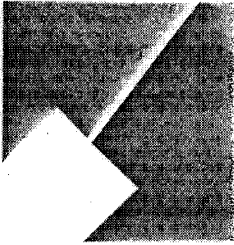


M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

MCPB
ITEM NO. 910,11
3-11-04

March 5, 2004

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Richard C. Hawthorne, Chief Transportation Planning *R C Hawthorne*
Sue Edwards, Team Leader *Sue*
Community-Based Planning

FROM: Michael Zamore: 301-495-2106 (Forest Conservation Plan and Water Quality Plan) and Larry Cole: 301-495-4528 (for the Park and Planning Department) *LC*
WZ

PROJECT: Stringtown Road Extended
From I-270 to Frederick Road (MD 355)
CIP No. 509337

REVIEW TYPE: Mandatory Referral No. 03806-DPW&T-1

APPLICANT: Montgomery County Department of Public Works and Transportation

APPLYING FOR: Plan Approval

COMMUNITY-BASED PLANNING TEAM AREA: I-270 Corridor (Clarksburg)

RECOMMENDATIONS:

Staff recommends that the Board approve the proposed project (see Attachment 1: Vicinity Map) with the following comments to Department of Public Works and Transportation (DPWT):

Forest Conservation Plan: APPROVAL WITH THE FOLLOWING CONDITIONS:

1. Submit for approval by staff an off-site reforestation-planting plan on a site within the Clarksburg Special Protection Area.
2. DPWT must place forest conservation easements on forests established per Condition No. 1. A five-year maintenance period is required for all planting per the environmental guidelines.
3. Submit the Final Landscape Plan to staff for review and comment.
4. Compliance with the above conditions of approval must be confirmed by the Maryland-National Capital Park and Planning Commission (M-NCPPC) prior to the release of sediment and erosion control permits by the Department of Permitting Services.

***Final Water Quality Plan: APPROVAL WITH THE FOLLOWING CONDITIONS:**

1. The proposed project must conform to the conditions stated in the Montgomery County Department of Permitting Services (DPS) letter dated January 23, 2004, approving the elements of the Special Protection Area (SPA) water quality plan under its purview (see Attachment A).
2. Landscaping and street trees must be planted on the lawn panel between the curb and adjacent sidewalk/shared-use trail to allow for better shading of the roadway, reduced warming of stormwater, and increased pedestrian safety. The typical fifty-foot spacing of street trees should be modified as necessary to allow the inclusion of existing trees.
3. REMOVE THE EXISTING LEFT TRAVEL LANE ON NORTHBOUND GATEWAY CENTER DRIVE TO REDUCE IMPERVIOUSNESS.

Mandatory Referral: APPROVAL WITH COMMENTS TO DPWT

Stringtown Road: General

1. Reduce the proposed pavement width of each roadway of Stringtown Road to twenty-seven feet.
2. Increase the width of the sidewalk along the south side of Stringtown Road to six feet.
3. The landscape panels along Stringtown Road should be nine feet wide.
4. Reduce the proposed right-of-way in the southwest quadrant of the Stringtown Road/Frederick Road intersection to 120 feet.
5. Maintain a consistent eight-foot width for the trail to the handicap ramps. All handicap ramps along the alignment of the trail should be eight feet wide to accommodate bikes. The trail and ramps should be oriented to provide as direct a route as possible and should not require turning movements in the roadway to stay on the trail alignment.

6. Reduce the curb radii at intersections to thirty-five feet.
7. Dual, directional handicap ramps should be constructed at all intersections where practicable, per Americans for Disabilities Act (ADA) Best Practices. The east side of the Frederick Road intersection should be modified to provide dual ramps.
8. Use Gateway Commons Site Plan No. 8-03023 proposed streetscape proposal as a guide for the landscape plan for Stringtown Road Extended. The street trees along Stringtown Road should be aligned across the proposed roadway to provide a very visible gateway treatment to the neo-traditional town of Clarksburg.
9. Alternative tree species should be used instead of Sugar Maples, which may be damaged from road salt, and Yellowwood trees, which are not good street trees. The latter are small flowering trees whose branches are not compatible with truck traffic. As shown in the *Staff Draft Clarksburg Streetscape Plan*, Fraxinus P. Lanceolata (Marshall's Seedless Ash) should be used for Stringtown Road Extended and Ulmus Americana 'Valley Forge' (American Elm) for MD 355.
10. Consider striping bike lanes on Stringtown Road.

I-270

11. Align the handicap ramps on the ramp from northbound I-270 to eastbound Stringtown Road.
12. Provide street trees in the median of Stringtown Road between the I-270 ramps and Gateway Center Drive.

Gateway Center Drive

13. Pull back the median on the north leg of Gateway Center Drive at Stringtown Road to be offset slightly from the westbound travel lanes of Stringtown Road. Provide pedestrian refuges in both medians.
14. Remove the pavement for the unneeded leftmost travel lane on northbound Gateway Center Drive, north of Stringtown Road, to reduce impervious surface area in the Clarksburg SPA.
15. Maintain the existing design for Gateway Center Drive, including the existing landscaping. Clarify which trees are to be saved and which are to be removed.
16. Place warning signs for westbound bicyclists that the trail ends ahead.

Observation Drive

17. Ensure that the proposed vertical alignment of Observation Drive is compatible with a light-rail at-grade crossing of Stringtown Road.

Frederick Road

18. Extend the median on the east leg of Stringtown Road at Frederick Road to be as close as possible to the intersection and to provide a pedestrian refuge.
19. Construct a sidewalk and curb along the west side of Frederick Road, and along the east side of Frederick Road, north of Stringtown Road, within the limits of construction. The sidewalk should be offset from the curb by a six-foot-wide (minimum) landscape panel with street trees. Provide pedestrian/bicyclist connections between the northern ends of the proposed sidewalks and the roadway shoulders of Frederick Road.
20. Provide a standard driveway treatment for the Poole property on Frederick Road north of Stringtown Road.
21. Coordinate with Park Planning and Resource Analysis staff and the Gateway Commons and Highlands of Clarksburg developers on the intersection improvements at MD 355 and Stringtown Road. This intersection is the site of the Dowden's Ordinary Historic Site and Marker. The plans should reflect the adjacent development site plans as approved by the Planning Board, including the retaining walls along Frederick Road that will be built by the developers.

PREVIOUS BOARD ACTION

There has been no previous action on this Stringtown Road project; however, the design of this road has been an integral part of the site plan approvals in this area. Construction of the outside lanes of Stringtown Road as a two-lane arterial road including a five-foot sidewalk, an eight-foot bike path, street trees, and grading for a future four-lane divided roadway between Gateway Drive and Observation Drive is a requirement of the Gateway Commons development as part of the site plan approval by the Planning Board on July 24, 2003.

The extension of Stringtown Road to the east of Frederick Road (MD 355) and improvements to the intersection of these two roads were approved by the Planning Board at the time of site plan approval of the Highlands of Clarksburg development on June 13, 2002, and amended on July 24, 2003, and the approval of the Clarksburg Town Center development on January 22, 1998.

PROJECT DESCRIPTION

This project would extend Stringtown Road feet from its present terminus at Frederick Road (MD 355) to the east side of the I-270/Clarksburg Road interchange, a distance of 2,735

feet (see Attachment 2). The road would be constructed as a four-lane divided roadway with a sidewalk and a shared-use trail, and would have a 120-foot right-of-way (see Attachment 3).

The existing Clarksburg Road (MD 121) connection to the interchange at I-270 would be severed and the road would end in a cul-de-sac just west of the Gateway Center Drive intersection. Clarksburg Road would be accessed from I-270 via Stringtown Road and Gateway Center Drive.

The proposed roadwork also includes reconstruction of MD 355 from about 400 feet north of Stringtown Road to a point roughly 650 feet south of the intersection, to add a short southbound left-turn lane and a turn/acceleration lane along southbound Frederick Road.

SUMMARY

This project would implement the recommendations of the Clarksburg Master Plan by completing a missing link of Stringtown Road and providing direct access from I-270 to Clarksburg Town Center and the Clarksburg Historic District (see Attachment 4). Expanding the network of local roads by projects such as this one will help relieve the major intersections in the area as the Clarksburg area continues to develop.

STAFF ANALYSIS

Typical Section

The road is classified as A-260, a four-lane divided highway with a 120-foot right-of-way. The proposed typical section differs from the appropriate Montgomery County standard for an Arterial Dual Road with a 120-foot right-of-way (see Attachment 5):

- Each half of the roadway would be twenty-eight feet wide, rather than the twenty-six feet shown in the standard.
- The median would be twenty feet wide, rather than the twenty-eight feet shown in the standard.
- The landscape panels between the road and sidewalk would be only eight feet wide, rather than the thirteen feet shown in the standard where there is a sidewalk and ten feet where there is a shared-use trail.

The segment of Stringtown Road closest to Frederick Road has a right-of-way of 130 feet, rather than the standard 120 feet. There was previously a right-turn lane in this segment that was later deleted in response to staff comment. The proposed right-of-way to accommodate the lane remains, however, increasing the land required to be taken from the Dowden's Ordinary site, a historical site that is to be conveyed by the developer as parkland. *Staff recommends that a 120-foot right-of-way be provided in this area also.*

The wider-than-standard roadway pavement is a concern since the road is in the Clarksburg SPA and more impervious would mean more stormwater runoff. Since Clarksburg Road (MD 121) would no longer have a direct connection to I-270, it is anticipated that the State Highway Administration (SHA) will take over the maintenance of Stringtown Road in a road transfer at some point in the future. SHA staff have objected to a pavement width of less than twenty-seven feet. ***Staff recommends that the proposed pavement width be reduced to twenty-seven feet for each half of the roadway.***

Landscaping

Staff recommends that the one-foot reduction in roadway width recommended above be applied to the landscape panels adjacent to the sidewalk and shared-use trail, for a total of nine feet on each side.

The proposed typical section includes six to nine feet of space behind the sidewalk and trail that is proposed to be used for planting additional rows of trees. The typical section would include these two rows of trees, two rows in their normal location between the curb and sidewalk/trail, and a row of trees in the median. An informal arrangement of trees is proposed by DPWT however, ***staff recommends that the five rows of trees be aligned across the roadway to create a more formal presence at the entrance to Clarksburg*** in accordance with the landscaping plans of approved developments.

Gateway Center Drive

As noted above, the existing Clarksburg Road (MD 121) connection to the interchange at I-270 would be severed and the road would end in a cul-de-sac just west of the Gateway Center Drive intersection. The existing northbound roadway has three travel lanes. Because of changed traffic patterns in the proposed condition, the leftmost lane on Gateway Center Drive would not be needed and is proposed to be striped out to prohibit usage. ***Staff recommends that this unneeded pavement be removed to reduce impervious surface area in the Clarksburg SPA.***

Observation Drive and Corridor Cities Transitway

Observation Drive is required to be built as part of the Gateway Commons development that straddles both sides of Stringtown Road. The future Corridor Cities Transitway is planned to run along Observation Drive. ***Staff recommends that DPWT ensure that the proposed vertical alignment of Observation Drive is compatible with a light rail at-grade crossing of Stringtown Road.*** The proposed grades appear to work but given the critical nature of this intersection, a double-check is warranted.

Frederick Road

A northbound left-turn lane would be provided in addition to the right-turn lane to be constructed by developers south of Stringtown Road, for a total of four lanes.

On the north side of the intersection, a short southbound left-turn lane would be provided.

Pedestrian Accommodation

Pedestrians would be accommodated by this project along Stringtown Road via a five-foot-wide sidewalk on the south side and an eight-foot-wide trail on the north side. *Staff recommends that the sidewalk width be increased to six feet to improve accommodation in what is anticipated to be a very busy area between the residential area west of Frederick Road, the transitway on the future Observation Drive, and the commercial area east of Frederick Road.*

Americans for Disabilities Act Best Practices recommend that dual handicap ramps be provided at intersections so that visually impaired persons have better guidance as to the direction they should go to cross the street. *Staff recommends that dual ramps be provided wherever practicable.*

At intersections, the proposed twenty-foot-wide median would be reduced to eight feet to accommodate a left-turn lane. *The eight-foot space is sufficient to accommodate pedestrian/bicyclist refuges but none are proposed. Staff recommends that these refuges be provide at all intersections.*

The proposed curb radii at intersections are larger than they need to be to accommodate turning traffic. *Staff recommends that the curb radii be reduced to thirty-five feet to shorten the pedestrian crossings and to encourage lower speeds in the area of the planned transit station.*

Bicyclist Accommodation

Bicyclist accommodation would be greatly improved by this project; off-road bicyclists would be accommodated via an eight-foot-wide trail on the north side of Stringtown Road. They would also be accommodated on-road via wider shared-use travel lanes. *Staff recommends that DPWT consider striping bike lanes on Stringtown Road rather than having shared-use travel lanes.*

Some adjustments are needed to the design to improve the usability of the trail. At Gateway Center Drive, the eight-foot-wide trail transitions down to the five-foot sidewalk width on Gateway Center Drive. *Staff recommends that the eight-foot width be maintained up to the handicap ramp so that riders have full use of the trail.*

The ramps themselves need to be widened to eight feet and need a better orientation. The dual ramps recommended by staff above would also provide a benefit to bicyclists, since a more perpendicular crossing would require that any turning movement be made while bicyclists are on the trail rather than in the roadway.

Since the trail ends at the existing I-270 interchange, where there is only a five-foot-wide sidewalk, *staff recommends that warning signs be placed at Gateway Center Drive that the trail ends ahead.* Some westbound riders may choose to get off the trail and go on-road at that point.

Nearby Development

The Planning Board has approved several site plans for properties located at the northern edge of the Transit Corridor District of the Clarksburg Master Plan (near the Clarksburg Historic District and Town Center). The proposed Conceptual Landscape Plan for Stringtown Road Extended should reflect the site plans of the adjacent developments as approved by the Planning Board. The plans should reflect the retaining walls approved by the Planning Board, which will be built by the developers.

With these conditions, the landscaping plan for Stringtown Road Extended will comply with the policies and objectives of the Clarksburg Master Plan, Staff Draft Clarksburg Streetscape Plan, and approved site plans for Gateway Commons and Highlands of Clarksburg.

Coordination with Park Planning and Resource Analysis staff, the Gateway Commons, and Highlands of Clarksburg developers is also needed for the intersection of MD 355 and Stringtown Road. This intersection is the site of a historic resource (Dowden's Ordinary Site and Marker) and roadway improvements associated with the recently approved site plans.

~~Environmental Planning staff reviewed the project with a view to ensuring that it met the following forest conservation objectives: reduction in impervious area, forest conservation, compliance with environmental guidelines, and compliance with Forest Conservation regulations. The project is subject to the Forest Conservation Act and a 1:1 replacement ratio is required. Landscaping and street trees will meet some of the roadway's reforestation requirements. As per the Forest Conservation Act, the project has an approved Natural Resource Inventory/Forest Stand Delineation, and a Forest Conservation Plan (FCP).~~

Forest Conservation Law Compliance

Staff reviewed the project with a view to ensuring that it met the following forest conservation objectives: reduction in impervious area, forest conservation, compliance with environmental guidelines, and compliance with Forest Conservation regulations. The project is subject to the Forest Conservation Act and a 1:1 replacement ratio is required. Landscaping and street trees will meet some of the roadway's reforestation requirements. As per the Forest Conservation Act, the project has an approved Natural Resource Inventory/Forest Stand Delineation, and a Forest Conservation Plan (FCP).

The site contains 1.75 acres of forest all of which the applicant proposes to remove. This removal includes several specimen trees. Their removal is unavoidable as they are either on the actual road alignment or within the road right-of-way. ~~Therefore, the applicant must provide a total planting requirement of 1.75 acres of forest.~~ ^{THE} The applicant has proposed a combination of landscaping and street trees (0.35 acres), and off-site planting (1.40 acres) at a site within the Clarksburg SPA. The amount of forest to be planted meets the 1:1 replacement ratio required. Therefore, the FCP submitted for this project meets the requirements for Section 22A-12(f) of the Montgomery County code.

Final Water Quality Plan

The proposed roadway is entirely within the Clarksburg SPA. Section 8 of the Water Quality Inventory of Montgomery County Executive Regulation 29-95 – *Water Quality Review for Development in Designated Special Protection Areas*, requires the preparation of water quality plans. Under the SPA law, DPS and the Planning Board have different responsibilities in the review of the water quality plan. DPS reviews and conditionally approves the elements of the final water quality plan under its purview, while the Planning Board determines whether the site imperviousness, environmental guidelines for special protection areas, and forest conservation requirements, have been satisfied.

Site Performance Goals

The following site performance goals were established at the pre-application meeting and will be met as specified in the Preliminary/Final Water Quality Plan:

- Minimize storm flow runoff increases.
- Minimize the impacts of road salts with redundant water quality controls.
- Minimize sediment loading.
- Maintain base flow and provide groundwater recharge.

Stormwater Management

The project site is located within the Little Seneca Creek and Ten Mile Creek watersheds. Stormwater runoff from immediately south of MD 355 flows southwest into Ten Mile Creek, which is classified as a Use-I-P stream. The remainder of the project site drains either north or east to Little Seneca Creek, designated as a Use IV-P waterway. The natural resource inventory approved for the site delineates the onsite environmental buffers.

Stormwater management for the project is being provided in accordance with the criteria outlined in the Maryland Department of the Environment's *2000 Maryland Stormwater Management Design Manual, Volumes I and II*. The project's location within the Clarksburg Special Protection Area requires additional stormwater management to satisfy the SPA criteria. Among these are redundant stormwater management controls (for one inch over the impervious surface area), treatment trains (i.e. a series of treatment devices rather than one large device), bio-retention, infiltration/filtration (i.e. pre-treatment with vegetated buffers and swales), and use of open sections in road design. An open section roadway is not possible for this project. As a result, additional water quality structures have been incorporated into the water quality plan to compensate for the lost benefits that an open section roadway would have provided. Additional Best Management Practices (BMP) will be implemented along Stringtown Road between MD 355 and Gateway Center Drive, to provide a treatment train that will permit a level of redundancy for water quality treatment for the watershed. These facilities include a sand filter

adjacent to the existing stormwater management pond in the southwest quadrant of MD 121 and Gateway Center Drive.

The applicant has agreed to monitor pollutant removal efficiency of the sand filter four times per year to evaluate the BMP design and its effectiveness in maintaining water quality. This will require three to five automated samplers that will be located in consultation with Department of Environmental Protection. The analysis of data from these samplers will consider drainage area, site design, storm characteristics and BMP design. Appropriate water quality BMP's will be implemented for the other two outfalls located along MD 355.

The majority of the proposed roadway improvements will drain to existing storm water management pond. Computations indicate that the pond will adequately provide quality and quantity management for the proposed roadway improvements. Three surface sand filters, a bio-retention structure and a dry swale with check dams, will provide quality control. Sediment traps and forebays are to be used for sediment control. Silt fences alone will not be allowed as perimeter control. Site grading will be limited as much as possible, and immediate stabilization will be emphasized for such grading.

Site Imperviousness

The proposed project will increase the impervious surface area by approximately nine acres. Although there are no imperviousness limitations within the Clarksburg SPA, Environmental Planning, nevertheless, evaluated all opportunities to reduce impervious surfaces. In that regard, Staff explored the possibility of terminating southbound Clarksburg Road closer to Gateway Center Drive than currently proposed, and reforesting the abandoned portion of roadway. This was not possible because of the need to provide road access to two parcels of private property adjacent to the I-270 right-of-way. Water quality improvements approved for the site include the requirement that street trees must be planted within the landscape panel between the shared-use trail/sidewalk and the roadway to provide for better shading of the roadway and to reduce warming of stormwater.

Historical and Archeological Impacts

The property at the southwest corner of Frederick Road and the proposed Stringtown Road is known as the Dowden's Ordinary site. A marker at the site was placed by the Janet Montgomery Chapter of the Daughters of the American Revolution in 1915, commemorating the encampment of General George E. Braddock, and Colonel Dunbar's Division of the Colonial and English Army, April 15-17, 1755, at the site of Dowden's Ordinary. Dowden's Ordinary also served as a meeting place for the Sons of Liberty protesting the Stamp Tax prior to the American Revolution, and as a dinner stop for Andrew Jackson on the way to his presidential inauguration in 1829.

The site would be impacted by the proposed improvements on both the north and east sides. Staff's recommendations would alter the impacts in two ways. On the north side (the south side of Stringtown Road), *staff recommends that the width of the proposed sidewalk be increased from five feet to six feet, but that the landscape panel be reduced from twenty feet to*

nine feet. This would reduce the grading impacts by about nine feet for a distance of 390 feet. We also recommend that the right-of-way be reduced, which would increase the size of the parcel remaining to be controlled by M-NCPPC. On the east side (the west side of Frederick Road), staff's recommendation to construct a five-foot sidewalk with a six-foot landscape panel would increase the grading impacts by about eight feet for a distance of 330 feet. The overall effect of the staff's recommendations would be to reduce slightly the grading impacts on the site, increase the size of the site to be controlled by M-NCPPC and provide a pedestrian facility along the west side of Frederick Road and a better pedestrian facility along Stringtown Road.

PUBLIC OUTREACH

A public meeting was held for this project on September 10, 2003, and a public hearing was held on October 22, 2003.

BACKGROUND

Relationship to the Clarksburg Master Plan

The 1994 Clarksburg Master Plan recommends that Stringtown Road be constructed as a four-lane divided arterial roadway between I-270 and A-305 (Midcounty Arterial). The Master Plan recommends that the 1968 Clarksburg and Vicinity Master Plan alignment of Stringtown Road be modified between MD 355 and Piedmont Road. The recommended alignment follows the existing road in order to utilize the existing point of Little Seneca Creek and avoid two tributaries to the north of this crossing.

During the Clarksburg Master Plan process, a great deal of attention was given to the cross-section design of the roads proposed in the Master Plan, the relationship of roads to neighborhoods land use, design objectives, and the relationship of the road network to the proposed park and open space system. The Master Plan recommends that roads linking major highways to neighborhoods be "pedestrian friendly" and include medians, street trees, and generous sidewalk areas.

Stringtown Road is located between the southern edge of the Town Center District and the northern edge of the Transit Corridor District of the Clarksburg Master Plan Area. The Master Plan states that it is essential that the character of the roadway network is supportive of the Master Plan's vision for the Town Center. The Master Plan proposes a transit-oriented, multi-use Town Center that is compatible with the scale and character of the Clarksburg Historic District.

Clarksburg is one of the County's oldest and most significant early communities. The Clarksburg Historic District reflects the community's prominence as a center of transport, trade, and industry for northern Montgomery County. It is among the County's most intact historic towns. One of the County's last and most elaborate remaining examples of a two-room schoolhouse is found here.

The following Master Plan guideline will help assure that streets and highways are built

in a manner that is compatible with land use and urban design objectives for the Town Center:

Because Stringtown Road and Clarksburg Road serve as entrances to the Town Center, extensive landscaping, including medians, shared-use trails, and bus transit access facilities, must be provided.

LC:gw
Attachments

mno to MCPB re MR03806-Stringtown Road Extended