



D U R H A M

## Bicycle & Pedestrian Advisory Commission

Durham Transportation Division ▪ 101 City Hall Plaza ▪ Durham, NC 27701

October 23, 2008

Mr. Edward R. Venable, Manager of Engineering and Stormwater Services  
City of Durham  
Public Works Department  
101 City Hall Plaza  
Durham, NC 27707

Subject: City of Durham Driveway Standards

Dear Mr. Venable;

The Durham Bicycle and Pedestrian Advisory Commission (BPAC) is a citizen's advisory commission that was created by the city and county of Durham. One of the Commission's charges is to study changes in laws, regulations, and best practices concerning bicycle and pedestrian issues.

The Bicycle and Pedestrian Advisory Commission has recently been discussing the city's driveway design standard, specifically the two-inch lip between the gutter and ramp portion of the driveway. The two-inch lip specified in the driveway standard poses some challenges to bicyclists of which you may not be aware. Among them are two worth mentioning specifically, as follows:

1. The lips can be challenging, and potentially dangerous, to approach at any angle other than perpendicular. For example, when turning right into a driveway, the smaller size of bicycle tires combined with typical right side positioning of a bicyclist can make it difficult to get the front wheel over the lip. This can cause the bicycle to stop suddenly or otherwise change the balance such that the cyclist crashes.
2. Hitting an obstacle like a two-inch concrete lip can cause flat tires, sometime called "pinch flats," when the tube is pinched between the tire rim and a hard, sharp object such as a driveway lip.

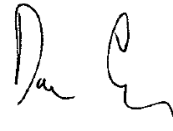
In addition, wheelchair users may also have a difficult time rolling over the lip. In residential areas, the driveway is often the only means available for wheelchair users to access a house. The ADA Accessibility Guidelines do not allow a lip at the bottom of curb ramps, and we believe the same reasoning should apply to the lip on a driveway ramp.

We thank you for the recent modifications made to the driveway-style ramps on the American Tobacco Trail in which the lips were either ground down or filled with asphalt (see attached photos). In addition, please note that there are still lips on other trails, such as the Riddle Road Spur, that need to be ground down.

The Bicycle and Pedestrian Advisory Commission recommends that the city take steps to improve the design of all new driveways in the city by adopting a new design standard similar to the standard used by the NCDOT, which does not include a two-inch lip (see attached illustration).

Thank you in advance for your careful consideration. We look forward to hearing from you about this matter.

Sincerely,



Dan Clever

cc: Ms. Stacy Poston, City of Durham ADA Coordinator  
Mr. John Rives, City of Durham -- Engineering Division  
Mr. Michael Hughes, City of Durham -- Engineering Division  
Mr. Robert Joyner, City of Durham -- Engineering Division  
Ms. Beth Timson, Durham Parks and Recreation Department  
Mr. Mark Ahrendsen, Transportation Manager, City of Durham  
Mr. Dale McKeel, Bicycle and Pedestrian Coordinator, City of Durham/DCHC MPO



*Driveway Built to City Standard with Lip (Parrish Street Downtown)*



*Asphalt Fill in Lip on American Tobacco Trail at Woodcroft Parkway*



*Lip on American Tobacco Trail that has been Ground Down*

