

Lincoln Ad Hoc Traffic and Roadside Committee: Draft Notes on Public Comment

As Recognized from Public Feedback from May 30 to September 24, 2008

September 24, 2008

The following summary is a working compilation of concerns and suggestions conveyed by residents and other interested parties to the Ad Hoc Traffic and Roadside Committee as part of the roadway design and rehabilitation planning process. This compilation is intended to inform design engineers in their effort to produce a concept design proposal congruent, on balance, with the wishes of Lincoln residents and partner organizations. This compilation is also intended to nucleate continued discussion with the goal of arriving at design proposals optimal for Lincoln.

Requests from Partner Groups and Agencies

- 1) Minute Man National Historical Park is interested in finding ways to allow cyclists and walkers to get to the park safely. However, they have just begun their planning process for new roadway designs and have no specific proposals to relay to Lincoln at this time.
- 2) Cambridge Water Board requests that we better service drainage catch basins.
- 3) An affiliate of Gropius House requested provision for clear signage during the repaving to minimize the number of patrons deterred from museums during construction.
- 4) The FACTS subcommittee of the CLRP group described a draft document last revised June 4, 2008 entitled "Transportation and Circulation." Though not yet finalized for public release, it promised good alignment with the guideline adopted by the Ad Hoc Traffic and Roadside Committee. If possible, reference to this FACTS report should be made during the design process. Noah Eckhouse, chair of the FACTS subcommittee of CLRP suggested the following points for consideration:
 - a. Mitigate adverse impacts of increasing traffic density and speed.
 - b. Promote transport methods that also enhance sense of community.
 - c. Improve options for those for whom personal vehicle use is not possible or practical.These sentiments were echoed in the September 24, 2008 Lincoln Journal.
- 5) The Conservation Commission's Peter von Mertens promoted the "creation of 'bike lanes' on certain roads. We are thinking of this as a strip of road outside the 'fog line' that would be safe for bicycles but not necessarily an official bike lane as required by the state." Con Comm. "agreed that official bike lanes might not be feasible or desirable. They liked the idea of moving fog lanes over and expanding the road where appropriate to give more room. Following are the roads where the Commission feels these ["fog"] lanes are needed in order of priority:
 - a. Route 117 – particularly from Lee's Bridge to Lincoln Rd
 - b. Lincoln Rd – particularly from public safety to 5-way intersection
 - c. Trapelo Rd
 - d. Concord Rd – particularly from Rte. 117 to Walden Pond
 - e. Bedford Rd"In addition the Conservation Commission suggested that "locations or neighborhoods for the transportation hubs or shelters not in order of priority are:
 - a. Train station – more new bike racks and a covered shelter or overhang on train side of existing building.
 - b. Bedford Rd and Morningside Lane
 - c. Old Concord Rd and Concord Rd
 - d. Farrar Rd and Concord Rd"

[Other locations specified by the Con Comm were outside the consideration of the AHTRC's current charge from the Board of Selectmen.]

Specific Roadway Treatment Considerations

Traffic Calming Measures:

- 1) Residents proposed a roundabout or other traffic calming flow diversions such as islands or roundabouts at:
 - Bedford Rd. and Rt. 2A
 - Intersection of Tower Rd. and Rt. 117
 - Intersection of Lincoln Rd. and Rt. 117
 - Intersection of Lincoln and Ballfield Rds.
 - Intersection of the railroad with Lincoln Rd.In general the reasons were based primarily on lack of safety inherent from the excessive speeds of drivers. However, an aesthetic value to slowing traffic was also recognized. It was noted that pedestrians have difficulty crossing Rt. 117 at Lincoln Rd., which is a quality of service consideration.
- 2) Confusion, speeding, and perceived lack of safety were cited as reasons to explore narrowing the intersection at Codman and Lincoln Rds.
- 3) Regarding the intersection at Trapelo Rd. and Old County Rd., we received anecdotal estimates that “at non-rush hours the ratio of northbound to southbound traffic on Old County is 10 to 1 and at rush hour, 25 to 1. Northbound traffic on Old County backs up at Trapelo intersection, creating dangerous conditions when exasperated drivers at the stop sign dart across.” In conjunction with this observation, it was suggested Lincoln take measures to slow east-bound downhill Trapelo Rd traffic as it approaches this intersection with Old County Rd., considering for that purposes (a) speed bumps on the Trapelo Hill west of intersection with Old County; (b) stop signs on Trapelo at intersection with Old County Road; and rumble strips on east bound lane of Trapelo approaching Old County.
- 4) There was other request for strategic use of rumble strips on the Trapelo Rd. causeway across the reservoir. And, to the contrary, there were also arguments against their use, particularly concerning noise. CEI noted that in their Project Development Manual, Mass Highway voices an opinion against the use of rumble strips for traffic calming: <http://www.mhd.state.ma.us/default.asp?pgid=content/designGuide&sid=about#para4> At this webpage, you will see a list of chapters of the Manual. If you select “Chapter 16 - Traffic Calming and Traffic Management” and go to paragraph 16.7.5 (on page 16-34) the basis of their opinion is explained.
- 5) Some residents sought data to support the rationale for any new traffic calming measures. In response, CEI reported the clear correlation between speed and traffic-related injury/fatality. Apart from that, CEI stated that “effective traffic calming is more of an art than a data-supported science. Sometimes these efforts have positive outcomes, sometimes negative outcomes.” CEI encouraged Lincoln to recognize that traffic calming measures like speed bumps should be introduced only after careful study of context-specific factors.
- 6) Two residents conveyed that they were puzzled by the location of the stop sign on the western end of Trapelo where it intersects Lincoln Rd and Bedford Rd at ‘5 Corners.’ The Page Rd resident thought the sign was too distal from the intersection and should be moved to the island. The observation was made in response that that ‘5 Corners’ was,

- surprisingly, an intersection that “worked” —possibly, because motorists are puzzled and, therefore, slow down and self-manage traffic flow.
- 7) In conjunction with the traffic enforcement topics, residents observed that speeding was rampant and unwanted throughout Lincoln. Some residents asserted that current enforcement measures were insufficient to provide for safety. An aesthetic detriment of speeding and elevated traffic volume was also noted. Residents further proposed that any new paving would invite additional traffic density and speed and suggested that some additional traffic calming measures were needed. Some residents hoped that traffic calming elements like neck-downs, speed humps or speed tables, stop signs, rumble strips, and roundabouts would be considered for this purpose. Conversely, some residents were ardently opposed, in particular, to speed bumps.
 - 8) One resident suggested speed bumps specifically on Trapelo Rd and on Bedford Rd as the hill descends to 5 Corners. In the latter case, the as a major artery for public safety vehicles, the difficulty of a fire truck both climbing the hill *and* navigating the speed bump was noted.
 - 9) Attention to the fog lines was recommended as a traffic calming measure. Notably, one Trapelo Road "S-curve" has fog lines that are painted in such a way as subtly to encourage an increase in the speed of traffic, which is the *opposite* of Traffic Calming. The lines appear to straighten a winding road.
 - 10) One resident asserted that “one of the current faster and straighter stretches on Trapelo Road is the flat (dip) opposite the DeNormandie Barn near Mine Brook Road (where our esteemed police sometimes set up a speed trap). This fast stretch was *created* in my life time when the old road was "straightened". The old road bed, still barely visible, curved nearer the sledding hill and made for slower speeds.” To promote historical consideration and traffic calming, consider returning the road bed to its original curve.
 - 11) The same was asserted and suggested for the road bed west of Lovelane Farm on Baker Bridge Rd: return the historical curve to the road bed.
 - 12) Resident Peter Braun wrote requesting:
 - (a) A crosswalk (preferably moderately “raised”) on Trapelo at the intersection with Lexington Road. Many of us in that neighborhood walk across Trapelo from the bikepath to Lexington Road. In addition, a well-marked and posted crosswalk at that point on Trapelo could help discourage speeders in both directions (who often view this section of Trapelo as a straightway where they can floor it, which only adds to their speed-mentality on the rest of Trapelo and on our other roads).”
 - (b) Stop signs, both directions on Trapelo, at the intersection with Silver Hill Road. Cars turning right off Silver Hill or left off Trapelo will have a safer opportunity to do so. Trapelo traffic will be forced to treat the S-curve with more caution (a bike disaster waiting to happen). Again, speeders would not be able to view Trapelo as an unimpeded cruise zone.” In response to this proposal, another resident wrote “I am especially concerned about a question of locating a Stop sign (Trapelo and Silver Hill) where the geometry of the road makes the approach to the stop a blind approach. A speeder, especially at night, might zoom around the bend to ram into a car stopped on Trapelo. There have already been some near misses -- me, stopped to make a left onto Silver Hill.”
 - (c) Stop signs, both directions on Trapelo, at the intersection with Stratford Way. Kids wait for school buses, and cars need to turn from Stratford to Trapelo and vice versa. Instead of a “bump” or “table”, stop signs would slow folks down on this relatively straight part of Trapelo (and not impede our emergency vehicles)
 - (d) Stop signs, both directions on Trapelo, at the intersection with Old County Road. Drivers going west will have a wonderful opportunity to read and observe our “welcome to Lincoln” gateway. Drivers going east (with appropriate forewarning signage) will be

forced to keep to the speed limit on the incline. Cars trying to cross or access Trapelo from Old County will have a safer opportunity to do so.

(e) Stop signs, both directions on Trapelo, at the intersection with Page Road and Winter Street, along with a crosswalk (preferably moderately “raised”) on Trapelo. Pedestrians, as well as cars going all directions from Page and Winter and turning off Trapelo, would have safety upgrades, and again, this would be a speed-impediment. If public safety considerations disfavor a westbound stop sign at the Silver Hill intersection, perhaps the westbound stop at Page/Winter combined with a sign at that point warning of the approaching Silver Hill intersection would suffice.

Bicycles:

- 1) Many bicyclists expressed concern to accommodate bicyclists in roadway design and several drivers expressed concern about safety hazard posed by bicyclists on roads.
- 2) The 2007 “Pedestrian and Bicycle Improvements in Town Centers” report from the Mass Highway Department was cited for reference:
http://www.ctps.org/bostonmpo/4_resources/1_reports/1_studies/4_bicycle/ped_bic_imp.html
One common suggestion in this report is the use of share-the-road signage to encourage drivers not to dismiss the rights of bicyclists.
- 3) Roadside maintenance was cited as an opportunity to improve provisions for bicyclists by sweeping sand and debris from roadway edges.
- 4) The committee had considered that fog lines painted closer to the center of the road (2 feet from the edge instead of 1 foot from the edge) as a traffic calming element may have the ancillary benefit of contributing to a “habit” that may provide space on the edges where bicyclists ride. However, it was noted that Mass Highway Dept. requires 4’ widths to meet a definition of “bicycle lane.” Peter von Mertens of the Conservation Commission relayed the same notion.
- 5) Overall, the debate on bike provisions was well summarized by FACTS committee member Alaric Naiman:

“This was an energetic discussion, melding factors of cost, general traffic calming, public safety, and bicycle/car interactions. The [CEI] consultants' opinion is that the best answer will be better bike paths, which several attendees made clear is not likely to occur for a variety of practical reasons..

The question was posed: Does anyone know whether broader roads and/or cyclable shoulders make roads safer for either cars or cyclists, and is there is a "sweet spot" constrained enough to induce caution but not collision? The [CEI] consultants reiterated that traffic safety is not an exact science and is highly situational. It suggests once again that a long-term and integrative view of both bike and car needs will serve us better than ad-hoc (re)construction.”

- 6) Bob Wolf of Meadowbrook Road relayed his assessment of the issue in discussion with several Lincoln cyclists and confirmed his agreement that this is an important issue for the safety of cyclists and to avoid conflict between cyclists and drivers. His comments are noted in separate memo (see AHTRC website).

Pavement design:

- 1) Several residents expressed concern to avoid problems associated with vertical transitions and grading where driveways and curbcuts meet roadway; avoid exacerbating drainage problems or inclines that make it difficult to navigate steep driveways.
- 2) Residents requested provision for better walking along Sandy Pond Rd. and wondered whether non-paved gravel shoulders could be widened and leveled to better accommodate walking in this stretch.
- 3) Residents acknowledged the aesthetic appeal of the “pink topcoat” if affordable.
- 4) Residents acknowledged appeal of blue crosswalk paint.
- 5) Residents requested narrowing the roadways, if practical.
- 6) Residents expressed strong support for not widening roads, acknowledging a benefit to traffic calming and rural character.

Roadside Treatments:

- 1) We have heard arguments for and against gateway treatments. In their favor, it is noted that gateways can serve as welcoming features as travelers cross the Town line on major roads. Gateway signage could also alert travelers to the no salt policy that makes Lincoln roads icier than roads in neighboring towns. In contrast, we have heard opinion against over-crafted gateway treatments that include excessive signage and markings that risk undermining Lincoln’s rural and uncrowded aesthetic.
- 2) CEI team member Pam Shadley proposed several gateway design options that included:
 - Relocated signage
 - Plantings to visually frame signage
 - A painted green road line to demark the Town line
 - Featuring a granite Town line marker as a cue that travelers are entering Lincoln
 - Narrowing the perceived roadway width at gateways with bushes and other plantings.Ms. Shadley’s proposal seemed to enjoy a warm response at the August 22 public meeting.
- 3) Sightlines were recognized as a delicate matter. In some locations, safety would require cutting back vegetation to permit views to safe stopping distances. CEI suggests that our consideration could include the felling of select trees. Yet in other cases, retaining roadway views with natural borders is a critical element for Lincoln’s rural aesthetic. Specifically, it was noted that at a recent work day on conservation land north of Trapelo Road and east of Page Road that spilled over to the Trapelo Roadside volunteers needed to cut back vegetation at the northeast corner of Trapelo and Page, significantly increasing the sight line.
- 4) A resident expressed a desire for more uniformity in signage color, design, and content.
- 5) A resident at 117 Lincoln Rd. requested that the nearby pictorial “road bend with intersection” sign be relocated to minimize visual obstruction as drivers exit his driveway and turn onto Lincoln Rd.

Other Items of Note

- 1) Both the Lincoln Garden Club and Stonegate Gardens entertain a consultative role in deciding what trees and plantings would be ideal in the context of roadside plantings.
- 2) Many residents expressed concern for roadway noise as detrimental.
- 3) Residents bristled at notion that trees may need to be cut down in this road rehab process.

- 4) Residents encouraged Town officials to ensure that if an archeologist is required by law for counsel on these projects, one is retained. These residents were also hopeful an archeologist could be retained even without a legal requirement. CEI commented that no legal requirement to retain an archeologist has been discovered for the current road rehab project.
- 5) Complaint was registered that parking near the library is inadequate, yet no attractive proposal to resolve the problem was forthcoming.
- 6) Concern about mailboxes and question about how they would be treated were taken.
- 7) A resident suggests "closing Baker Bridge Road 1/2 way down somewhere near the Carroll School). Perhaps only at rush hour. Perhaps other roads, too" with the intent of reducing traffic flow. It was acknowledged that this would run counter to serving traffic need and may invite objection from the Mass Highway.
- 8) A resident suggested charging a \$2/day parent drop-off or pickup fee at the schools to promote bus use. Enforcement of this measure seemed daunting in follow-up discussion.

Proximity of Roads and Roadside Paths

- 1) Several residents expressed concern about the unsafe proximity of Bedford Rd. to the bike path that runs parallel to it near Morningside Ln. and requested measures to create distance between the bike path and the roadway.
- 2) Similarly, it was noted that the design features invite unsafe automobile driving on the roadside paths that parallel:
 - Rt. 117 between Rt. 126 and Lincoln Rd
 - Rt. 126 north of the gas station
 - Bedford Rd near Morningside LnIn each case the paths are (a) less than 2-3 feet from the roadway pavement and (b) the paths are level with the roadway pavement. This condition is accompanied by motorists parking on the roadside path. Cars parked on the paths defeat block pedestrian and bicyclist use of the path. One resident observes U.S. postal mail carriers (!) driving and parking on this roadside path. Apart from being a potential issue of law enforcement, better roadway edge design was proposed as a possible solution. In particular the introduction of curbing to better demark the distinction between vehicle and pedestrian zones of travel.

Traffic Enforcement:

- 1) It was noted that speed limits vary significantly over Trapelo Rd. and scrutiny was promoted for review of what the posted speed limits should be.
- 2) A resident proposed a traffic enforcement camera system that could automatically issue tickets to speeders. He suggested automated red light cameras at Tracey's corner (Rt 2 and Bedford Road), noting that the state legislature has shifted their position on the legality of such automated enforcement equipment and is close to allowing them (see http://www.boston.com/cars/news/articles/2008/07/17/before_you_run_that_light_stop_a_camera_might_be_coming/). On follow-up with a commercial vendor of such systems, we were told:

"Currently there are no photo enforcement programs, red light or speed, operating in Massachusetts. There has been legislation filed for the last 5 years in the legislature but it has failed to

pass. There is significant support with local officials but only tepid support by state legislators. We currently have a contract to provide red light cameras for Salem MA and an award from Dartmouth MA both subject to state authorization.

... there are multiple speed options including 24/7 stand alone fixed speed and mobile speed vehicles that are manned by police....

...the systems, both speed and red light cameras, are generally installed on a turnkey basis where the municipality has no up front cost, the company installs the system and maintains the system. The municipality pays a monthly fee that could range from \$4500 to \$8000 depending on the type of program the Town wants. These fees are usually paid from citation revenue and the contracts tend to be cost neutral. Meaning, that the citations revenue will cover vendor expenses.”

- 3) Asked for a show of hands, a majority of residents at the July 22 meeting indicated they (a) thought unsafe speeding was rampant on Lincoln roads and (b) would welcome more active speed limit enforcement.
- 4) It was noted that on Bedford Rd. automobile parking has been observed on the roadside and partly on the road itself, constricting the width of navigatable roadway and presenting a safety hazard. The question was raised of whether this constitutes an enforceable traffic violation.
- 5) A resident proposed that “the speed limit near the schools should be *raised* to 25 MPH, and then enforced. Almost no-one keeps to 20 MPH there, so it really weakens the sense of responsibility.”
- 6) A resident proposed that a “uniform 30 MPH limit should be imposed for all of Trapelo. I distinctly recall Chief Mooney telling us that a uniform limit is much easier to enforce. All of Trapelo is a residential zone (even Waltham thinks so).”