

**MEMORANDUM**

**To:** Mayor and City Council

**From:** Mindy Sanders, Capital Projects Manager

**Date:** August 26, 2013

**Subject:** **Approval of the Contract Amendment for Mount Vernon Road at Vermack Road**

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**ITEM DESCRIPTION**

Approval of the Contract Amendment for Mount Vernon Road at Vermack Road for increased scope

**BACKGROUND**

In March 2013 the Mayor and Council approved a contract with Mulkey Engineers & Consultants to design improvements for the Mount Vernon Road at Vermack Road Intersection. Concepts were proposed at a public meeting in June and presented to the Mayor and Council in July. The recommended concept extends the original limits of the project by approximately 30% (500 feet) resulting in an increase in the surveying and design costs. The extension would extend the sidewalk, bike lanes and two way left turn lane to the existing three lanes of pavement at Corners Drive to the east and to Vernon Oaks Drive to the west.

The original contract was approved for an amount up to \$120,000. Mulkey has submitted a request to increase the contract amount to \$131,000 based on the increased scope of the project.

**DISCUSSION**

Two way left turn lanes have historically been used to enhance both roadway safety and operation. The American Association of State Highway Transportation Officials' (AASHTO) standard design guidebook states that two way left turn lanes work well on lower speed (25 to 45 mph) roadways where there is not a large number of left-turning vehicles at any one location. This AASHTO description matches the conditions of this segment of Mount Vernon Road.

Benefits

At the August 12<sup>th</sup> Council Meeting staff was asked what traffic benefits would be provided by the 350-foot extension to Vernon Oaks Drive. The following sections discuss specific safety and operational benefits that would be gained by extending the project as proposed in the recommended concept.

*Vehicular Safety*

As outlined in the City's Comprehensive Transportation Plan, the segment of Mount Vernon Road between Vernon Oaks Drive and Vermack Road has historically had total and injury crash rates approximately four times higher than the state average for similar facilities.

This is depicted visually in the attached crash density map which shows that the highest crash rate on Mount Vernon outside of the commercial area of Dunwoody Village occurs within the limits of this project. Two way left turn lanes are installed by many agencies as a safety countermeasure and are viewed as an effective way to specifically reduce rear-end type crashes.

### *Pedestrian Safety*

The pedestrian safety will be improved in two ways by extending the project to the next side street in both directions. The primary benefit will be the connection between neighborhoods and the intersection. If this portion of the sidewalk is delayed to a future project, pedestrians will be forced cross the street or walk on the shoulder. Due to the topography of this area, conceptual construction limits show that a comparable level of land disturbance would be required if sidewalks and bike lanes were constructed without the addition of the two way left turn lane. If a future project were later constructed to add the two way left turn lane (~5' additional width on each side of the road), the curb and sidewalk would then have to be reset in the future. These options are not desirable from cost and pedestrian safety perspectives.

Staff believes the center turn lane provides a secondary benefit to pedestrian safety by providing an opportunity to add a pedestrian refuge island at Vernon Oaks Drive. The extremely high traffic volume and wide spacing between signal-protected pedestrian crossings on Mount Vernon Road present a barrier to pedestrians trying to reach destinations on both sides of the road. Pedestrian islands located in the center lane will provide a refuge for pedestrians that allows them to cross one lane of traffic at a time. Though not shown in the original concept plan, staff is recommending an island just west of Vernon Oaks Road. Refuge islands also provide an opportunity to break up the corridor aesthetically with landscape or hardscape treatments.

### *Operational Benefits*

Two way left turn lanes improve traffic flow by providing space for left turning vehicles to move out of the through lane and wait for a gap in oncoming traffic. When traffic volume reaches the levels such as those on Mount Vernon Road throughout much of the day there are fewer gaps in oncoming traffic which results in a longer wait to turn left and more vehicles backed up behind the vehicle waiting to turn. At the traffic volume levels on Mount Vernon, the number of left turners does not have to be very high to negatively impact traffic and warrant a dedicated turn lane. Every driveway and side road is another opportunity for this negative impact to be increased.

### Costs

As discussed at the August 12<sup>th</sup> Council Meeting, in addition to the benefits discussed above, the extension of the project is not without cost. In addition to the \$11,000 increase in design costs, the construction cost for the additional project length is estimated to be \$100,000 (less than 10% of the total project). . Extending the project to Vernon Oaks will result in grading and construction along the frontage of two additional residences on the south side of Mount Vernon. Approximately 300 square feet of temporary construction easement to construct slopes may be necessary. However, no additional right of way is anticipated. A conceptual cross section of the existing and proposed roadway is attached to this memo. This cross section is an approximate representation of the context. It is not

based on a field survey and does not indicate the actual topography. However, it does offer perspective to the corridor and the position of the homes along it.

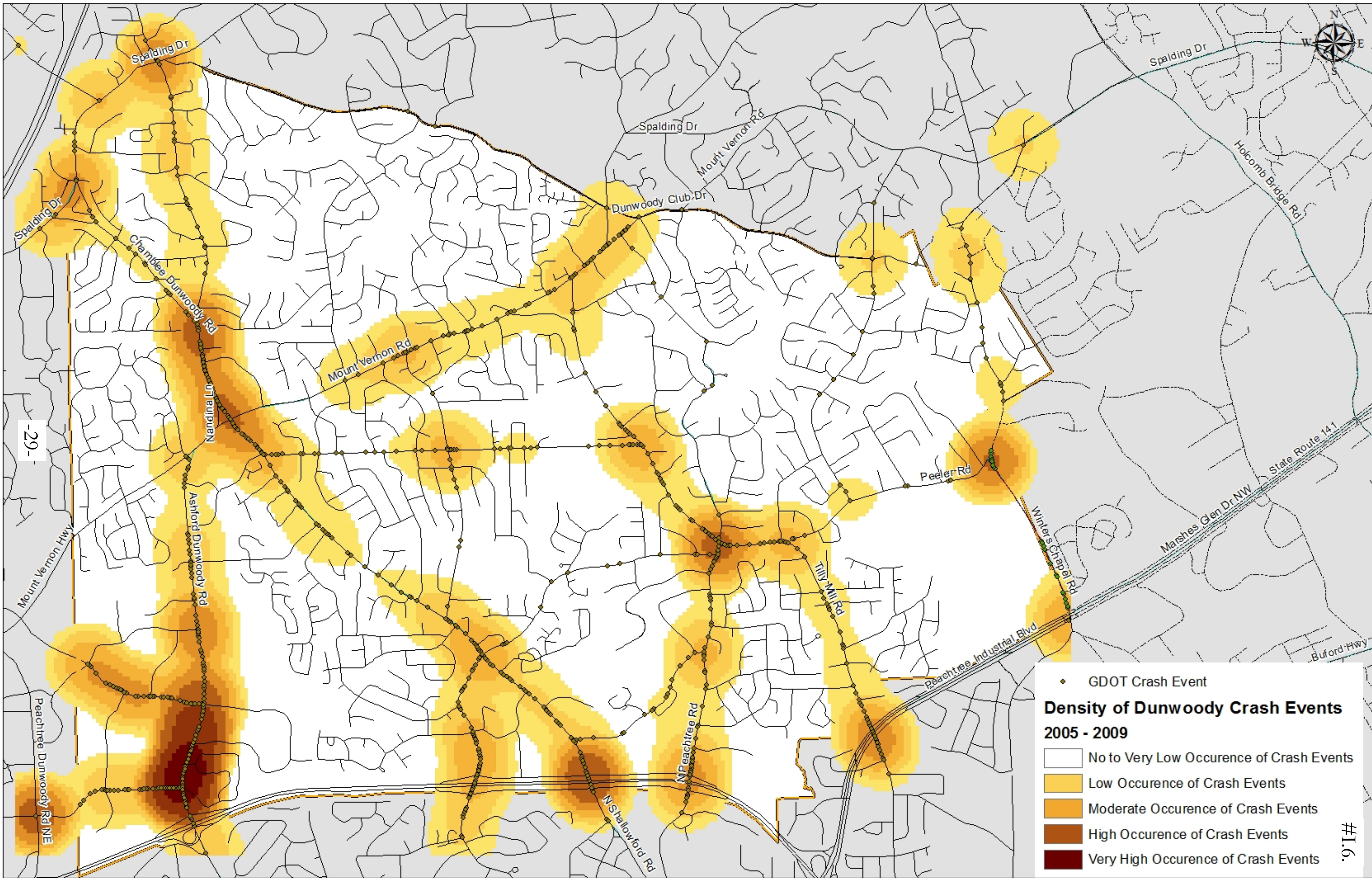
## **FUNDING**

The funding necessary to cover the additional \$11,000 needed to extend the limits of this project can be allocated from the remaining funds budgeted in FY 2013 for "design and engineering of future road projects." The other intersection improvement project funded through this line item, Chamblee Dunwoody Road at Spalding Drive, concept design cost came in lower than anticipated leaving \$25,000 available for other design and engineering project. Staff proposes for the additional \$11,000 for Mount Vernon Road at Vermack Road design to be allocated from the available FY 2013 allocation for design and engineering of future road projects.

## **RECOMMENDED ACTION**

Staff recommends authorizing an \$11,000 increase in the contract with Mulkey Engineers & Consultants to \$131,000.





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