

December 27, 2011

Current and Future Traffic along Long Pond Road south of Clark Road

The impact of vehicle traffic on the Six Ponds area and on the difficulty of having vehicles, pedestrians and cyclists share a heavily traveled roadway is best illustrated by examining some data which has been gathered for the section of Long Pond Road south of Clark Road.

Some of the data comes from the 2011 Old Colony Planning Council (OCPC) report on Long Pond Road Traffic Counts (South of Clark Road).

Other data comes from the 2007 A.D. Makepeace Draft Environmental Impact Report (DEIR) on their Wareham Road Mixed-Use Development.

OCPC Data

Data collected by the OCPC in 2009, 2010 and 2011 show that the number of vehicles per day on this section of road has increased about 10% over the past 3 years to approximately 10,000 vehicles per day. In 2011, the peak hour of morning and peak hour of evening traffic accounted for about 19% of this traffic. Most of the other 81% of the traffic is distributed over 15 hours from dawn to mid-evening.

What these numbers mean can easily be more understood by calculating the number of vehicles per minute and the number of seconds between vehicles. The 2011 traffic volume during the peak hours converts to roughly 15.8 vehicles per minute or 1 vehicle every 3.8 seconds. For the non-peak hours the average number of number of vehicles is about 9 per minute or 1 vehicle every 6.7 seconds.

OCPC/DEIR Data Combined

Data presented in the ADM DEIR of 2007 indicates that in 2006 about 9,390 vehicles traveled this stretch of road each day. While this number is a little higher than the OCPC number for 2009, it suggests that not much changed between 2006 and 2009.

On the other hand, the report estimated that the ADM Project would generate approximately 7,834 additional trips per day. While not all of the vehicles would travel over the section of Long Pond Road south of Clark Road, the report estimates that during the peak hours about 938 vehicles coming from or going to the project would pass through or turn at the intersection of Long Pond Road and Clark Road each day. Since report estimates that 1,249 vehicles would enter or exit the project during peak hours, this means that 75.1 % of those vehicles would pass through or turn at the intersection of Long Pond Road and Clark Road. Assuming that peak hours account for about 19% of the total traffic as estimated in the OCPC data, this would mean that 5,883 additional vehicles would be traveling over this section of road each day. This constitutes a projected increase of 58.8% above the current traffic volume on this section of road estimated by the OCPC.

In terms of vehicles per minute and seconds between vehicles, once the Project has been built, there would be about 23.5 vehicles per minute or 1 vehicle every 2.5 seconds during peak hours, and an average of about 15.5 vehicles per minute or 1 vehicle every 3.8 seconds during the non-peak hours.

Detailed DEIR Data for a Specific Intersection at Peak Hours

A more detailed analysis of peak hour data in the DEIR for the intersection of Long Pond Road and Clark Road indicates that the number of vehicles passing through or turning at this intersection was about 1,712 in 2006, was estimated to be about 2,011 in 2016, and was estimated to be about 2,969 after the ADM Project had been built. This means that there would be an estimated 73% increase in traffic during the peak hours over the 2006 numbers as a result of this Project.

This volume of traffic during the peak hours converts to about 24.7 vehicles per minute or 1 vehicle every 2.4 seconds.

Another way of looking at the data presented above is to examine how far apart vehicles would be when traveling 30 miles per hour. If vehicles are 2.4 seconds apart and going in the same direction, the distance from the front of one vehicle to the back of the next vehicle is a little less than 200 feet and it remains that way. However, when vehicles on one side of the road are 2.4 seconds apart and vehicles on the other side of the road are 2.4 seconds apart, a gap of 200 feet between vehicles going in opposite direction becomes only 100 feet after 1.2 seconds. While it would be difficult pull into traffic on the side going in the same direction, it would be virtually impossible to pull into traffic when it is necessary to cross a line of oncoming traffic.

DEIR Conclusions

The DEIR states that traffic increases from the ADM Project will not result in a significant change in traffic or queuing over anticipated conditions that would exist without the Project. (from p. 9-57)

The DEIR also states that, as a result, the transportation improvement program for the Project has been structured primarily to address existing deficiencies identified as part of this study, as well as to accommodate anticipated future development in the area independent of the Project. (from p. 11-12)

Note: The conclusion that the ADM Project will not result in a significant change in traffic appears to derive largely from a comparison of estimated Project traffic at Route 3 intersections with the total amount of traffic moving up and down Route 3. The queuing conclusion apparently derives largely from information regarding these same Route 3 intersections. (from p. 9-32)

Re-analysis Conclusions

It should be apparent from the re-analyses presented above that the DEIR conclusions do not represent the situation that prevails with respect to roads and intersections inside the Project area.

When viewed from the perspective of Six Ponds residents, the re-analysis demonstrates that traffic on Long Pond Road south of Clark Road is already very heavy and that once the ADM Project has been built, the traffic will be much heavier yet. The rural character of driving in the area has already all but disappeared, and the traffic is destined to become much worse in the future.

To the extent that traffic mitigation plans might be based on DEIR conclusions regarding traffic and queuing, it seems likely that mitigation measures could seriously underestimate what needs to be done to accommodate traffic loads.

Walking or cycling along the side of Long Pond Road is already very dangerous. There are no lanes along the sides for either walkers or cyclists, and there are no sidewalks. These conditions are particularly dangerous for children, and they are very hazardous for adults as well. The likelihood of being hit is high. In order for walkers and cyclists to have any degree of safety under current and especially under future traffic conditions, there needs to be a path which is separated from the road to make things reasonably safe. This need will increase dramatically as traffic increases in the future.

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