



September 2, 2004

MEMORANDUM – MANDATORY REFERRAL

TO: Montgomery County Planning Board

VIA: John A. Carter, Chief
Community-Based Planning Division

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Community-Based Planning Division

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SUBJECT 1: Preliminary and Final Water Quality Plan for Mandatory Referral No. 04602-MCPS-1, Banneker Middle School, 14800 Perrywood Drive, R-200 Zone, Fairland Master Plan

SUBJECT 2: Mandatory Referral No. 04602-MCPS-1, Banneker Middle School, 14800 Perrywood Drive, R-200 Zone, Fairland Master Plan

This combined staff report provides recommendations on the combined Preliminary and Final Water Quality Plan and Mandatory Referral No. 04602-MCPS-1 for Banneker Middle School. **The Planning Board must act on the SPA Water Quality Plan before it can act on the Mandatory Referral.**

SUBJECT 1

STAFF RECOMMENDATIONS: WATER QUALITY PLAN (Attachment A)

Staff recommends approval of the Special Protection Area (SPA) combined Preliminary and Final Water Quality Plan with the following conditions:

1. Total impervious cover will be no more than 5.14 acres, as shown on the proposed site plan dated March 2003.
2. Conformance to the conditions as stated in the Department of Permitting Services (DPS) Water Quality Plan approval letter dated August 27, 2004. (Attachment B)

SUBJECT 2

STAFF RECOMMENDATIONS: MANDATORY REFERRAL NO. 04602-MCPS-1

Staff recommends APPROVAL.

PROJECT SUMMARY

Montgomery County Public Schools (MCPS) proposes to reconfigure Banneker Middle School's parking lots for greater safety and efficiency. During peak drop-off and pick-up periods at the school, traffic backs-up onto Perrywood Drive and Old Columbia Pike. MCPS is proposing to have separate entrances for the staff and visitors parking areas and a separate entrance for school buses.

Banneker Middle School, constructed in 1974, is a part of the Northeast Consortium. In 2003-2004, the school had an enrollment of 1,102 students in grades six through eight, and approximately 100 professional/support staff.

BACKGROUND

Description of Site

Banneker Middle School is located at the southwest quadrant of the intersection of Perrywood Drive and Old Columbia Pike in Burtonsville. The site and adjacent properties are zoned R-200 and developed with single-family detached homes. This site is also within the environmentally sensitive Upper Paint Branch Special Protection Area. Most of the site is relatively flat, but there is a man-made wetlands area of approximately 6,000 square feet near the south corner of the school structure. In cooperation with the Maryland Department of the Environment, Banneker Middle School created and maintains this wetland for use in its science projects. There is no forest on the subject site; shade and flowering trees exist at the entrance to the site and generally along the periphery of the parking areas.

In addition to the school building, the site is improved with four portable classrooms, a baseball field, tennis courts, basketball courts, a bus turnaround and two parking lots. Banneker has 110 parking spaces available. Currently, portable classrooms cover a large portion of the staff parking lot, taking up approximately 36 parking spaces.

Description of Project

MCPS states in their application that the purpose of this project is to alleviate the dangerous and inefficient traffic conditions at Banneker Middle School during drop-off and pick up times. The existing design of the school's parking lots and driveways does not allow for efficient flow of traffic on-site, causing back-ups on Perrywood Drive and Old Columbia Pike. The heavy volume of traffic in the area surrounding Banneker Middle School has prompted the Montgomery County Department of Public Works and Transportation (DPWT) to recommend improvements to the intersection of Perrywood Drive and Old Columbia Pike. The intersection improvements, which will be the subject of a separate project in 2005, will promote more efficient traffic flow from Old Columbia Pike to Perrywood Drive. Traffic, however, will continue to back-up onto both Perrywood Drive and Old Columbia Pike unless the conditions at Banneker Middle School are improved.

To increase safety and efficiency at the school site, the proposed plan creates separate parking areas and entrances for parents, buses, and staff. The parent-loop offers increased queuing space to help prevent cars from backing up on Perrywood Drive. The bus-loop is restricted to buses only, and the revised staff parking lot will have a new separate entrance.

There are 110 usable parking spaces on the site, 56 spaces in the parent drop-off/pick-up/staff parking lot to the west, and 54 spaces in the staff parking lot. With the proposed modifications to the parking areas, there would be a reduction of 9 spaces in the parent drop-off/pick-up/staff parking lot, for a total of 47 spaces. The staff parking lot would have an increase of 26 spaces, for a total of 80 spaces. Overall there would be a total of 127 parking spaces, a gain of 17 spaces over what now exists.

ANALYSIS

Master Plan

The 1997 Approved and Adopted Fairland Master Plan describes the site as being within the Perrywood community, an area bounded by Columbia Pike (US 29) to the east, Spencerville Road to the north, the Upper Paint Branch Stream Valley Park to the west, and Briggs Chaney Road to the south. The Master Plan does not have any specific recommendations for the subject school site.

Transportation

Transportation Planning staff has reviewed the subject plans (Attachment C) and has no comments regarding the Adequate Public Facilities (APF) test for this Mandatory Referral.

Access and Circulation

Currently, access to Benjamin Banneker Middle School is facilitated via two full-movement driveways off Perrywood Drive, which are internally connected. The internal connections connect the school bus drop-off/pick-up in front of the school to the staff parking lot to its east and the parent drop-off/pick-up/staff parking area to its west. The proposed improvements at Benjamin Banneker Middle School will involve the reconfiguration of existing school access to create a separate school bus drop-off/pick-up loop with an exclusive access driveway, a separate student drop-off/pick-up area with some staff parking via another exclusive driveway and a modified, separate staff parking lot with an exclusive access driveway. In effect, the proposed plan will eliminate the connections between the bus drop-off/pick-up loop, student drop-off/pick-up loop and staff parking areas. The proposed separation of vehicular circulation at the school is anticipated to provide safe and efficient flow of buses, and parent, staff and visitor vehicles. Parent drop-off/pick-up vehicles will enter the school via the driveway proposed farthest from Old Columbia Pike, flow through the loop in a counterclockwise direction, and will exit out the same driveway. Buses will enter/exit via the proposed middle driveway and will also have a counterclockwise flow within the loop. Staff will enter/exit their parking lot via the driveway proposed closest to Old Columbia Pike.

Perrywood Drive is an open-section primary residential street approximately 20 feet wide, with a four-foot sidewalk along its south side, only between the eastern school driveway and Old Columbia Pike. The roadway is posted for a speed limit of 25 mph. School-related parking currently occurs along the south side of Perrywood Drive along school frontage. Except for the school, land use along Perrywood Drive and its connecting streets are entirely residential. Perrywood Drive, to the northeast of the school intersects Old Columbia Pike at a two-way STOP-sign controlled intersection, with the Perrywood Drive approaches to the intersection controlled by STOP signs.

Old Columbia Pike is a north-south roadway along the west side of US 29 between Spencerville Road to the north and US 29 to the south, where it switches over to the east side of US 29. Except for a short section of the roadway between US 29 and East Randolph Road where it is classified arterial, the rest of the roadway is classified as a primary residential street. In the vicinity of the school, the roadway is approximately 26 feet wide, has an open section (no curbs) and minimal shoulder. The roadway has four-foot wide sidewalks along both sides to the north of Perrywood Drive and to only the east side south of Perrywood Drive. Parking is not permitted along Old Columbia Pike. The roadway has a posted speed limit of 35 mph. Metrobus route Z9 runs along Old Columbia Pike and has bus stops located along Old Columbia Pike just south of its intersection with Perrywood Drive. Crosswalks are present across Old Columbia Pike (to the south side of the intersection) and across Perrywood Drive (along the west side of the intersection).

Master Plan Roadways and Pedestrian/Bicycle Facilities

The 1997 Approved and Adopted Fairland Master Plan describes the nearby master-planned roadways, bikeway/pedestrian facilities as follows:

1. Old Columbia Pike, as a two-lane Primary (P-25c) between Briggs Chaney Road to the south and Spencerville Road (MD 198) to the north, with a minimum right-of-way width of 70 feet, and with existing Class I/II bikeway (EB-13; or with Bike Lanes as BL-12 in the May 2004 Planning Board Draft of the *Countywide Bikeways Functional Master Plan* between Tech Road and Spencerville Road) and sidewalks between Stewart Lane and Spencerville Road. The Montgomery County Department of Public Works and Transportation (DPWT) recently completed its sidewalk construction projects (between Spencerville Road and East Randolph Road) along Old Columbia Pike.
2. Perrywood Drive, as a two-lane Primary (P-15) between Old Columbia Pike to the east and Cabin Creek Drive to the west, with a minimum right-of-way width of 70 feet.

Nearby Transportation Improvement Project

The Montgomery County DPWT's Capital Improvements Program (CIP) includes the following nearby project:

- CIP Project No. 509953; Old Columbia Pike – Phase III Roundabout: This project will construct a roundabout at the intersection of Old Columbia Pike and Perrywood Drive. The project is in final design and estimated to go into construction by June 2005. It is fully funded for construction.

Local Area Transportation Review

The proposed vehicular access and safety improvements at the school are physical improvements that will separate parent drop-offs/pick-ups from that by school buses, and will provide a separate school access point for staff. These improvements ultimately are anticipated to enhance access and traffic safety at the school and along Perrywood Drive. Additionally, these improvements will not result in additional traffic at the school during the weekday morning (6:30 to 9:30 a.m.) and evening (4:00 to 7:00 p.m.) peak-periods. Therefore, this Mandatory Referral does not require review under the Local Area Transportation Review Guidelines.

Parking

Transportation Planning staff recognizes that school-related overflow parking currently occurs along Perrywood Drive along school frontage, and request that the school consider accommodating all of its parking on-site when additional parking becomes available on-site with the anticipated future removal of some of its modular classrooms.

Policy Area Transportation Review/Staging Ceiling

The Benjamin Banneker Middle School is located within the Fairland/White Oak Policy Area, which had a remaining staging ceiling capacity of 1,939 additional jobs as of June 30, 2004. The proposed vehicular access and safety improvements at the school are not anticipated to change staffing levels at the school. This Mandatory Referral therefore passes the Policy Area Transportation Review (PATR) test (it is noted that the PATR test had been eliminated under the FY 2005 AGP).

Environment (Attachment A)

Site Description

The 19.96-acre site lies within the Upper Paint Branch Special Protection Area. The site is already developed as a middle school and has an existing site imperviousness of 25.8%. There is no forest on the site. There are some trees throughout the site. The Fairland Farms Tributary originates near the southeastern corner of the site.

Review for Conformance to the Special Protection Area Requirements

As part of the requirements of the Special Protection Area law, a SPA Water Quality Plan must be reviewed in conjunction with a mandatory referral¹. Under the provision of the law, the Montgomery County Department of Permitting Services (DPS) and the Planning Board have different responsibilities in the review of a Water Quality Plan. DPS has reviewed and approved the elements of the Preliminary Water Quality Plan under its purview. The Planning Board responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and site imperviousness limits have been satisfied.

¹ Section 19-62 (c) of the Montgomery County Code states that "before engaging in any land disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan."

DPS has reviewed and conditionally approved the elements of the SPA Water Quality Plan under its purview (see Attachment B).

Site Performance Goals – As part of the Water Quality Plan, several site performance goals were established for the site: minimize storm flow runoff increases, minimize sediment loading, and promote groundwater recharge.

Site Imperviousness

The Upper Paint Branch SPA is the only SPA that has regulatory impervious surface restrictions for development projects. These are set forth in the Environmental Overlay Zone for the Upper Paint Branch. On new development, there is a ten percent (10%) site imperviousness limit. There is also a provision for projects with existing impervious surfaces lawfully existing before July 1, 1997 that already exceed the 10 percent limit and are proposing to reconstruct features within the project area; such projects may maintain, but not increase, impervious surface coverage.

Section 59-C-18.152 (a)(1) of the Montgomery County Code states:

“Any development must not result in more than 10 percent impervious surface of the total land area under application for development.

“(A) Any impervious surface lawfully existing pursuant to a building permit issued before July 1, 1997 that exceeds the 10 percent restriction, may continue or be reconstructed under the development standards in effect when the building permit was issued.”

Staff believes that Section 59-C-18.152(a)(1)(A) of the Environmental Overlay Zone applies to this project. That is, for the purposes of reviewing impervious surface coverage, the project should be classified as one that is undergoing reconstruction.

To conform to the Environmental Overlay Zone as a “reconstruction” project, the site imperviousness cannot be increased over what exists today. That is, there cannot be any net gain in impervious surfaces.

With the proposed reconstruction of the driveways, bus loop, and parking lots, MCPS proposes to add 0.21-acre of new impervious surfaces and remove 0.22-acre of existing impervious surfaces. The project results in a slight reduction of impervious surfaces on the entire school site, from 5.15 acres to 5.14 acres (or, 25.8% site imperviousness). Therefore, it conforms to the environmental overlay zone.

Environmental Buffers – A small stream and its buffer lie near and on the southeastern side of the school site. The proposed project area is on the northern side of the school site and is at least 100 feet from the stream and buffer.

Forest Conservation

The proposed project is exempt from forest conservation requirements because it is a modification to existing developed property and there is no forest on the subject site (Section 22A-5(s) of the County Forest Conservation Law).

MCPS proposes to provide tree protection fencing for some of the trees near the project area. None of the trees that are proposed to be removed or protected are large or of specimen size.

Stormwater Management Concept – A surface sand filter is required to provide stormwater management for the project area.

Sediment and Erosion Control

DPS is requiring the use of super silt fences and silt fences around the perimeters of disturbed areas.

Monitoring of Best Management Practices – DPS has determined that this project does not need to conduct any monitoring because the proposed project is relatively small and there is little opportunity for collecting meaningful data.

PUBLIC CONSULTATION

MCPS held a design team meeting on November 3, 2003, which was attended by Mr. Harry Bagley, representing the surrounding Perrywood Civic Association. Their primary concern was to urge that the parking needs of the school continue to be met on site without relying on the public street. They shared MCPS desire that the safety and efficiency of the site be improved.

Planning staff notified local citizens associations, adjoining and confronting property owners, and other interested parties by post card on August 9, 2004 that a mandatory referral application had been submitted and the proposed date of the Planning Board hearing. Staff received one call from a resident on Perrywood Court. The resident told staff that school buses were leaving the pavement on Perrywood Drive to make the left-hand turn into the school bus entrance. This practice left deep tire depressions within the right-of-way, making it difficult for the resident to maintain the grass in that area. Staff showed the resident a copy of the proposed plan which showed that with the reconfigured school bus entrance, buses would make the left-hand turn sooner, thereby having little or no impact on the current affected area of the right-of-way.

CONCLUSION

Based on its analysis, staff believes the proposal is consistent with the Fairland Master Plan, meets the requirements of the R-200 Zone, the Special Protection Area and other applicable environmental and transportation requirements. The Department recommends approval of this Mandatory Referral and transmittal of comments.

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ATTACHMENTS

- A. SPA Combined Preliminary and Final Water Quality Plan memorandum from the Countywide Planning Division dated August 31, 2004.
- B. DPS Preliminary/Final Water Quality Plan approval letter dated August 27, 2004.
- C. Transportation Planning memorandum dated September 2, 2004.
- D. Vicinity Map
- E. Existing Conditions Plan
- F. Proposed Site Plan