



## Stoneybrook Estates Patching Project

### Full-Depth Permanent Pavement Patching to Begin Soon

#### PURPOSE

This newsletter is to inform you of the upcoming full-depth permanent pavement patching of the Stoneybrook Estates subdivision. This pavement system preservation project employs long-term strategies to preserve and enhance the physical and operating conditions of the roadway system as it exists, and ensures a system serviceable for many years.

#### BACKGROUND

The Montgomery County Department of Transportation, (MCDOT) Division of Highway Services (DHS) maintains nearly 5,200 lane miles of streets and highways using various methods of routine maintenance, pavement preservation, and repaving depending on the level of pavement deterioration present. An annual survey of county roads is conducted to assess the pavement condition of each road within the county. A Pavement Condition Index (PCI) is then calculated for each road segment. Using this PCI data, MCDOT determines the appropriate repair strategy for each road given available funding. Part of Montgomery County's Pavement Management System includes structural permanent patching, which is a cost-effective interim solution to maintain roadway structural integrity based on current funding allocations.

#### SCOPE OF PROJECT

Overall, the pavement conditions in your community were generally rated as fair, with some areas described as needing more attention. This rating meets the criteria for roadway preservation using Hot Mix Asphalt (HMA) full-depth permanent patching.



Typical survey paint markings

#### PROJECT WORK PLAN

You may have noticed paint markings that outline areas for pavement replacement. The markings enable us to estimate the quantity of asphalt needed for full-depth patching and provide the locations of the distressed pavement. Crews will excavate the distressed

pavement with a pavement milling machine or Gradall excavator.

#### Full-Depth Permanent Patching



Milling machine patch excavating

Areas of pavement distress are excavated and replaced with hot mix asphalt. This method is used in isolated areas where pavement failures extend through the road base. Full-depth patching restores the pavement's structural integrity and capacity to support vehicle loads. Further, patching will prevent water from infiltrating through the pavement and into the underlying road base, which exacerbates the degree and extent of pavement deterioration. Failing pavement conditions are dynamic in nature and will worsen, nearly exponentially, under conditions such as harsh winters and wet summers. Patching with HMA will yield a service life of between 15-20 years.

There are 2 phases to full-depth patching:

First, the pavement is excavated. Then, HMA base material is replaced in 2 layers and compacted with a steel-wheeled roller. The patch is left approximately one-and-one-half (1 ½) inches below the existing road surface to allow room for a layer of smooth surface HMA to be applied at a later time (within a few days).

Second, the surface HMA is placed either by machine or by hand, depending on the size of the patch, into the depression left by the base asphalt work. The asphalt is then compacted using a steel-wheeled roller. The final surface of the patch will match the level of the existing roadway and provide for a smooth ride.

#### SCHEDULE

The patching project is scheduled to begin in July 2017, and will be completed within 4-6 weeks, weather permitting. Work hours are from 7 am to 5 pm, Monday through Friday.

#### IMPACTS

Street patching will necessitate daily short-term parking restrictions. "No Parking" signs

will be posted to notify residents of the planned dates for patching. Parking restrictions are only valid from 7 am to 5 pm. Please pay close attention to the dates on the signs as weather may delay the planned work. Our intent is to maintain continuous traffic at all times utilizing lane closures and/or alternating one-way traffic patterns. However, minor traffic delays and brief daily road closures may be experienced if deemed necessary. Signs will be posted identifying such restrictions.

Access to residences will be available at all times; however, minor delays may be experi-



New asphalt is placed and compacted

enced as workers restrict traffic from freshly placed hot mix asphalt.

Generally speaking, this work is best characterized as noisy and disruptive. However, MCDOT will take all necessary steps to mitigate any inconveniences this work may cause. Quality control for the project will be managed by County inspection staff to ensure the project meets contract specifications.



New patch is flush with existing pavement

*Thank you for your cooperation as we work to improve the county infrastructure for residents and users!*

