



DEPARTMENT OF TRANSPORTATION

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County Executive

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May 27, 2016

INTRODUCTION

Highway Services would like to update you on the status of Montgomery County's ongoing investigation and remediation of the premature surface scaling of concrete curbs and sidewalks in the Forest Glen neighborhood.



Evidence of scaling concrete along the sidewalk to be replaced

BACKGROUND

As discussed in MCDOT's last newsletter, street rehabilitation work was completed in the Forest Glen neighborhood in 2012. Shortly thereafter, the Montgomery County Department of Transportation (MCDOT) received reports of premature scaling and surface deterioration of the concrete. In response, MCDOT conducted a thorough inventory of all affected concrete (curbs, sidewalks, driveway aprons), of areas with scaling, and began assessing which long-term, practical solutions might be most effective and least disruptive to the community. Montgomery County has developed a phased repair strategy for addressing the scaling concrete issue.

REGIONAL AND NATIONAL ISSUE

During MCDOT's investigation, it became apparent that concrete of the same mix-design used elsewhere in the

County had similar problems. Moreover, other jurisdictions within the state of Maryland and the greater Washington, D.C. area were also reporting premature scaling of concrete. In October 2015, MCDOT contacted several industry leaders from across the country and learned that similar conditions have been reported by jurisdictions throughout nationwide. Because the issue is occurring nationally, it indicates that concrete scaling is a systemic issue as opposed to a local, more contained, issue of materials and workmanship alone.

REVIEW AND TESTING

MCDOT worked closely with its contractors, as well as concrete producers and concrete industry leaders to better understand what has precipitated surface scaling conditions. Testing performed by a national testing firm has shown that *only* the top 1/16 to 1/8-inch of the concrete is affected by scaling. The main body or mass of the concrete itself remains solid and durable, indicating the scaling is an aesthetic rather than structural, issue.



Evidence of scaling concrete along the curb line to be replaced

MCDOT began sealing all concrete in the Forest Glen community to preclude further scaling or degradation late last year. We are using a non-toxic, silicone-based sealer designed to penetrate up to 1/2-inch. All sealing was completed in 2015. The application of the sealer is viewed as only the first-step, preventative measure to stop the scaling while other options to remediate the

scaling are tested. This measure was aimed at protecting the newly installed cement mix as it cured from the elements. MCDOT also conducted a number of test pilot programs to determine what impacts and strategies were involved in this issue.

As part of the remediation, a newly developed, higher strength of cement known as Mix 6 will be used in the areas showing scaling or spalling. **Again, only the impacted infrastructure will be replaced and not the infrastructure in the entirety of the neighborhood.** All repaired concrete will be sealed. **Additionally, MCDOT will continue to survey the neighborhood each year to identify any new areas of scaling and schedule the necessary repairs.**

SUMMARY

MCDOT is committed to fully addressing all concrete issues in the Forest Glen Community and keeping the community well informed of our progress. MCDOT remains committed to providing an effective, practical and responsible solution that ensures the long-term performance of concrete curbs, sidewalks, and driveway aprons and addresses the concerns of residents and users alike.

For more information, please feel free to contact the Division of Highway Services at [mcdot.highway@montgomerycountymd.gov](mailto:mcdot.highway@montgomerycountymd.gov).

Very truly yours,

Richard Dorsey  
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Montgomery County Department of Transportation

IMPORTANT MCDOT CONTACTS

Program Manager: John Birton 240-777-7616

DHS Email: [mcdot.highway@montgomerycountymd.gov](mailto:mcdot.highway@montgomerycountymd.gov)

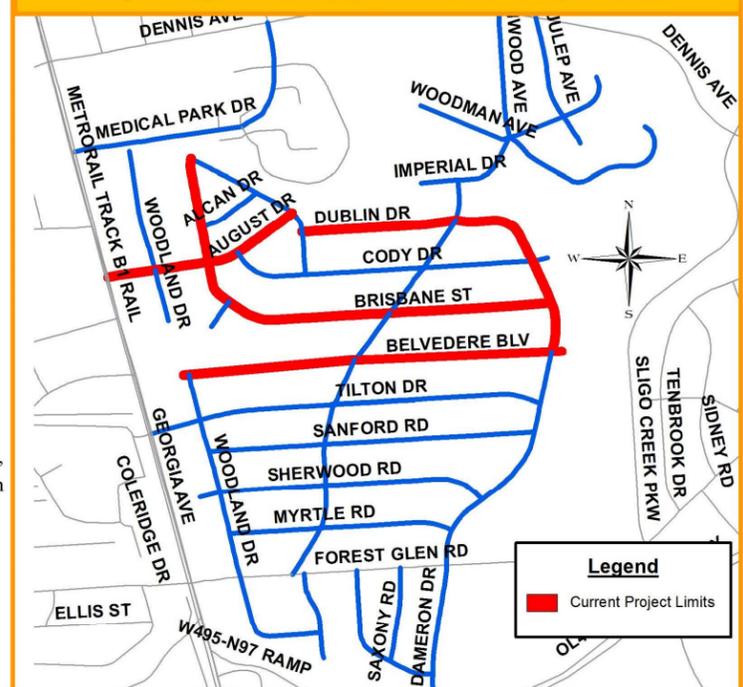
Should your questions be of a more general nature please contact the MC311 Call Center by dialing 311 or 240-777-0311.

DHS Website: [www.montgomerycountymd.gov/DOT-Highway/](http://www.montgomerycountymd.gov/DOT-Highway/)

On the Highway Services Map, click on the **Silver Spring** Service Area, where you will find additional roadway maintenance projects scheduled in your area.



Map of Original Forest Glen Rehabilitation Project Limits



Division of Highway Services

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