March 14, 2008

MEMORANDUM

TO:

Montgomery County Planning Board

VIA:

Gwen Wright, Chief

Countywide Planning Division

Dan Hardy, Acting Chief

Transportation Planning

Khalid Afzal, Team Leader for Georgia Avenue

Community-Based Planning

FROM:

Larry Cole: 301-495-4528, for the Planning Department  $\angle C$ 

**MCPB** Item No. 10

March 20, 2008

PROJECT:

Randolph Road from Rock Creek to Charles Road

CIP Project No. 509337-25

**REVIEW TYPE:** 

Mandatory Referral No. 08801-DPW&T-1

APPLICANT:

Montgomery County Department of Public Works and Transportation

APPLYING FOR:

Plan Approval

COMMUNITY-BASED

PLANNING TEAM AREA: Georgia Ayenue

# **RECOMMENDATIONS:**

We recommend that the Board approve the Mandatory Referral of the proposed project with the following comments to DPWT:

- 1. The project as proposed would reduce pedestrian safety by eliminating the buffers that now exist between the sidewalk and the roadway. Strong consideration should be given to building the ultimate typical section of Randolph Road as part of this project, resolving the pedestrian safety problem as well as providing safe accommodation for bicyclists.
- 2. DPWT should provide the County Council a detailed comparison of the capital cost to construct the project with and without its ultimate typical section, including bike lanes, within the project limits. This information is needed so that the Council can make a more informed decision on how this project should be pursued. The cost for the option without

informed decision on how this project should be pursued. The cost for the option without the bike lanes should assume that three-foot-wide (minimum) landscape panels are provided.

3. Consider narrowing the median at Charles Road to six feet to provide a better alignment of the roadway and to create the additional space needed at the eastern end of the project to retain the landscaped buffers adjacent to the sidewalk and to create the on-road bike lanes while minimizing the impact on the adjacent homeowners.

### 4. Rock Creek Trail

- a. Construct the relocated segment of Rock Creek Trail within the project limits at a ten-foot width and offset it from the south side of Randolph Road by six feet minimum to provide greater safety and comfort for trail users.
- b. Provide a six- to eight-foot-wide safety refuge in the median of Randolph Road at Dewey Road to provide greater safety for Rock Creek Trail users.
- c. Widen the proposed ramps on the western leg of Randolph Road at Dewey Road to eight feet to accommodate trail traffic.
- d. Provide sufficient lighting at the intersection of Randolph Road and Dewey Road to meet current AASHTO standards.
- 5. Provide six-foot-wide buffers for the relocated sidewalk in Rock Creek Park where possible.
- 6. ADA-accessible crossings of Randolph Road must be provided at all intersections where it is safe to cross. Any intersections where it is unsafe to cross should be signed to prohibit the crossing to all pedestrians, who should be directed to the nearest safe crossing. Intersections that do not have ADA-accessible crossings within the project limits are Saint Dunston Lane, Colin Road, and Charles Road.
- 7. Bus stops should be located near safe, accessible crossings of Randolph Road with lighting that meets AASHTO recommendations. The bus stops at Colin Road and Charles Road do not have ADA-accessible crossings. ADA-accessible crossings should be provided at these locations, including refuges in the Randolph Road median, or the bus stops should be relocated or eliminated.
- 8. ADA Best Practices should be followed to the greatest extent feasible, including crossings at driveways.
- 9. Clearly identify the grading and ROW impacts on private property, especially for driveways that must be much flatter than other slopes.

- 10. If the bike lanes and sidewalks are constructed in their ultimate location as part of this project, DPWT should consider planting street trees at the back of sidewalk as part of this project to mitigate the visual impact of moving the road closer to some of the abutting homes.
- 11. Comply with the conditions of approval of the tree save plan dated February 28, 2007.
- 12. A Park permit is required and should be applied for at the semi-final plan stage.
- 13. No staging and storage of materials and equipments will be allowed on Park property without a prior approval from our Park Manager and/or Park Inspector.
- 14. Our Natural Resources Division will require replacement of trees removed from Park property.

Previous Board Action on Facility Planning Project Prospectus: The Prospectus recommended building a cross-section that included 11-foot-wide travel lanes and 5-foot-wide bikes lanes for the whole study length, between Parklawn Drive and Veirs Mill Road (Alternative 3), a distance of about 1-1/4 miles (see Attachment 1). It also recommended that intersection improvements, without the bike lanes, be constructed as a short-term improvement (Alternative 2), a distance of about ¼-mile (see Attachment 2). The Planning Board approved the Project Prospectus for this project in June 2004, with the recommendation to pursue the shorter project in the near term. It is this project that has been carried forward to design.

# **Project Description**

The project would realign 1,400 feet of Randolph Road between Rock Creek and Charles Road to meet a 40 mph design speed. Ten-to eleven-foot-wide travel lanes would be provided.

New curb and gutter would be constructed throughout the project length and the sidewalk would be reconstructed immediately adjacent to these curbs. Drainage improvements would also be included.

Note: DPWT staff has agreed to make some changes to the design, but the project description and our comments reflect the plans that were submitted for Mandatory Referral review. Staff and DPWT will review the accepted changes at the Planning Board hearing.

# **Staff Analysis**

# General

The Prospectus recommended that Alternative 2, which this project would implement, be pursued as a short-term project to address a high-accident location on Randolph Road. This short stretch of road was noted as having 109 crashes between 1998 and 2000.

It was noted that this alternative would not provide safety and accessibility for bicyclists. But we believe that the study, and our review at the time, should have considered the practical effect of not including bike lanes in the shorter reconstruction project between Rock Creek and Charles Road, which is that the bike lanes might become more difficult and expensive to implement in the future. In addition, what was not foreseen was that the short-term project would be designed in a way that diminished pedestrian accommodation and safety.

Our review of the plans submitted for Mandatory Referral coincided with the T&E Committee's review of the CIP. We voiced staff's concerns about the lack of bike lanes, discussed in detail below, but the committee voted 2-1 to continue with the project as proposed. The full Council on March 11, 2008 accepted the committee's recommendation. But we continue to believe that it would be a mistake to pursue the project as designed.

As a general comment, we believe that it is usually more cost efficient to address all of the project's needs at a particular location at one time. The County will be more successful in achieving the optimum use of our transportation system if we address pedestrian, bicyclist, and transit needs at the same time as driver needs.

Detailed Comments in Regard to the Location of the Curbline

## Bike Accommodation

Five-foot-wide bikes lanes are recommended along Randolph Road in the Countywide Bikeways Functional Master Plan, but would not be provided as part of this project. A future retrofit to provide the bike lanes as part of the ultimate roadway design (shown in the Project Prospectus as Alternative 3) would require the removal and replacement of all the new curb and sidewalks along both sides of the roadway for the entire length of the subject project. In addition to the wasted expense involved in rebuilding the curb and sidewalk, we are concerned that the larger project would have difficulty competing for funding in future CIP efforts. Providing a usable segment of bike lanes now would also help provide visible support to ultimately complete the planned bike facility on this important east-west road that ties into Rock Creek Trail.

Outside the Dewey Road intersection, the median width varies between eleven and fifteen feet and is the location for a few proposed underground stormwater management structures, but no street trees are proposed. We recommend that DPWT consider narrowing the median at Charles Road to six feet to create the additional space needed at the eastern end of the project to implement the bike lanes on the westbound roadway. This shift would also provide a better alignment of the roadway and make it easier to retain the landscaped buffers adjacent to the sidewalk.

On the westbound roadway, the same opportunity does not exist. While there are no structures near the roadway that would be affected, the block between Saint Dunston Road and Colin Road has steep slopes that could require retaining walls to accommodate the ultimate typical section.

# <u>Sidewalks</u>

As submitted, the five-foot-wide landscape panels that exist for about half of the project length would be eliminated. Sidewalks that are adjacent to the curb would also have to be removed to widen the roadway and implement the bike lanes at a later date. There is a fundamental problem with pursuing the project as designed; it brings pedestrians closer to traffic than they are today on a roadway that has a daily traffic volume of about 50,000 vehicles.

Randolph Road is an important transit route with one Ride-on and two Metrobus routes; eight buses serve the project limits in the peak hour. Sidewalks adjacent to the curb are subject to roadway debris and stormwater in the gutter being splashed up onto the sidewalk. While such sidewalks provide poor pedestrian accommodation, the more severe problem is in the winter when the snow from three lanes of traffic is plowed up onto the sidewalks, making them impassable for transit patrons and other pedestrians.

Much of the placement of the proposed sidewalk against the curb is unnecessary. Opportunities to provide a landscaped offset from the roadway, as called for in the County's roadway standards and as recommended by AASHTO, have not been used. The proposed sidewalk is at several places proposed to be closer to the road than the existing sidewalk even where the road is moving farther away from the ROW line.

At a minimum, the project must be redesigned to include three-foot-wide landscape panels between the curb and roadway, but this would still be a reduction in safety for pedestrians unless bike lanes are also built since the latter would provide an additional buffer.

# Travel Lane Width

Eleven-foot-wide travel lanes were specifically called out as part of the approved alternative, but a narrower roadway was shown in the plans submitted. DPWT staff has agreed that this was an error and will correct the plans.

Part of DPWT's objection to including the bike lanes at this point in the design would delay the project; since a revision of the plans is required to fix the curbline to reflect the proper travel lane width and to offset the sidewalk to provide the minimum buffer, the schedule should not be a major issue.

# Cost

As discussed above, an alternative that included bike lanes for the shorter Alternative 2 limits was not considered as part of Facility Planning. During the recent T&E Committee meeting, DPWT staff gave an informal estimate of \$1M to provide the bike lanes in this short length, a figure that represents an approximate 40% increase in the project cost. DPWT should provide the Council a detailed estimate of the comparative cost to construct the ultimate section for the Alternative 2 limits so that the Council can make a more informed decision on how this project should be pursued. The cost for the option without the bike lanes should assume that three-footwide (minimum) landscape panels are provided.

# Additional Comments on Pedestrian Accommodation

In addition to causing a safety concern by having pedestrians immediately adjacent to traffic, sidewalks at the curbline do not conform to ADA Best Practices since they require that the sidewalk be ramped at every driveway, requiring much more effort on the part of persons using wheelchairs or having other mobility problems. Such ramps are not yet shown, so the design also does not appear to meet the minimum ADA requirements.

ADA-accessible crossings of Randolph Road must be provided at all intersections where it is legal and safe for pedestrians to cross. Any intersections where it is unsafe to cross should be signed to prohibit the crossing to all pedestrians, who should be directed to the nearest safe crossing. Bus stops must be located near safe crossings of Randolph Road. Bus stops that are not located near an ADA-accessible crossing should be relocated or eliminated.

No crosswalk exists on the east leg of Randolph Road at Dewey Road and none is proposed. We do not recommend that the crosswalk be striped here because of the crash history and the slope and curve approaching the intersection. We recommend that signs be provided to prohibit the pedestrian crossing and direct pedestrians to the west crosswalk. This makes it all the more important that we get a safe, well-designed west crosswalk, which is the crossing point for the Rock Creek Trail, discussed in further detail below.

The steep slope in the Randolph Road median at Saint Dunston Lane and the slope and curve of Randolph Road make it unsafe for people to cross here. We recommend that this intersection be signed to direct pedestrians to the west crosswalk at Dewey Road.

There is no handicapped-accessible crossing of Randolph Road at Colin Road even though there are bus stops on either side of Randolph Road near the intersection. The stops appear to be well-used but we recommend that they be eliminated if a safe crossing of Randolph Road cannot be provided.

There are also bus stops on either side of Randolph Road at Charles Road without a safe crossing of Randolph Road between them. A handicapped-accessible crossing with a refuge in the median of Randolph Road must be provided at this location.

# **Driveway Impacts**

The grading and right-of-way impacts on private property have not been clearly identified. One example is one of two driveways serving 4510 Randolph Road where the remaining driveway would be unusable since it would be less than nine feet long.

# Street Trees

No street trees are proposed as part of this project but are recommended along Randolph Road in the Kensington-Wheaton Master Plan as part of the Green Corridors Policy along Major Highways. As discussed above, the genesis of this project was a short-term safety improvement, not a streetscaping project. But if the bike lanes and sidewalks are constructed in their ultimate location as part of this project, DPWT should consider planting street trees at the back of sidewalk, as shown in the Project Prospectus for the ultimate section, as part of this project to mitigate the visual impact of this project. The trees could be planted in an easement or by a letter of agreement to avoid additional right-of-way taking.

### Environmental

The project will disturb approximately 3.81 acres. The site does not include any streams, wetlands, or floodplains and is restricted to the existing public right-of-way

# Forest Conservation

Forest Conservation Exemption 42008095E was granted on February 28, 2008, per section 22A-5(e) and 22A-9 of the Montgomery County code. Per Section 22A-9 a County roadway project is not required to compensate for the loss of trees or forest if less than 40,000 square feet of forest is proposed for removal. The plan submitted as part of the exemption indicating that there is no forest within the limits of disturbance. As per Section 22A-6, a Tree Save Plan was required to be submitted at the time of Mandatory Referral.

# Tree Save Plan

The applicant has submitted a Tree Save Plan that shows large and specimen trees, as well as smaller trees on the subject and adjacent properties. There are fifteen large and specimen trees on-site and this plan would save twelve of these trees by using a variety of tree save measures. As shown on the approved tree save plan, the measures include tree protection fencing, tree protection signage, and root pruning. Only 1 tree proposed to be saved has more than 1/3 of its

critical root zone impacted. The remaining 11 trees have less than 1/3 impacted. The specific details of each of the tree protection measures can be found on the tree save plan.

# **Park Impacts**

# Rock Creek Park

The project will impact Rock Creek Park property due to the curb and sidewalk construction and the installation of the proposed 42-inch storm drain pipe and outfall on Park property, with the following right-of-way impacts:

Perpetual Drainage Easement:

6,930 sq. ft. (covering the replacement of an existing

pipe)

Perpetual Sidewalk Easement:

310 sq. ft.

Total Perpetual Easement:

7,240 sq. ft.

Temporary Construction Easement:

1,318 sq. ft.

# Rock Creek Trail

Two narrow parts of Rock Creek Park extend to Dewey Road at Randolph Road to allow Rock Creek Trail to cross at the signalized intersection. The trail is not identified on the plans and the submitted plans show the trail being replaced with a five-foot-wide sidewalk at the curb.

Parks staff considers this trail crossing to be one of the ten most hazardous in the county. In addition to the roadway crashes on the curve just east of the trail crossing that were the genesis of this project, staff also notes that there are speed cameras monitoring both directions of Randolph Road just west of the trail crossing. We recommend that the following improvements be included or considered in this project:

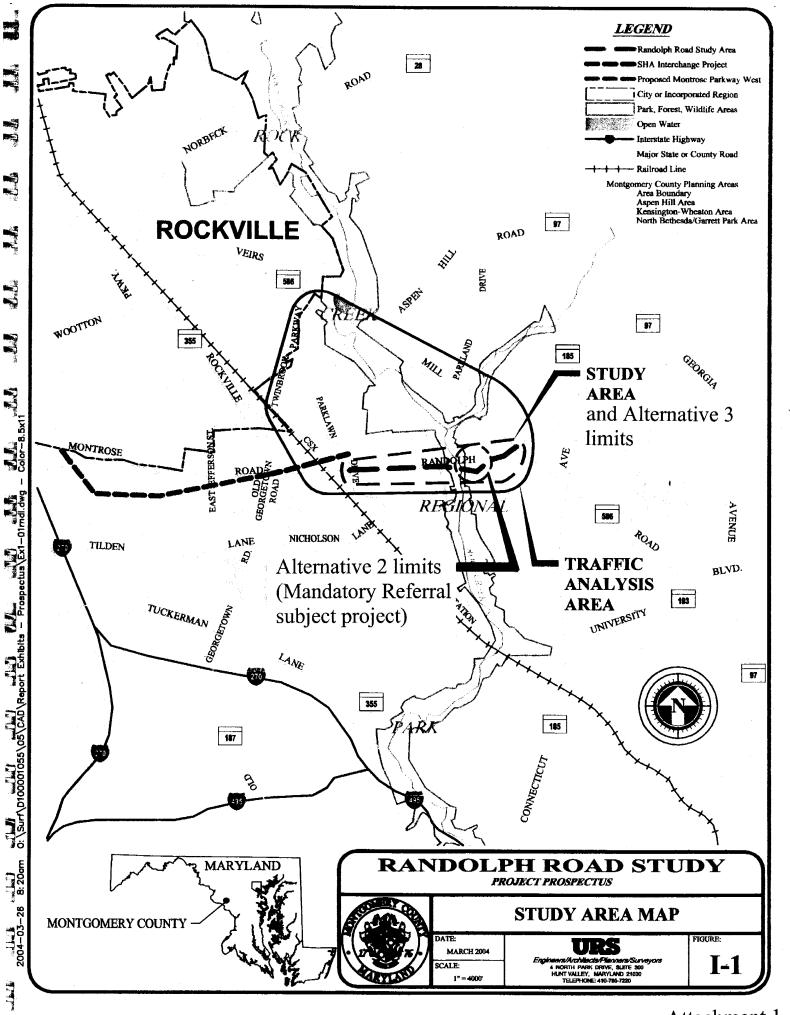
- The trail should be widened to ten feet and offset from the south side of Randolph Road to provide greater safety and comfort for trail users.
- The handicap ramps on the west leg of Randolph Road should be widened to eight feet to accommodate trail traffic.
- The Randolph Road median should be extended to provide a protected six- to eight-footwide (min.) safety refuge for trail users.
- While park trails are closed at night, lighting this intersection to current AASHTO
  standards would greatly improve safety for all users of this hazardous intersection and
  would provide an ancillary benefit to trail users during early morning and evening hours.

The sidewalk on both sides of Randolph Road through the park should also be offset from the roadway to provide a buffer for pedestrians. The offset of the sidewalk and trail recommended by staff would increase the required permanent sidewalk easement and temporary construction easement on Park property.

# **Public Outreach**

DPWT held a public meeting for this project on February 27, 2008 and was attended by approximately a dozen residents. Residents at the meeting expressed concerns about:

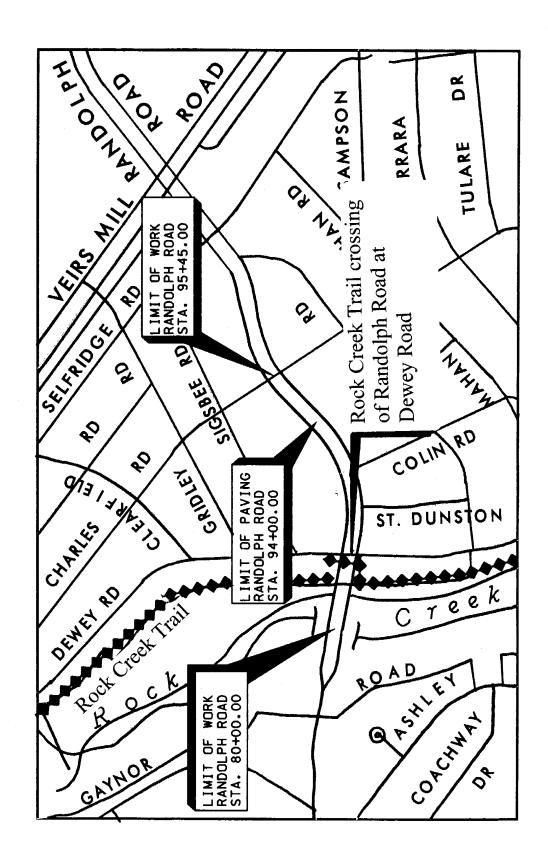
- the crash experience at the curve
- the safety of the existing sidewalk
- the impact on adjacent property from the proposed construction
- drivers on the north side of Randolph Road (the inside of the curve) being able to safely exit their driveways because of sight distance concerns



Alternative 2 limits (Mandatory Referral subject project)

# C.I.P. PROJECT

NO. 509337



VICINITY MAP SCALE: 1"= 500'