



MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

July 16, 2009

MCPB
Item # 15
7/30/09

MEMORANDUM

TO: Montgomery County Planning Board

VIA: John Carter, Chief *JC*
Urban Design Division

FROM: Karen Kumm Morris, Master Planner *KKM*
Urban Design Division

SUBJECT: Mandatory Referral No. 09723-MCPS-01
Whetstone Elementary School Addition
Montgomery Village Gaithersburg Vicinity Master Plan

RECOMMENDATION:

Approval to transmit the following comments to MCPS:

1. Provide 11 street trees along Centerway Road to continue the established line of street trees and show on revised landscape plan.
2. Provide a sidewalk along the school's frontage with Thomas Farm Road in coordination with MCDOT and MCDPS and continue a five foot sidewalk around the school to accommodate convenient pedestrian access.
3. Continue coordination with MCDOT and M-NCPPC to provide an administrative review of the traffic study. If the administrative review finds that the traffic study requires any changes to the proposed site plan, a revised mandatory referral application must be submitted.
4. Coordinate final decisions to preserve four existing trees identified on the Tree Save Plan as #7, #8b, #28 and #29 with M-NCPPC's Inspectors. If these trees cannot be saved, provide four, large caliper replacement trees and revise the Tree Save Plan.

DISCUSSION

Location

The Whetstone Elementary School is located on the northeast corner of Thomas Farm Road and Centerway Road in Montgomery Village (see Aerial Vicinity Map, Attachment A). The existing school is bordered by single family attached residences to the west and north, the Centerway Park to the east and a Montgomery Foundation Recreation Center across Centerway Drive. The school is in the Watkins Mill Cluster.

Project Description

The existing 76,600 SF school on approximately 8.82 acres is to be expanded with a 20,000 SF, two story addition adding nine additional, permanent classrooms to alleviate the need for the mobile classrooms and to provide for an increase in student capacity up to 706 students. The existing school population is 586 students and existing capacity is 489 students. The project also includes innovations to the existing building and expansion of the parking areas, bus drop off and driveway circulation. The vehicular circulation plan includes a new driveway access along Centerway Road (see Existing Conditions, Attachment B and Proposed Site Plan, Attachment C).

ANALYSIS

Conformance with the Gaithersburg Vicinity Master Plan, 1985

The proposed school expansion meets the goals and guidelines of the master plan. The school was built in 1968 and its continued use as a school site was confirmed in the 1985 Master Plan. The 1985 Master Plan does not discuss this particular school site other to state the following goals and guidelines for public facilities:

- Provide community facilities which promote the health, safety and welfare of a variety of users including the elderly, the handicapped, and children.
- Provide conveniently located parks and other facilities for both active and passive recreation to meet the needs and interests of various segments of the community.
- Promote access to recreational opportunities and facilities.
- Provide appropriate facilities to meet the general and specialized educational needs of area residents.

Conformance with Development Standards

The subject site is in the Town Sector Zone, a mixed use zone that was intended to create new town communities such as Montgomery Village and Germantown. The zone's development standards are flexible in order to:

- encourage and facilitate desirable development,
- integrate mutually compatible uses and optimize land planning with greater efficiency, convenience and amenity than the standards permitted by right in conventional zoning categories. Sec. 59-C-7.21

The proposed site plan conforms to the Town Sector Zone as follows:

Development Standards

Item	Required/Allowed	Proposed
Lot Area	8.82 ac (existing)	8.82 ac
Lot Frontage		
Centerway Road		
Thomas Farm Road		
Building SF	76,657 SF (existing)	96,900 SF
Building Coverage	61,887 SF (existing)	72,405 SF (18.85%)
Green Area	NA	NA
Building Height	No height in Zone To be comparable to other zones, Sec. 59-C-7.26	32 feet (2 story)
Parking Spaces	95 existing spaces	100 spaces
Building Setbacks		
From Front Lot Line (Centerway Road)	185 feet (existing)	185 feet
From Thomas Farm Road	80 feet (existing)	80 feet
From Side Yard (adj. to SFA Homes)	43 – 80 feet (existing)	40 feet
From Rear Lot Line	220 feet (existing)	170 feet
Parking Setbacks		
From Front Lot Line	85 feet (existing)	25 feet
From Thomas Farm Road	10 feet (existing)	10 feet
From Side Yard (adj. to SFA Homes)	18 feet (existing)	100 feet

Building Location, Circulation and Compatability

The proposed plan represents a significant improvement over existing conditions for the school by providing permanent classroom space and improving the on-site vehicular circulation. The proposed plan achieves the objectives of the zone in the following ways:

- a. **New Building Location:** The proposed, two story addition is oriented to the side and rear of the school extending from existing internal hallways. The new building's 40 foot setback from the side yard exceeds side yard setbacks found in most other residential zones. The proposed addition will extend further towards the existing community than the existing building setbacks along this side yard. Existing building setbacks range from 43 feet to 80 feet. The elimination of the mobile units is an improvement. See Site Plan, Attachment C.

- b. **Parking and Circulation:** The vehicular circulation of buses and cars is improved by the proposed plan. Buses are given a separate entrance from parking entrances and the student drop off area is expanded reducing congestion in the parking lot. A new entrance along Centerway Road that serves primarily the student drop off area will help reduce congestion at the intersection of Thomas Farm Road. The entrance is aligned with an entrance serving a recreation area managed by the Montgomery Village Foundation.

Pedestrian Circulation: The proposed plan provides for several sidewalk connections along Centerway Road and along the frontage of the school adjacent to the bus and student drop off areas. The new addition also has a perimeter sidewalk shown around the new building. Pedestrian access needs to be provided along Thomas Farm Road to improve safety for students and pedestrians along this street. And, a continuous sidewalk linking various existing sidewalk segments needs to be provided around the school to facilitate convenient access to ball fields and play areas.

Transportation staff has reviewed the proposed traffic study and finds that additional information and coordination is needed. See Transportation Memorandum, Attachment E.

- c. **Outdoor play areas and ball fields:** The existing outdoor play areas are relocated to the rear of the school away from Centerway Road. Approximately the same amount of paved outdoor play space is proposed in the plan as is currently provided. No changes are proposed to the existing ball field other than to overlay a junior soccer field within the existing outfield.
- d. **Landscaping and Lighting:** The proposed plan provides extensive on-site landscaping within the parking areas, along the side yard abutting the single family townhomes, and around the proposed stormwater management facilities. The plan will create an attractive setting for the school. Of particular importance, the landscape treatment along the side yard adjacent to the existing single family townhouses is extensive combining a double row of pines, oaks and maples to create a significant screen of the two story addition. See Landscape Plan, Attachment D.

The frontage of the site along Centerway Road is devoid of street trees even though further west along Centerway Road an established line of street trees exist. It is important to establish the continuity of a tree lined street and plant the front of the school site with street trees. The landscape Plans should be revised to show 11 street trees along the school's street frontage with a note that states: The exact location of the street trees to be determined in the field to fit existing conditions.

Forest Conservation and Tree Save: The subject site is exempt from the Forest Conservation Law, see memorandum from Environmental Planning,

Attachment F. Four existing, mature trees are identified by Environmental staff as potentially affected by the construction and may need to be removed. If this is the case, four replacement trees will be required.

Lighting: The proposed lighting plan indicates new parking lot lighting on 20 foot high poles and new building mounted lighting on the new addition. The lighting plan shows a low level of lighting along the perimeter sidewalk and at the perimeter of the site adjacent to the abutting townhouse residences.

- e. Compatibility: Compatibility with adjacent residences is achieved by the combination of building setback of the new addition and the extensive tree plantings that will screen views of the building. The proposed addition will be heavily screened by double row of trees, a combination of evergreen screening and shade trees. The active outdoor areas of the school are oriented away from the existing community and blocked by the new addition. Building lighting is directed down away from the community.

CONCLUSION

The proposed building addition and redesign of the parking lot and vehicular circulation represent improvements to the existing school. Compatibility with adjacent residences is carefully addressed with the building location and landscape proposals. MCPS staff should continue to work with staff to address the comments raised in this memorandum.

Attachments:

- A. Aerial Vicinity Map
- B. Existing Conditions
- C. Proposed Site Plan
- D. Proposed Landscape Plan
- E. Transportation Division Memorandum
- F. Environmental Planning Division Memorandum
- G. Elevations
- H. Elevations

M:Kumm/MandatoryReferrals/Whetstone ES/MCPB Whetstone

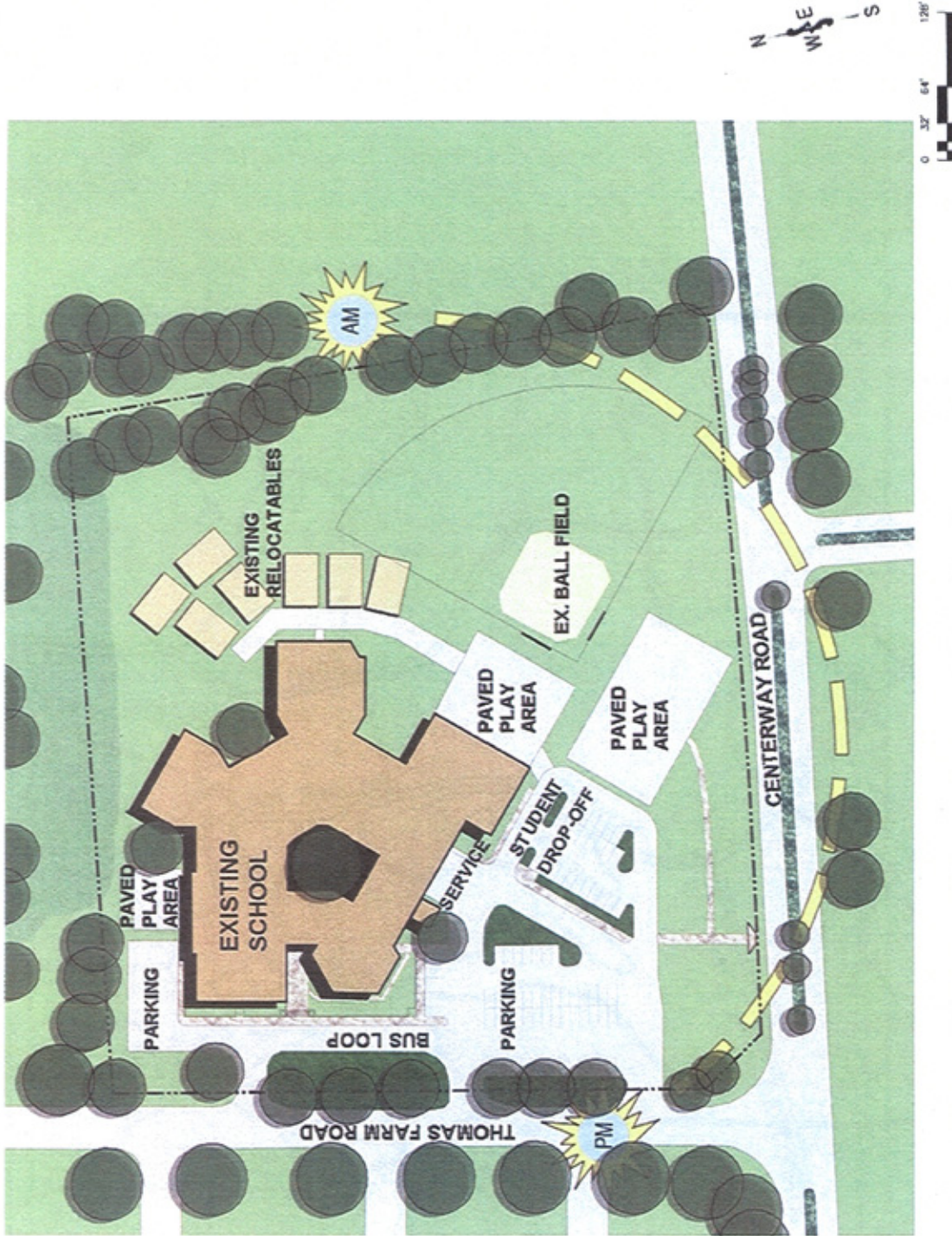
Whetstone Elementary School



Attachment A
Aerial Vicinity Map

Attachment B Existing Conditions

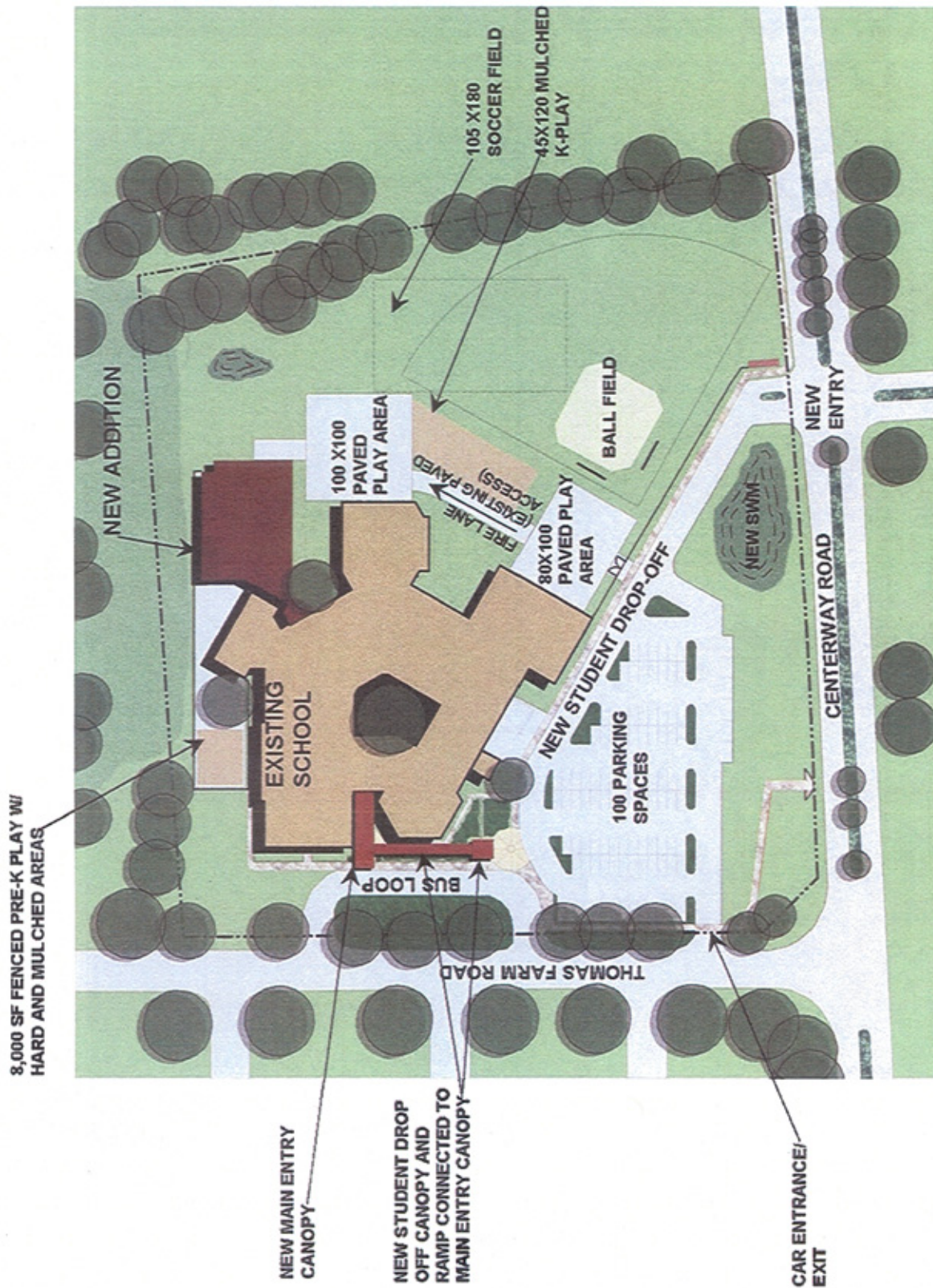
Existing Site Plan



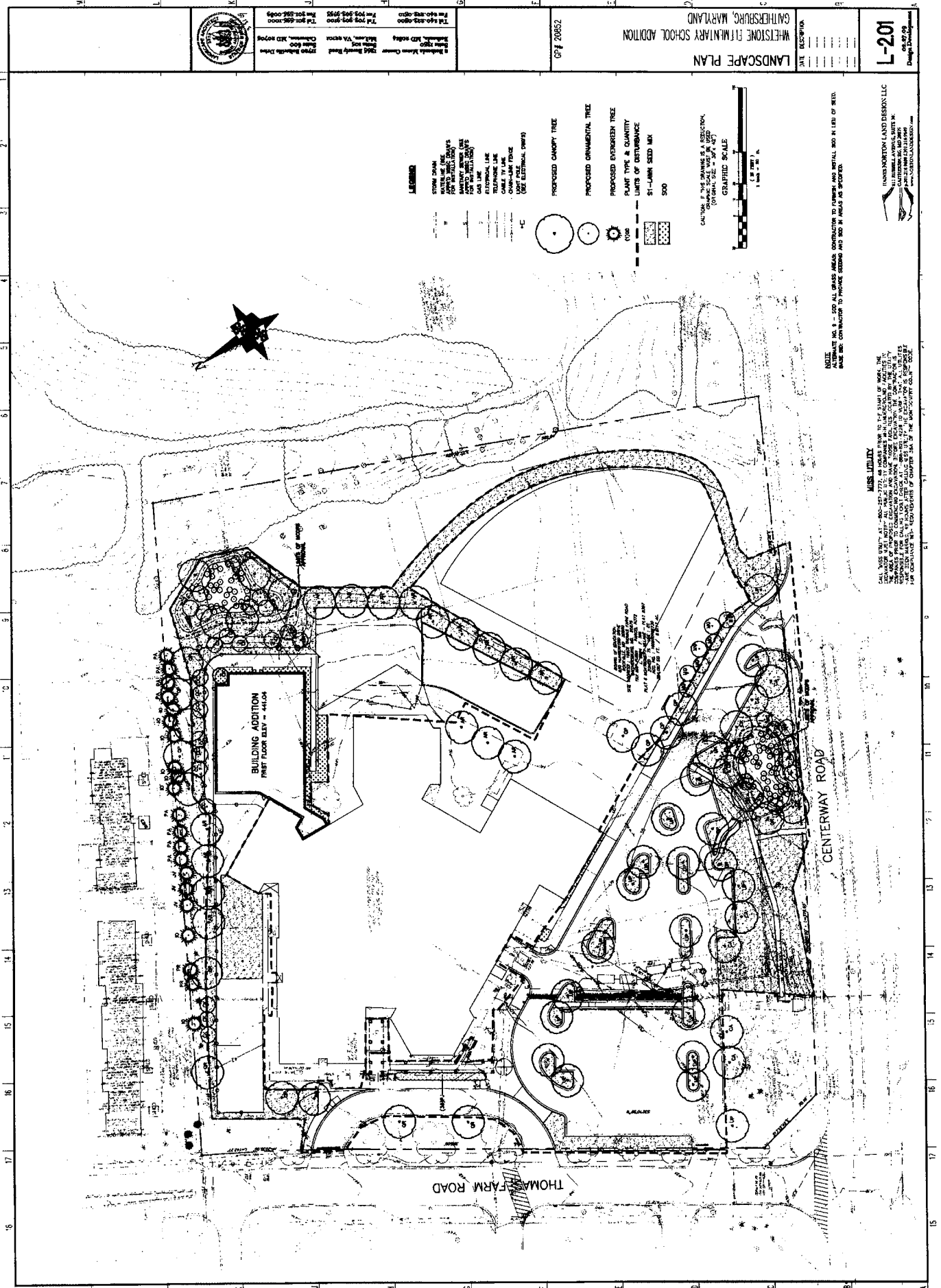
Whetstone Elementary School
Grimm + Parker Architects

Attachment C Proposed Site Plan

Proposed Site Plan



Attachment D Proposed Landscape Plan





Attachment E Transportation Division Memorandum
MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

July 15, 2009

JUL 15 2009

MEMORANDUM

TO: Karen Kumm Morris
Vision/Community-Based Planning Division

VIA: Shahriar Etemadi, Supervisor
Move/Transportation Planning Division

FROM: Cherian Eapen, Planner/Coordinator
Move/Transportation Planning Division
301-495-4525

SUBJECT: Mandatory Referral 09723-MCPS-01
Proposed Classroom Addition Project
Whetstone Elementary School
Montgomery County Public Schools
19201 Thomas Farm Road
Montgomery Village/Airpark Policy Area

DKH fr

CE

This memorandum presents Transportation Planning staff's review of the subject mandatory referral for Whetstone Elementary School classroom addition project. The school is located at 19201 Thomas Farm Road in Montgomery Village, within the Montgomery Village/Airpark Policy Area.

RECOMMENDATIONS

We have completed our review of the materials submitted for the subject mandatory referral and recommend that the Planning Board transmit the following comments to Montgomery County Public Schools (MCPS):

1. Any mandatory referral submission for future improvements at the school by MCPS must include a traffic study for Adequate Public Facilities (APF) purposes if those improvements at the school will result in a student core capacity that is greater than 740 students.
2. MCPS must coordinate with DOT to construct the missing segment of sidewalk along Thomas Farm Road (along school frontage, between Centerway Road and north school driveway). MCPS, in coordination with DOT, must also assess the need and provide

adequate crosswalks along Thomas Farm Road at student crossing points and at the intersection of Centerway Road and Thomas Farm Road.

3. MCPS must manage parent drop-off/pick-up of students entirely within the school property and must discourage any drop-off/pick-up of students along Centerway Road, Thomas Farm Road, and other neighboring streets.

A traffic study was required for the mandatory referral since the school generated **30** or more total peak-hour trips during the typical weekday morning (6:30 a.m. – 9:30 a.m.) and evening (4:00 p.m. – 7:00 p.m.) peak periods. The traffic study dated July 2, 2009, prepared for the classroom addition project was forwarded to both Maryland State Highway Administration (SHA) and Montgomery County Department of Transportation (DOT) on July 6, 2009, for their review and comments. Since comments on the traffic study from SHA and DOT are still pending, we recommend that the following additional comment be incorporated into Planning Board's comments to MCPS regarding this mandatory referral's APF test:

- Continue to coordinate with M-NCPPC, SHA, and DOT staff on an administrative review of the traffic study. If the administrative review confirms that additional changes to site design and/or offsite improvements based on the increase in core capacity at the school are not needed, then this mandatory referral will be completed by a staff memo to that effect with a copy provided to Planning Board members. However, if the administrative review results in new technical comments by SHA and/or DOT staff, then MCPS must resubmit a revised mandatory referral application for the school reflecting those changes.

DISCUSSION

School Location, Existing Area Roadway/Pedestrian Facilities, Public Transit, and Land Uses

Whetstone Elementary School is located within the northeast corner of Centerway Road and Thomas Farm Road in Montgomery Village, approximately at the Centerway Road midpoint between Goshen Road to the east and Montgomery Village Avenue to the west. At the Centerway Road/Thomas Farm Road intersection, the southbound Thomas Farm Road approach to the intersection is controlled by a STOP sign.

Between Goshen Road and Montgomery Village Avenue, Centerway Road is a four-lane divided arterial. Within this section, the roadway has a sidewalk along its north side (i.e., the school side). The western end of Centerway Road between Club House Road and Montgomery Village Avenue has a sidewalk along the south side of the roadway as well. The residential community to the south side of Centerway Road (to the south of the school) is connected to the school via a pedestrian underpass (under Centerway Road). Thomas Farm Road is a two-lane secondary residential street to the north of Centerway Road that currently provides sole access to a residential community and to the school. The roadway has a sidewalk along its west side. On the east side (i.e., the school side), there is no sidewalk along Thomas Farm Road between Centerway Road and the north school driveway. Near the north school driveway, a lead-in sidewalk is provided to the school from Thomas Farm Road. Staff therefore recommends that MCPS coordinate with DOT to construct the missing segment of sidewalk along Thomas Farm

Road school frontage (between the north school driveway and Centerway Road) as part of this mandatory referral and complete the area sidewalk network. MCPS, in coordination with DOT, must also assess the need and provide adequate crosswalks along Thomas Farm Road at student crossing points and at the intersection of Centerway Road and Thomas Farm Road.

Centerway Road is served by RideOn Route 60 bus, which runs between Montgomery Village Center and Shady Grove Station via Flower Hill. Additional RideOn buses that serve the general area include Routes 58, 59, and 65 (along Montgomery Village Avenue) and Route 64 (along Montgomery Village Avenue and Goshen Road).

Land use in the immediate vicinity of the school is primarily residential. The area near the western end of Centerway Road at Montgomery Village Avenue consists of a neighborhood retail/shopping center (Montgomery Village Center) and medical office buildings. The Centerway Park is located to the east, adjacent to the school.

School Hours of Operation, Access, and Parking

Whetstone Elementary School is open between 8:50 a.m. and 3:05 p.m. The school, oriented to Thomas Farm Road, currently has access from Thomas Farm Road via three driveways, all located to the front of the school. These include a two-way south driveway that provide in/out access to the parent drop-off/pick-up loop and the visitor/staff parking lot, a center bus entrance driveway, and a north bus exit driveway (that doubles up as in/out access to a small north parking lot). School buses enter the school via the center driveway and circulate on-site in a counter-clockwise direction to drop-off/pick-up students in front of the school and exit the school via the north driveway.

The existing school access scheme is proposed to be revised as part of this mandatory referral. The new access scheme, as proposed, will separate the bus drop-off/pick-up area in front of the school from the new parent drop-off/pick-up area. The plan will also expand the school parking lot and will create a longer parent drop-off/pick-up loop to the south of the school building. The mandatory referral also proposes a new school access driveway to Centerway Road from the expanded parking lot (across from Brooke Grove Court). It is noted that the expanded parking lot and the new parent drop-off/pick-up loop will continue to have access to Thomas Farm Road via the south driveway.

The proposed access and circulation improvements will improve the ability of buses and parent vehicles to queue and stack on-site and will improve student safety. The new access scheme is a significant improvement since the proposed new driveway across from Brooke Grove Court, the expanded parking lot, and the internal circulation driveways provide a much longer on-site queuing area (especially for cars waiting to pick-up kids in the afternoon) compared to existing conditions. The new plan provide additional in/out ingress/egress options as well.

Parking at the school is provided primarily to the south of the school building. A small parking lot is also provided to the north of the school building. A total of 86 parking spaces, including two handicapped spaces are currently provided at the school. A total of 100 parking

spaces, including four handicapped spaces will be provided at the school. All parking will be located to the south of the school building.

School Enrollment and Capacity

Whetstone Elementary School during 2008-2009 had an enrollment of approximately 586 students, which is projected to increase to a maximum of 665 students in 2014-15 (as estimated in the FY 2009-2014 MCPS CIP). The school currently has program capacity for approximately 489 students.

To address current overcrowding and future student enrollment increases anticipated at the school, MCPS is planning to eliminate portable classrooms at the school, and add 10 permanent classrooms at the school. The classroom addition project thus will increase school's program capacity from 489 students to 706 students, sufficient to meet the projected enrollment demands. It is noted that the traffic study completed for this mandatory referral examines an enrollment of up to 740 students, identified as the core capacity for the school. The mandatory referral traffic study thus considers a future enrollment increase of 154 students at the school.

Master Plan Roadway/Bikeway Facilities

The Amended 1990 Approved and Adopted *Gaithersburg Vicinity Master Plan* describes the following nearby master-planned roadway/bikeway facilities:

- Centerway Road, as a four-lane arterial (A-275) with a recommended minimum right-of-way width of 80-feet, between Snouffer School Road to the east and Montgomery Village Avenue to the west.
- Montgomery Village Avenue, as a four- to six-lane major highway (M-24) with a recommended minimum right-of-way width of 120-150 feet, between Darnestown Road to the southwest and 500 feet north of Club House Road to the north, and as a four-lane arterial (A-295) with a recommended minimum right-of-way width of 80-feet between 500 feet north of Club House Road to the south and Wightman Road to the north.
- Goshen Road, as a four-lane major highway (M-25) with a recommended minimum right-of-way width of 120 feet, between Oden'hal Avenue to the south and Warfield Road to the north. A dual bikeway (DB-29) is also recommended for Goshen Road within the above roadway limits.

Adequate Public Facilities Review

A traffic study was required for the subject mandatory referral since the school generated **30** or more total peak-hour trips during the typical weekday morning (6:30 a.m. – 9:30 a.m.) and evening (4:00 p.m. – 7:00 p.m.) peak periods. Staff review of the above traffic study indicated that the study complied with the requirements of the *LATR/PAMR Guidelines* and the traffic study scope provided by the staff.

The consultant for the applicant submitted a traffic study that presented traffic-related impacts of the school with core capacity for 740 students (an additional 154 students over current enrollment of 586 students) during the weekday morning and afternoon peak-periods. Based on trip generation data collected at the existing school, the study estimated that an increase in school enrollment to a maximum of 740 students would generate 90 peak-hour trips during the morning peak period and 46 peak-hour trips during the evening peak period. The trip generation data for the school is summarized in Table 1.

TABLE 1
SUMMARY OF TRIP GENERATION
WHETSTONE ELEMENTARY SCHOOL CLASSROOM ADDITION PROJECT

Trip Generation	Morning School Peak-Hour			Evening School Peak-Hour		
	In	Out	Total	In	Out	Total
Trip Generation – Current Enrollment (586 students)	195	146	341	80	94	174
Per Student Trip Rate	0.33	0.25	0.58	0.14	0.16	0.30
Trip Increase (154 students)	51	39	90	21	25	46
Trip Generation - Future Enrollment (740 students)	246	185	431	101	119	220

Source: Whetstone Elementary School LATR and PAMR Study. The Traffic Group, Inc., July 2, 2009.

- Local Area Transportation Review

A summary of the capacity/Critical Lane Volume (CLV) analysis results for the study intersections for the weekday morning and afternoon peak-hours as presented in the traffic study is provided in Table 2. As shown in Table 2, the capacity analysis presented in the traffic study indicated that under Total Traffic (i.e., Build) Conditions, CLV at the study intersections would be below the applicable congestion standard for the Montgomery Village/Airpark Policy Area (1,425 CLV). The mandatory referral therefore satisfies the LATR requirements of the APF test.

- Policy Area Mobility Review

To satisfy the PAMR requirements of the APF test, the Montgomery Village/Airpark Policy Area requires mitigation of five percent (5%) of new trips generated by a use.

Trip generation data collected at the school as part of the traffic study indicated that the per student trip rate at the school is approximately 37 percent lower than the per student trip rate for private schools with Grades K through 8 included in the *LATR/PAMR Guidelines*. Staff therefore finds MCPS to be achieving trip mitigation at the school that is well above the mitigation requirement for the policy area. The mandatory referral therefore satisfies the PAMR requirements of the APF test.

TABLE 2
SUMMARY OF CAPACITY CALCULATIONS
WHETSTONE ELEMENTARY SCHOOL CLASSROOM ADDITION PROJECT

Intersection	Traffic Conditions					
	Existing		Background		Total	
	AM	PM	AM	PM	AM	PM
Montgomery Village Ave/Club House Rd	826	613	834	627	843	632
Montgomery Village Ave/Centerway Rd	792	735	820	836	823	846
Centerway Rd/Thomas Farm Rd	528	418	425	428	468	451
Centerway Rd/Goshen Rd	1,152	799	1,205	946	1,216	950
School South Dr/Kanfer Ct (South)	352	296	195	218	240	240
School Center Dr/Kanfer Ct (North)	139	142	127	138	133	142
School North Dr/Thomas Farm Rd	133	131	126	125	132	129
Proposed New School Dr/Centerway Rd/ Brooke Grove Ct	--	--	--	--	360	388

Source: Whetstone Elementary School LATR and PAMR Study. The Traffic Group, Inc., July 2, 2009.

Note: Based on morning and evening school peak-hours of 8:00 a.m. – 9:00 a.m. and 2:30 p.m. – 3:30 p.m.

Congestion Standard for Montgomery Village/Airpark Policy Area: 1,425 CLV

SE:CE:tc

cc: Sue Edwards
Dennis Cross
Carl Wilson
Ed Axler
Greg Leck
Sarah Navid
Jean Gries
Corren Giles

mmo to KK re WES 09723-MCPS-01.doc

Attachment F Environmental Planning Division Memorandum



MONTGOMERY COUNTY PLANNING DEPARTMENT THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MEMORANDUM

TO: Karen Kumm-Morris, Urban Design Division

VIA: Stephen Federline, Environmental Planning

FROM: Amy Lindsey, Environmental Planning

DATE: July 13, 2009

SUBJECT: Mandatory Referral No. 09723-MCPS-01
Whetstone Elementary School

RECOMMENDATION:

Environmental Planning staff recommends transmittal of the Mandatory Referral with the following comments:

1. Final decisions about the retention of trees #7 (36" sawtooth oak), #8B (38" silver maple), #28 (14" and 31" white pine), and #29 (32" red maple) will be made in the field with Arborist and MNCPPC Inspector in attendance as part of the pre-construction meeting. If these trees cannot be retained, large caliper specimen trees (DBH \geq 6") should be planted as replacements.

BACKGROUND

Whetstone Elementary School is an 8.82-acre existing school located in Montgomery Village/Gaithersburg at the intersection of Centerway Road and Thomas Farm Road. There is 0.27 acres of forest onsite and approximately 20 large and specimen trees. There are no streams, wetlands or floodplains on the subject property, nor any environmental buffer. The property is within the Cabin Branch watershed: a Use Class I/I-P watershed. The Montgomery County Public Schools' (MCPS) proposed plan is to build an addition, rearrange play areas, and reconfigure parking and student drop-off circulation.

DISCUSSION

Environmental Guidelines

The applicant received approval of Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) # 420090830 on January 2, 2009. There are some areas of steep slopes but no other sensitive environmental features.

Forest Conservation

Chapter 22A- the Montgomery County Forest Conservation Law – is applicable to this property. However, the property is exempt from the requirements of submitting a Forest Conservation Plan per Exemption #42009157E approved on April 17, 2009. A Tree Save Plan was submitted at time of Mandatory Referral.

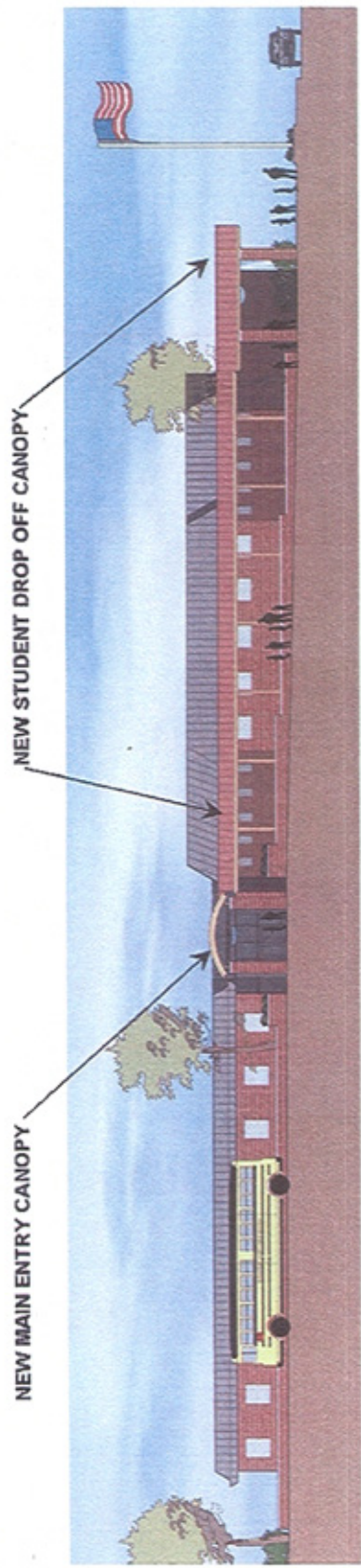
Tree Save

There are 13 specimen trees ($\geq 30''$ DBH or by species) and 6 large trees ($\geq 24''$ DBH), potentially affected by the proposed construction. As part of the construction of the addition and associated facilities, 1 specimen trees and 2 large trees will be removed. However, a number of trees will be significantly impacted by the proposed disturbance and may need to be removed. For example, tree #29 is a 32'' red maple at the front door of the school. While the tree is already significantly impacted by current development, the proposed development will leave this tree with less than 5% of the critical root zone intact. Trees #7, 8B, and 28 are similarly impacted. These trees have been evaluated by an arborist and MCPS has planned on retaining these trees. However, this may not be possible, dependant on detailed field conditions. MNCPPC inspection staff will make removal and retention decisions about these trees after field examinations. All other trees on adjacent residential property will be adequately protected from damage associated with the proposed development.

Green Building

This project is not required to comply with County Council Bill 17-06, Montgomery County Green Buildings Law, as the addition does not increase the current building's land coverage by 100% or more.

Elevations

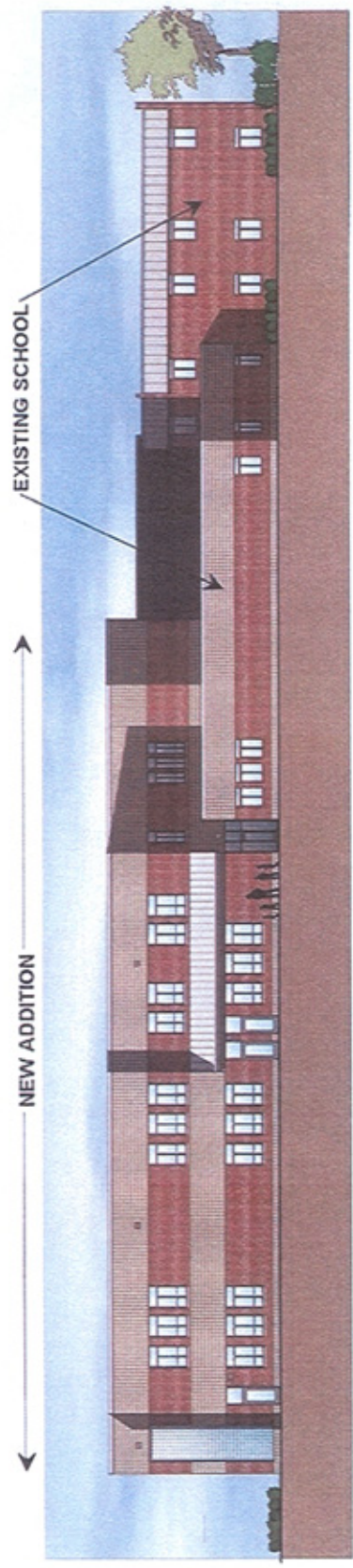


Main School Entrance Canopy Elevation



Centerway Road Entrance Canopy Elevation

Elevations



New Addition North Elevation

Attachment H Elevations



New Addition West Elevation