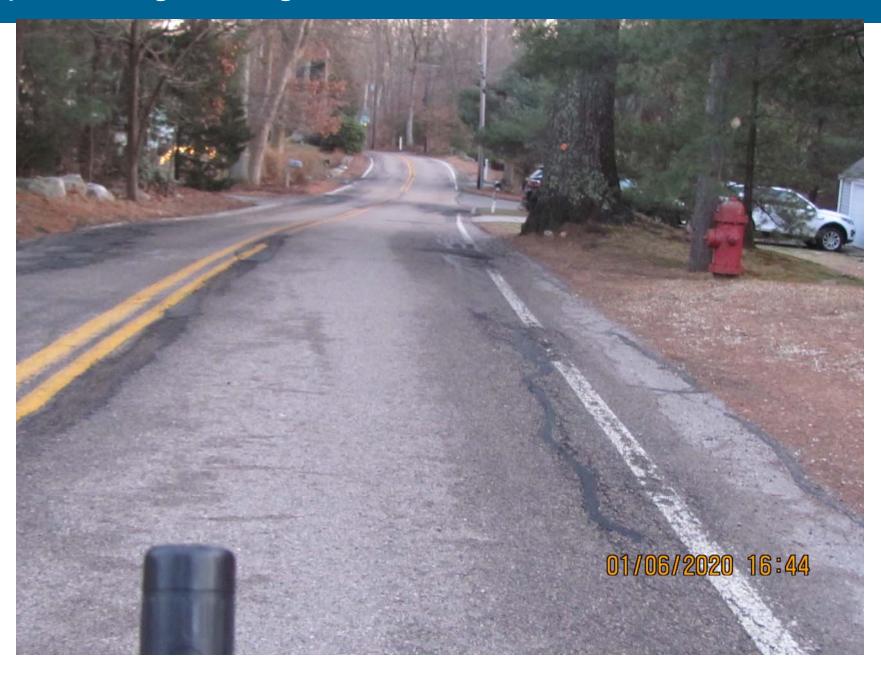
<sup>&</sup>lt;sup>2</sup> Arithmetic Mean in mph

<sup>&</sup>lt;sup>3</sup> The speed at or below which 85 percent of the vehicles are traveling in mph.

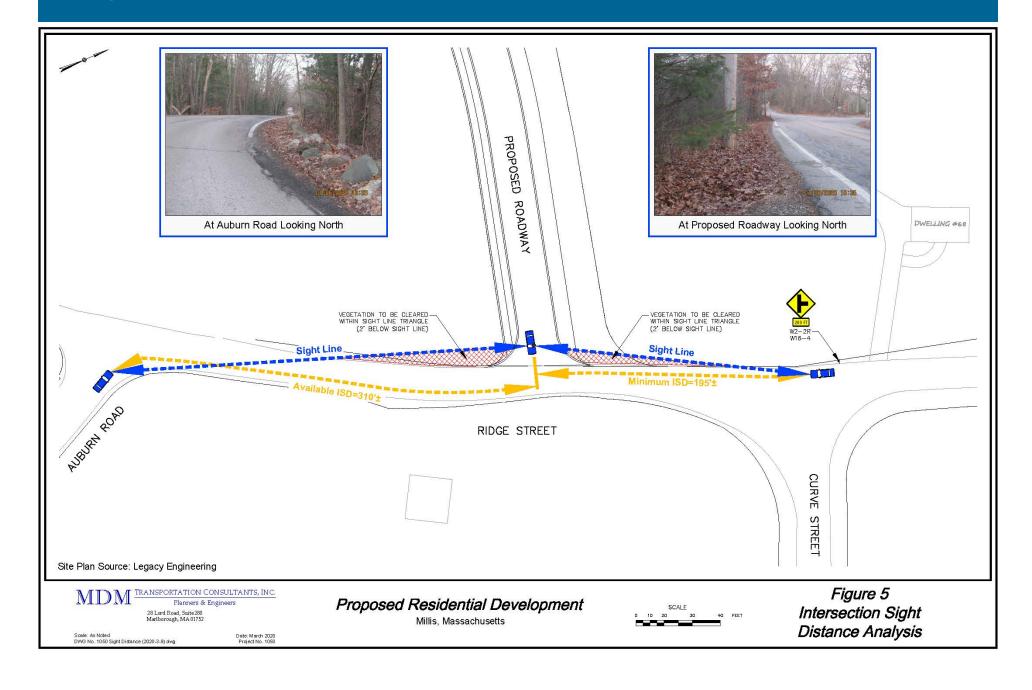
# Proposed Roadway – Looking North



# Approaching Rolling Meadow Drive – From North



## Sight Lines



## **Stopping Sight Distance Summary**

		AASHTO Recommended <sup>1</sup>		
Approach/	Available	Average	85 <sup>th</sup> Percentile Speed <sup>3</sup>	
<b>Travel Direction</b>	SSD	$Speed^2$		
Ridge Street at Rolling Mead	ow Drive			
Northbound	500± Feet	155 Feet	185 Feet	
Southbound	300± Feet	165 Feet	195 Feet	
Ridge Street at Proposed Site	C	155 Each	10F E1	
N I a u t l a la a a u a d				
Northbound Southbound	300± Feet >500 Feet	155 Feet 165 Feet	185 Feet 195 Feet	

<sup>&</sup>lt;sup>1</sup>Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on driver height of eye of 3.5 feet to object height of 2.0 feet.



 $<sup>^2</sup>$ Average Speed; Ridge Street: NB = 25 mph and SB = 26 mph.

<sup>&</sup>lt;sup>3</sup>85<sup>th</sup> Percentile Speed; Ridge Street: NB = 28 mph and SB = 29 mph.

## Intersection Sight Distance Summary

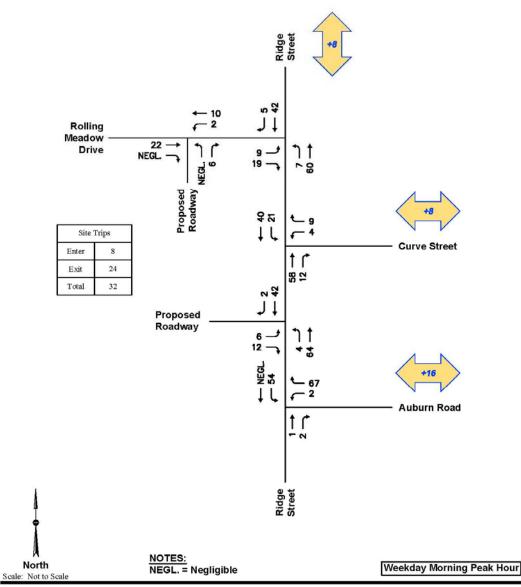
	AASHTO Minimum <sup>1</sup>	AASHTO Ideal <sup>2</sup>	
Available		85 <sup>th</sup> Percentile	
ISD	$Speed^2$	Speed <sup>2</sup>	
Aeadow Drive			
200± Feet	195 Feet	280 Feet	
500± Feet	185 Feet	310 Feet	
Site Roadway  195± Feet	195 Feet	280 Feet	
310± Feet	185 Feet	310 Feet	
	ISD  Meadow Drive  200± Feet 500± Feet  Site Roadway  195± Feet	Available ISD Speed <sup>2</sup> Meadow Drive  200± Feet 500± Feet 195 Feet 185 Feet Site Roadway  195± Feet 195 Feet	

<sup>&</sup>lt;sup>1</sup>Recommended sight distance based on AASHTO, A Policy on Geometric Design of Highways and Streets. Based on driver height of eye of 3.5 feet and an object height of 3.5 feet and adjustments for roadway grade if required. Minimum value as noted represents SSD per AASHTO guidance.

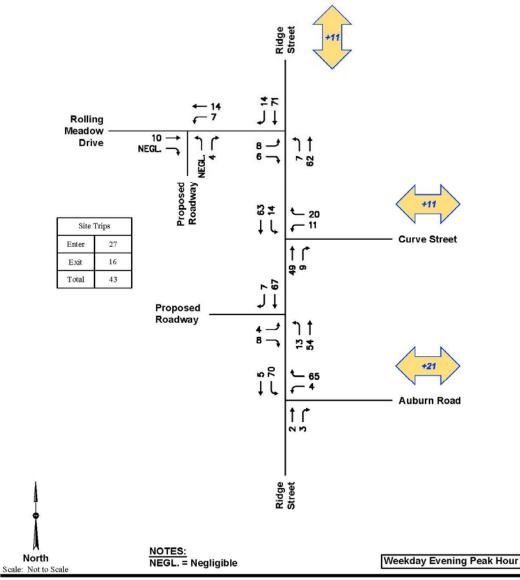


<sup>&</sup>lt;sup>2</sup>85<sup>th</sup> Percentile Speed; Ridge Street: NB = 28 mph and SB = 29 mph.

### Site Generated Trips – AM Peak Hour



## Site Generated Trips – PM Peak Hour



### Recommendations

### Signage and Markings

MUTCD compliant STOP sign (R1-1) and STOP line markings for driveways

#### Roadway Design

- Perpendicular orientation to Ridge Street
- Curb radii and road width to accommodate Town's largest fire apparatus
- Roadway grading and orientation to meet/exceed minimum recommended stopping sight distance (SSD)

### Sight Line Triangles

 Placement of advanced intersection warning sign (W2-2) and supplemental warning plaque (W16-2P) on approaches to Rolling Meadow and Primary Drive

#### Sidewalk Connection

- Connect to the existing sidewalk system along Rolling Meadow Drive
- ADA-compliant ramps as appropriate/required