

March 20, 2003

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Richard C. Hawthorne, Chief *RCH*
Transportation Planning
County-wide Planning Division

Sue Edwards, Team Leader *Sue*
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Community-Based Planning Division

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Transportation Planning
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FROM: Ki H. Kim, Planner/Coordinator (301) 495-4538 *KHK*
Transportation Planning
County-wide Planning Division

SUBJECT: Father Hurley Boulevard Phase I Transportation Facility Planning Study
Project Prospectus Recommendations

RECOMMENDATION: Transmit the following comments to the Montgomery County Department of Public Works and Transportation (DPWT):

1. The Father Hurley Boulevard Transportation Facility Planning Study should proceed to Phase II of the Facility Planning process as recommended in the January 2003 Final Project Prospectus to develop a detailed design for the master planned Major Highway.
2. Per the Project Prospectus recommendation, the design for Father Hurley Boulevard Extended should be a four-lane facility, rather than the six-lane facility recommended in the 1989 Germantown Master Plan. Recent long-

range forecasting efforts have indicated that the six-lane facility will not be needed and this change will be reflected in the upcoming Germantown Master Plan amendment.

3. At the beginning of the Phase II Facility Planning study, DPWT should obtain staff approval for a natural resource inventory and forest standard delineation (NRI/FSD) and a Forest Conservation Plan (FCP). The NRI/FSD must include delineation of wetlands and Waters of the United States and the FCP must describe how the approximately 3.2 acres of forest stand impacts will be mitigated.
4. The Phase II Facility Planning study for the Father Hurley Boulevard should consider the following design details:
 - a. Select a fill slope treatment adjacent to the Gateway West based on further coordination with the Willow Cove Manor condominium community
 - b. Widen the bridge crossing the CSX tracks to provide adequate functional width for the shared-use path and sidewalk and separate these elements from the roadway
 - c. Expand the mounted median treatment beyond the southernmost segment
 - d. Minimize impacts to the stand of specimen Tulip-poplar (*Liriodendron tulipifera*) trees near the proposed CSX crossing

PURPOSE OF THIS BRIEFING

The purpose of this briefing is to apprise the Montgomery County Planning Board on the Phase I Facility Planning study completed by DPWT for the Father Hurley Boulevard project.

This study, commenced in late 2001, produced a Final Project Prospectus in January 2003 based on several public meetings and discussions.

SUMMARY OF THE PROJECT

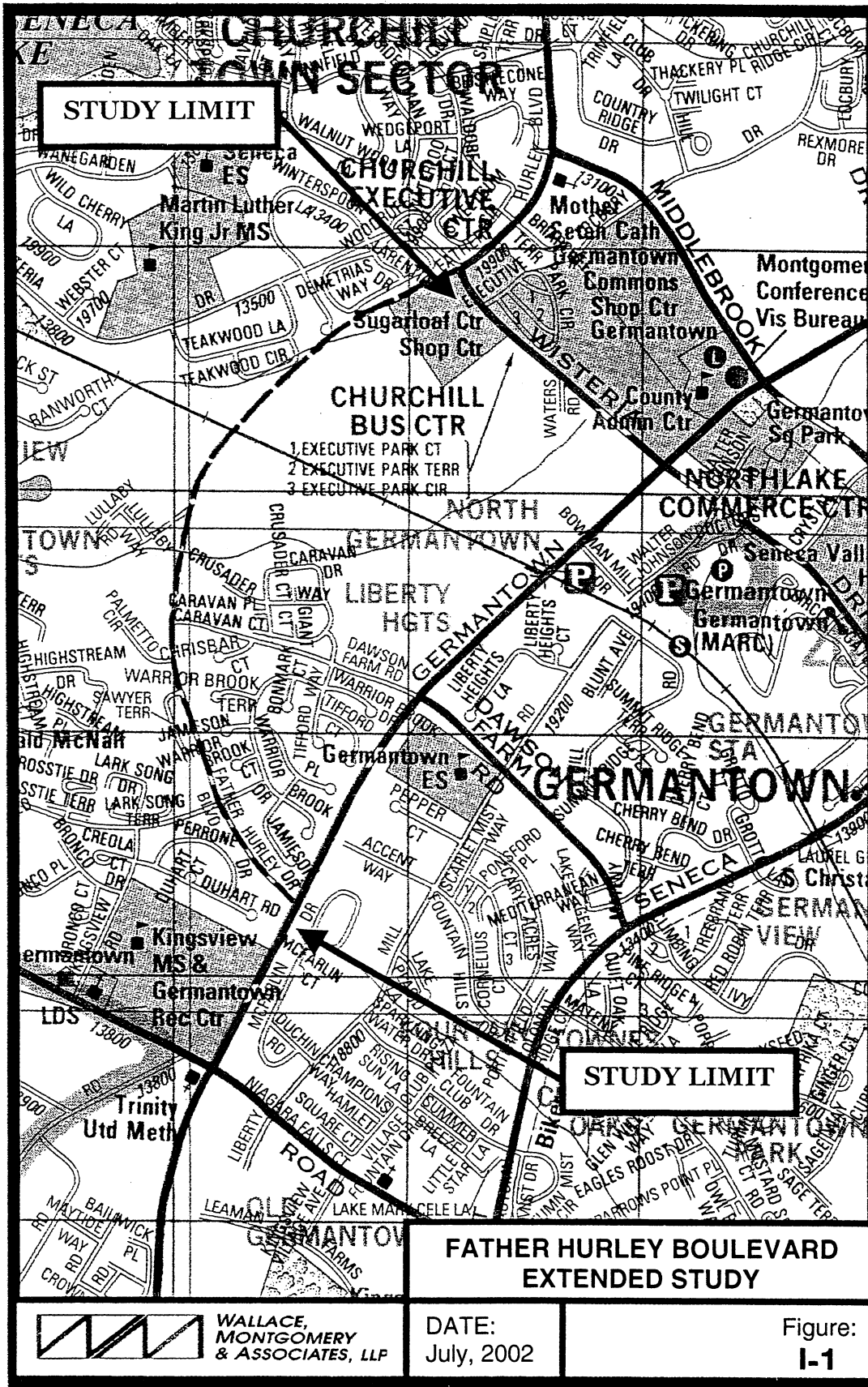
This project extends Father Hurley Boulevard from Wisteria Drive to MD 118 (Germantown Road), a distance of slightly more than one mile. The study area is shown as Exhibit 1 and the recommended alternative for the roadway is presented, from south to north, in Attachments A through D.

As indicated in the attachments, the recommended typical section varies slightly throughout the project to reflect the opportunities and constraints in each portion of the study area. In each location, the typical section includes four through travel lanes, an eight-foot hiker-biker trail on the northwest side, a sidewalk on the southeast side, and



Father Hurley Boulevard Extended

Exhibit 1



landscape panels at least seven feet wide with street trees. The slight variations reflect subtle shifts in the location of these elements. From south to north, the shifts in typical sections reflect:

- MD 118 to Hopkins Road – shifting the roadway away from the greater number and closer spacing of residential properties on the northeast side of the road
- Hopkins Road to Lullaby Road – retaining and incorporating the two-lane section already built by the development community
- CSX crossing – minimizing construction costs and retaining wall impacts to the Willow Cove Manor condominiums
- CSX crossing to Wisteria Drive – minimizing community impacts and facilitating participation by the developer of the Fairfield at Germantown site

The crossing of the CSX tracks is designed as a gateway feature with a recommended cut stone architectural finish on the bridges, abutments, wing walls, and parapet walls. A schematic of the bridge design is shown in Exhibit 2.

MASTER PLAN CONSISTENCY

Father Hurley Boulevard Extended is needed to provide connectivity between the residential portions of Germantown on the west side of the CSX railroad tracks with the commercial and community services on the east side of the tracks. Father Hurley Boulevard is one of only four roadway bridges crossing the CSX tracks in Germantown along with MD 118, Great Seneca Highway (MD 119), and Waring Station Road.

The 1989 Germantown Master Plan describes Father Hurley Boulevard as a Major Highway (M-27) with six lanes in a 120-foot right-of-way with a 24-foot-wide median, an emphasis on a landscaped roadway median and edges, and sidewalks on both sides of the roadway.

Staff finds that the recommended alternative for Father Hurley Boulevard is consistent with the intent of the Master Plan. There are two elements, however, where the design does not reflect specific Master Plan recommendations:

- The recommended design provide four travel lanes rather than six
- The section between Wisteria Drive and the CSX tracks includes a 20-foot-wide median rather than a 24-foot-wide median

Staff recommends that these two elements reflect an appropriate design for Father Hurley Boulevard, as discussed below.

ORNAMENTAL SAFETY
FENCE, TYPICAL
(WITH RUB-RAIL ON
HIKER/BIKER SIDE ONLY)


ARCHITECTURAL
FINISH

SIMULATED CUT
STONE FINISH, TYPICAL

CSXT

B R I D G E E L E V A T I O N

MONTGOMERY COUNTY
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
ROCKVILLE, MARYLAND
STEEL BEAM BRIDGE
FATHER HURLEY BOULEVARD
OVER CSXT
BRIDGE ELEVATION
Scale: 1/4" = 1'-0"
Date: November, 2008
Contract:
DESIGNED BY: S.E.D.
DRAWN BY: S.E.D.
CHECKED BY: P.A.L.

**WALLACE, MONTGOMERY
& ASSOCIATES, LLP**
CIVIL AND STRUCTURAL ENGINEERS
110 West Road
Lynch, Maryland 21204

Number of Travel Lanes

The Germantown Master Plan recommends that Father Hurley Boulevard have a six-lane cross-section. The Facility Planning study examined three different typical sections: a two-lane undivided section, a four-lane divided section, and a six-lane divided section. The two-lane undivided typical section does not meet the study's purpose and need since the lack of a median would result in undesirable levels of traffic service, safety, and aesthetic value.

Both the four-lane and six-lane sections would provide commensurate levels of service in 2020, the horizon year analyzed for the study. However, the six-lane section recommended in the Germantown Master Plan has greater adverse community impacts. In essence, both the four-lane and six-lane sections have the same general requirements regarding sidewalks and landscaping within the same 120-foot right-of-way. However, the six-lane section requires a far more constrained design with narrower landscape buffers. The construction cost for the six-lane section would also be approximately \$2M more than the cost of the four-lane section.

Staff finds that the six-lane typical section will never be needed to accommodate future travel demands even under Master Plan buildout conditions. As described below, there are two primary reasons for this recommendation: one related to the amount of development envisioned at buildout and the other related to roadway network topology.

The current estimates of total commercial development at buildout are now lower than those made when the 1989 Germantown Plan was adopted. The 1989 Germantown Master Plan envisioned a buildout with approximately 1.1 million jobs countywide, 78,000 of which would be located in the Germantown Plan area. During the 1990s, county policies have stressed the need for a balance between jobs and housing, with a subsequent reduction in estimates for the number of jobs which can be supported in the county. Year 2050 forecasts for the Transportation Policy Report have assumed a countywide "buildout" total of 750,000 jobs, including approximately 50,000 in the Germantown Plan area. Therefore, the current long-range plans yield slightly lower travel demands than plans developed in the late 1980s.

The relationship of this southernmost portion of Father Hurley Boulevard to the rest of the Germantown roadway network also affects the total number of travel lanes needed. Father Hurley Boulevard and MD 118 are generally parallel "rungs" in the Germantown roadway network until they meet at the western terminus of Father Hurley Boulevard. MD 118 is recommended to be a six-lane Major Highway both to the east and west of the western terminus of Father Hurley Boulevard. In essence, therefore, the Germantown Plan envisions two six-lane major highways (Father Hurley Boulevard and MD 118) crossing the CSX tracks and then "merging" into a single six-lane major highway (MD 118) prior to crossing Clopper Road. This merging of the two rungs results in an imbalance in the number of travel lanes on either side of their junction. Therefore, from the perspective of network topology and lane balance, a four-lane

section for Father Hurley Boulevard makes more sense than a six-lane section. **Staff proposes to incorporate the recommended four-lane section for Father Hurley Boulevard in the amendment of the Germantown Master Plan currently being developed.**

DPWT has recently completed an analysis of the performance of the four-lane Father Hurley Boulevard design under year 2050 travel demands from the Transportation Policy Report. This analysis confirms the staff position described above as both the Father Hurley Boulevard intersections with MD 118 and Wisteria Drive are forecast to operate at LOS D or better given the year 2050 travel demands.

Median Width

In general, the recommendation for a four-lane typical section allows a median design that exceeds the 24-foot width recommended in the Master Plan. To the north of the CSX crossing, however, the recommended typical section is 20 feet wide. The reduced width typical section accomplishes two objectives. First, it reduces the height of the required retaining wall adjacent to the Willow Cove Manor condominiums. Second, it facilitates participation in the roadway project by the developers of Fairfield at Germantown by limiting fill slope impacts to the dedicated right-of-way. **Staff finds that the recommended typical section satisfies the intent of the Master Plan.**

PUBLIC OUTREACH

The DPWT study team held two public meetings during the Phase I Facility Planning process. The first meeting, on January 10, 2002, presented the study's purpose and need. The study team held the second public meeting on June 19, 2002, to update the community on the project's progress and to obtain community input and preferences for the project.

The recommended alternative includes several design elements that reflect comments received through public participation. In particular, the recommended typical section has been modified to minimize impacts to the edge of roadway by shifting typical section elements away from the Willow Cove Manor Condominiums and the homes along Jamieson Drive.

SUMMARY OF PROJECT PROSPECTUS STUDY FINDINGS

The four-lane alternative recommended in the Project Prospectus is expected to have the following benefits and impacts:

Benefits

- Improves network connectivity per Germantown Master Plan, reducing travel times for pedestrians, bicyclists, and vehicles (including emergency vehicles)
- Reduces congestion at several intersections along MD 118

- Provides a community gateway feature at the CSX tracks

Impacts

- Approximately 3.2 acres of forest stand impacts
- Visual and potential property impacts to the Gateway West community associated with the fill slopes required to elevate Father Hurley Boulevard over the CSX tracks
- Potential stream channel and wetlands impacts south of Lullaby Road
- Construction cost of approximately \$10M

Based on year 2025 travel demand modeling, no noise abatement (such as noise walls) appears to be required for the recommended alternative.

During Phase II of Facility Planning, the Project Prospectus notes that the following items will require continued coordination:

- The design specifications for the CSX bridge crossing could be subject to change based on updated clearance requirements from CSX and the level of interest in accommodating a third track being contemplated by CSX.
- Impacts associated with extending a culvert under the existing roadway south of Lullaby Road.
- Roadway phasing from the typical section to be constructed as a condition of subdivision approval for the Fairfields at Germantown development and the ultimate typical section.
- Completion of signal warrant analyses and a Determination Of Eligibility form for the Eugene Waters House.
- **Identification of forest stand impact mitigation techniques through completion and approval of a forest stand delineation and Forest Conversation Plan. Identification and minimization of impacts to specimen trees in the forest stand adjacent to the Gateway West community.**

Pedestrian and Bicycle Accommodations

Throughout the project length, pedestrians will be accommodated on a five-foot-wide sidewalk on the east side of the roadway. The shared-use path proposed on the west side would accommodate both pedestrians and bicyclists. Both of these facilities are separated from the roadway by a landscape panel with street trees.

Staff recommends that the bridge crossing the CSX tracks be widened to provide adequate functional width for both the shared-use path and sidewalk as well as to separate these elements from the roadway. The conceptual plans for the CSX bridge shown in Attachment D indicate that both the five-foot sidewalk and eight-foot shared-use path would be located at the back of the roadway curb. Staff concurs that maintaining the full landscape panel width across the bridge is not practical due to cost and property impacts. However, further analysis is required during Phase II to determine the most appropriate treatment for safely separating the pedestrian and bicycle elements from the roadway. Two elements in particular need to be considered, the functional width required for both sidewalk and shared-use path and the type of physical barrier that may be needed. In general, hiker-biker trails require an additional two-foot-wide clear zone, or “shy distance” from vertical obstructions such as parapet walls. The roadway design will also need to incorporate guardrails on the bridge approaches. Ideally, the guardrail or a similar barrier between the pedestrian and vehicular realms should be continued across the bridge itself. As these safety elements are reviewed, it will also be important to retain the attractiveness of this gateway feature as proposed in the Project Prospectus.

Staff suggests consideration of expanding the mounded median treatment at the project’s southern end. The southernmost segment of the project, between Hopkins Road and MD 118, includes a mounded median. This treatment is designed to discourage pedestrian crossing as this section of the roadway is located between the residential properties along Jamieson Drive and the community facilities at Kingsview Middle School and the Germantown Recreation Center. This treatment may be desirable and should therefore be considered at other locations in the study area.

KK/ct

Attachments

mno to mcpb re Father Hurley Blvd.doc