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Comments to the April 11 Traffic study slides

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To: Matthew Sarcione <msarcione@shrewsburyma.gov>

Cc: David Mercuri <dmerc@townisp.com>, "dale@the-martins.org" <dale@the-martins.org>

Hi Matt,

I would like to share my thoughts on the traffic plans that were presented at the ZBA meeting on April 11th. Please pass this info to the ZBA and traffic peer reviewer.

My comments below refer to these traffic slides:

Applicants presentation 4/11/16 - <https://shrewsburyma.gov/DocumentCenter/Home/View/1878>

Steve Danielson presentation 1/25/16 - <https://shrewsburyma.gov/DocumentCenter/Home/View/1673>

The developers current proposal (shown on slide 3, 4 & 5) have a dedicated left turn lane on Rt 20 into Stoney Hill. This left turn lane is both good and bad. It can be seen as good because drivers turning left into Stoney Hill will have a safer place to turn left. But I will also say that it will be bad for drivers waiting to pull out of Stoney Hill onto Rt 20 westbound.

So I might agree that this addition left turning lane could be helpful for today's traffic volumes where there are not too many vehicles making a left from Rt20 into the existing neighborhood. But I will be frightened when you add 156 units (~234 cars) to that side of the neighborhood as the traffic patterns will be disastrous during peak hours.

Imagine you're a car trying to pull out of the Stoney Hill west end during peak PM hours. Your trying to time pulling out into 50mph gaps of cars coming east and west on Rt20. You start to see a gap, but a westbound car slows into the new left turning lane to pull into Stoney Hill. He has the right of way and partially blocks your view, so you wait for him to find a gap and turn into Stoney Hill. The car finally turns into Stoney Hill and you might have waited about 1.5 minutes overall. At about that same time another car slows and pulls into left turning lane for entering into Stoney Hill making you wait another cycle for that car to turn. At this point several cars are lined up behind you and are waiting for you to pull out.

The scenario that I have just described is highly likely and is supported by the data provide on TetraTech slide 5. Notice the additional 29 cars + 7 existing (slide 4 from my 1/25/16 pres) that will want to turn left into Stoney Hill during PM Peak hours – this equates to 1 car every 1min 40 seconds (36 cars/hr). At the same time 21 cars (additional 12 + 9 existing cars) will want exit Stoney Hill and turn left; while another 15 cars (9 additional + 6 existing cars) will want to exit SH and turn right. This is a total of 36 cars or 1 car every 1min and 40 seconds trying to exit Stoney Hill West during peak PM hours (note: it's just a coincidence that it's 36 cars entering & 36 cars exiting per hr) . Cars trying to exit Stoney Hill West will be faced with the situation that this is all happening as cars on Rt 20 are traveling on average every 3.2 seconds westbound and 5 seconds eastbound (reference Steve's 1/25/16 presentation slide 4). The PM peak traffic volumes discussed here are of course just an

estimate as there will be times, seasons and situations where the congestion may be better or much worse than this. There is also a case to be made for the difficulties of AM Peak traffic hours when the additional 156 unit apartment traffic is factored in, but I'll leave that for the towns peer reviewer to examine.

I hope you take the time to review these numbers and let me know if you have any questions. I think that they support the fact that terrible congestion will occur if 156 units (~234 cars) will have access in & out of the west end of Stoney Hill. My findings are based on the Tetra Tech slides which show the existing & additional traffic volume that will be directed to the west end of Stoney Hill and does not appear to be reasonable or safe.

I therefore would like to recommend a traffic light on Stoney Hill West end as I believe this is the safest option for our neighborhood. But seeing that this proposal is not before us, I would like to suggest that proposal "Stoney Hill Road - No Access Route 20: Left In/Right In" should be preferred option as it should have the least impact and nearly as safe an option as we have today.

As a final note, I also would like to highlight some traffic patterns that can impact the left turn exits out of the Stoney Hill West (SHW) end:

- High school start time is 7:30am – some parents & high school drivers take a left out of SHW at the same time ~7:10am
- Middle school start time is 8am – some parents take a left out of SHW ~7:45am
- Coolidge school start time is 9am - some parents take a left out of SHW ~8:45am (I note Coolidge as some/all of our neighborhood might switch to Coolidge with the additional apartments)
- More apartment renters may find work in Worcester, UMass Med or the growing Lakeway district which will direct them to turn left out of SHW
- Rt20 will likely get increased traffic with growth of Northboro Crossing, Olde Shrewsbury Village, new Russell Industrial Park (across Rt20 from Phase I), YMCA access road & the old Shrewsbury Drive-in lot.

Regards, Steve Danielson