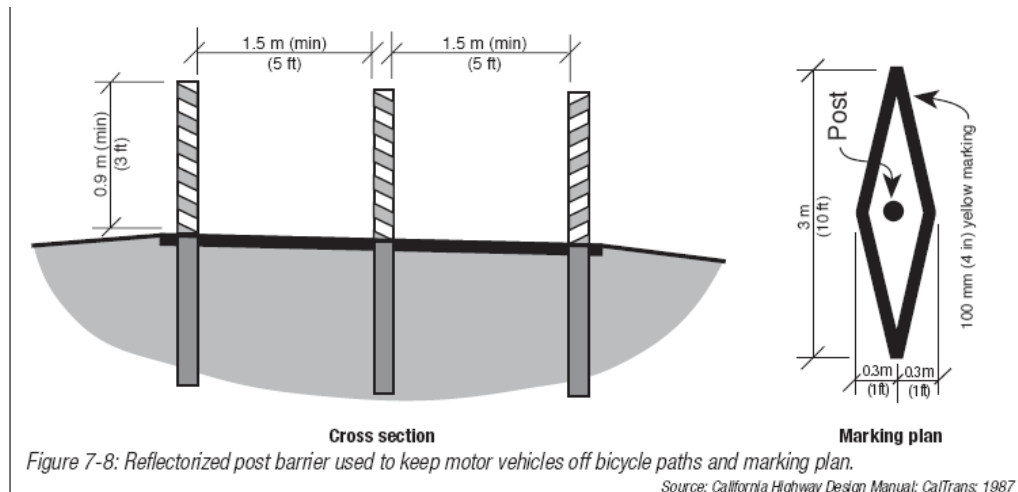


October 19, 2010

TO: Ed Venable, Manager, Engineering and Stormwater Division, City of Durham  
 FROM: Alan Dippy, Chair, Durham Bicycle and Pedestrian Advisory Commission  
 Subj: Swing Gates on Phase E of American Tobacco Trail

The Durham Bicycle and Pedestrian Advisory Commission (BPAC) eagerly awaits the completion of Phase E of the American Tobacco Trail and appreciates the city's efforts in making this happen. We are confident that the Phase E section of the trail will be heavily used and that it will be tremendous amenity for the region.

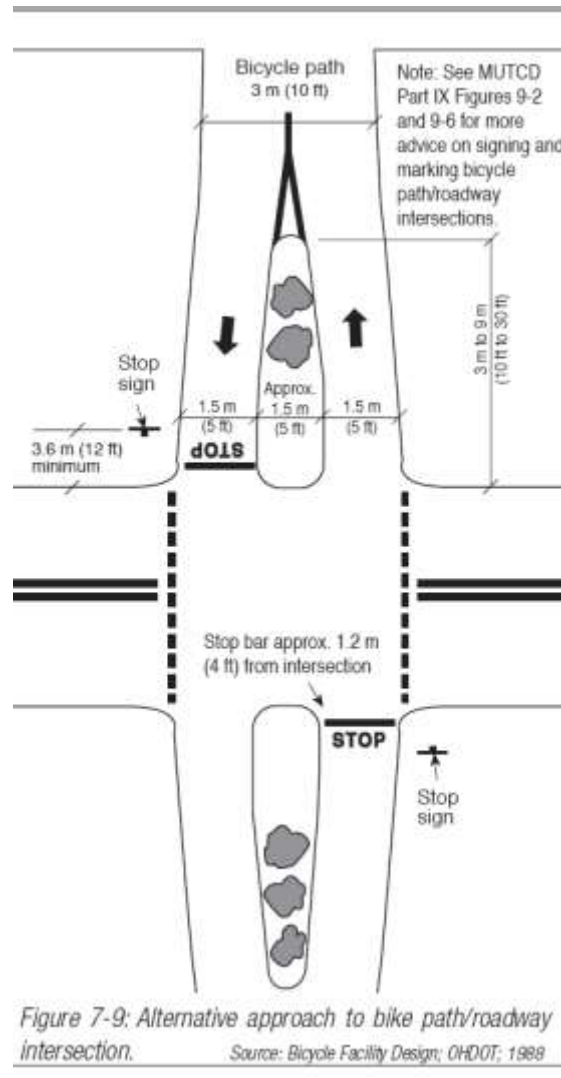
There is one design element, however, that gives us some concern. We have learned that swing gates may be used at the intersections with Massey Chapel Road and Scott King Road. According to drawings we've seen, there would be one 3' wide opening to the side of the gate where bicycle and pedestrian traffic would pass through. According to NCDOT's Bicycle Facilities Planning and Design Guidelines, there should be a minimum of 5' clearance between bollards or inset posts. See Figure 7-8 below:



Though a 3' clearance is acceptable for a single pedestrian or standard upright bicycle, it would be difficult for cyclists hauling trailers or tri-cycles to negotiate this opening.

Based upon observations of the swing gates on the Chatham County section of the trail, there is another concern about the 'bottleneck' effect that the planned gate and opening would have at intersections. A 3' wide opening would only allow one user at a time to pass through, forcing others to wait for their turn. Though it is good to encourage cyclists and pedestrians to stop as they approach road crossings, we believe the current proposed design may encourage users to queue on the roadway itself. There is also concern that two cyclists may try to pass through at the same time.

Our recommendation would be to maintain the same intersection design with bollards that will be used for other roadway crossings in Phase E. These would be more consistent with what has been done on Phases A-D of the trail and allow bi-directional traffic flow at the intersections. Another possible treatment would be bi-furcated openings, as shown below in Figure 7-9 of the Guidelines. This has been utilized at a trail entrance in Carrboro (at the intersection of Greensboro Street and Estes Drive). This design requires no gates or bollards, yet the narrowness of the paths dissuades entry by motorists.



Please let us know if you have any questions or concerns about our letter or our recommendations.

CC: Jeff Lecky, Engineering Design, City of Durham  
 Mark Ahrendsen, Director, Durham Department of Transportation  
 Beth Timson, Assistant Director, Department of Parks & Recreation, City of Durham  
 Rosetta Radtke, Senior Planner, Department of Parks & Recreation, City of Durham  
 Helen Youngblood, Senior Planner, Durham City/County Planning Department