

MCPB Item No. 10 Date: 09-22-11

Georgian Forest Elementary School Addition, Mandatory Referral, MR2012002

Carlton W. Gilbert, Planner Coordinator, <u>Carlton.gilbert@montgomeryplanning.org</u>, 301-495-4576 Khalid Afzal, Acting Chief, Area 2 Planning Division, <u>Khalid.afzal@montgomeryplanning.org</u>, 301-495-4650

description

- 3100 Regina Drive, Silver Spring, MD
- R-90 zone, 11.03 acres, 1989 Master Plan for the Communities of Kensington-Wheaton
- A two-story addition to accommodate current and projected enrollment, and to modernize the layout of the school interior to allow for enhanced educational programs.



summary

Staff recommends **approval** to transmit the following comments to the Montgomery County Public Schools (MCPS):

- The applicant must obtain a final stormwater management approval from the Department of Permitting Services.
- Provide adequate signage in order to maintain consistent traffic flow between school buses and vehicular traffic into the school site.

Site Description

The Montgomery County Public Schools (MCPS) proposes to construct a two-story addition to the existing Georgian Forest Elementary School to replace approximately ten (10) portable classrooms. Additionally, the project will consist of a relatively minor suite addition and reconfiguration of the site access to provide a more effective vehicular circulation, and separate drop-off/pick-up areas for school bus and vehicular traffic.

The existing school property is approximately 11.03 acres with relatively steep grades sloping west to east at the front of the property and between the existing school building and play areas. The property, located in the Strathmore at Bel Pre subdivision, is bounded to the west by Regina Drive, to the north and east by single-family residential homes that front on Regina Drive; and to the west and south by single-family homes that front on Rippling Brook Drive and Rippling Brook Court. It has sixty-one (61) parking spaces and a shared school bus loop at the front of the school along Regina Drive that accommodates approximately eight (8) buses. According to the applicant, the existing shared entrances between school bus traffic and vehicular traffic results in long queues of cars along Regina Drive and insufficient parking spaces.

The school is surrounded by mature trees that screen the adjacent single-family residential homes from view. The mature trees along the property lines will be retained and supplemented with additional landscape plantings to enhance the screening to the existing houses.

Existing access to the School is provided via two (2) entrance/exit access points that are located along Regina Drive, west of the main school buildings. The southern provides access to the staff/visitor parking lot, as well as the bus loop exit. The northern access point provides access to the staff parking lot, the bus loop, and the designated student drop-off/pick-up area.

Proposed Use

The proposed expansion to the main school building will accommodate the students currently in portable classrooms and update the layout of the school interior to allow for enhanced educational programs. The new facility will provide program spaces for Kindergarten and Grades 1 through 5. The project will increase school capacity from approximately 503 students to 640 students to meet the school's existing and projected enrollment needs.

The proposed addition includes the construction of a new two-story, 23,281-square foot addition and the construction of a new Linkages to Learning (LTL), suite of approximately 2, 420 square feet for a total of 25, 701 square feet. The two-story "L" shaped addition will be located in the northeast corner of the existing building and will be setback substantially from the adjacent residential neighborhoods. The lower level will consist of classrooms for head start and pre-kindergarten, and specialty classes (i.e., art, general music, and instrumental music). The upper level will consist of standard classrooms, administrative offices, support spaces and student bathrooms. A two-level, enclosed court yard will feature a teaching green roof on the upper level. The proposed LTL suite will be located at the southeast side of the existing building adjacent to the parking area.

The proposed addition will be complementary to the existing building. According to the applicant, the existing building is approximately 25 feet high and the new addition approximately 32 feet high. In both

cases, the height is from the lowest floor to the highest point of the roof. Visual impact of the two-story addition will be minimized due to the building being built into the side of a steep hill.

The proposal also includes a separate entrance to the parent drop off loop and staff parking lot and a separate entrance to the bus loop. This would allow for the separation of bus, pedestrian, and automobile traffic on site. The on-site sidewalk system will be connected to the existing neighborhood sidewalk and provide safe routes for pedestrians. The proposed project adds eleven (11) parking spaces to the existing sixty-one (61) for a total of seventy-two (72) spaces. Bike racks will also be provided on the site.

Lighting and Landscape

New building- mounted and parking lot lights are proposed. The submitted lighting plan illustrates that all the new lights will not impact adjacent residential properties. The proposed fixtures have been located so that a maximum light intensity of 0.1 footcandles does not extend from the school property. On-site landscaping improvements will provide additional canopy cover and shrubs. These improvements create an attractive setting for the school and the neighborhood.

Master Plan

The Georgian Forest Elementary School is located within the 1989 *Approved and Adopted Master Plan for the Communities of Kensington-Wheaton*. The master plan does not make any specific recommendations for the Georgian Forest Elementary School. The proposed project is consistent with the master plan goals and objectives of providing adequate and enhanced educational facilities.

Transportation

Area 2 transportation planning staff reviewed the materials submitted for the subject mandatory referral and recommend approval to transmit the following comments to the Montgomery County Public Schools (MCPS):

Any mandatory referral submission for future improvements at the subject school must include a traffic study, as required by Mandatory Referral standards, if those improvements will increase the school's capacity beyond 640 students.

Discussion

With the existing shared entrance for school buses and student drop-off/pick-up, long queues of passenger cars spill-over onto Regina Drive. Despite the long queues, all motorists were observed using the student on-site drop-off/pick-up loop and not being dropped-off and picked-up along Regina Drive in front of the school.

MCPS proposes to improve the vehicular circulation by separating the different types to vehicular movements. Below are the proposed vehicular access points from Regina Drive:

1. Southern Driveway #1: Will function as only the entry/exit point to/from the student dropoff/pick-up loop and the main south side parking area.

2. Northern Driveway #2: Will continue to function as the exit from the bus loop and the entry/exit point to/from the north side parking area.

3. Proposed New Middle Driveway #3: Will be a new entry point for the bus loop.

Eight school buses can be queued on the existing and proposed bus loop although a maximum of 4 buses are scheduled to arrive or leave at any one time.

On-Site Parking

The proposed project will increase the existing 61 parking spaces to 72.

Public Transit Service

Transit service is not available along Regina Drive. Along nearby Georgia Avenue, the transit serve is provided via the following -- Metrobus routes Y-5, Y-7, Y-8, & Y-9 and Ride-On routes 51 & 53.

Pedestrian and Bicycle Facilities

The number of students walking and bicycling to and from the school was observed to be only 5 (1% of the total number arriving and leaving the school). Part of the reason for this small number could be that 4-foot wide sidewalks exist along Regina Drive only in the front of the school. A 5-foot wide lead-in sidewalk and a marked crosswalk across Regina Drive exist at the northern driveway. An existing 4-foot wide path connects the school's front to Rippling Brook Drive, parallel to Regina Drive. Unlike Regina Drive, Rippling Brook Drive does have 4-foot wide sidewalks on both sides of the street. A marked crosswalk exists at the path's terminus to cross to the opposite side of Rippling Brook Drive. MCPS proposed to add the following pedestrian facilities:

- 1. A second 5-foot lead-in sidewalk from the existing sidewalk along Regina Drive into the southern parking area.
- 2. Handicapped ramps along existing sidewalk in front of the school's property.
- 3. Designated internal 5-foot wide pedestrian paths with handicapped ramps through the student drop-off/pick-up loop.

The proposed project will provide six bike racks in the southeastern corner of the school between the bus loop and student drop-off/pick-up loop.

Adequate Public Facilities Review

The table below shows the number of total peak-hour trips generated by the proposed increased capacity from 503 to 640 students during the school's morning peak hour within the weekday morning peak period (6:30 to 9:30 a.m.) and its afternoon peak hour (3:15 to 4:15 p.m.). The school's afternoon peak hour ends at the start of the standard weekday evening peak period between 4:00 and 7:00 p.m. The table below shows the trips generated by the proposed school addition based on actual vehicular trips collected at the existing elementary school driveways:

Number of Students		Morning Peak-Hour			School's Afternoon Peak-Hour		
		In	Out	Total	In	Out	Total
Existing Enrollment	503	129	103	232	57	85	142
5		0.27	0.22	0.49	0.13	0.19	0.32
Proposed Capacity	640	173	141	314	83	122	205
Net Increase	+137	44	38	82	26	37	63

Total vehicular trips include pass-by and diverted trips by parents dropping-off and picking-up their children, but are already on the road and traveling on their way to and from other origins or destinations.

A traffic study was required to satisfy the Local Area Transportation Review (LATR) test because the proposed school addition generates 30 or more total peak-hour trips during the weekday morning peak period.

Based on the results of the traffic study, the capacity/Critical Lane Volume (CLV) analysis at the studied intersections is shown in the table below for the existing and total future traffic conditions. A background traffic condition was not analyzed because there was no unbuilt, but approved (i.e., background developments) in the vicinity of the studied area.

	Traffic Condition			
Studied Intersection	Existing		Total Future	
	AM	PM	AM	PM
Georgia Avenue & Regina Drive	723	667	746	693
Georgia Avenue & Rippling Brook Drive	800	684	807	690
Regina Drive & Southern Driveway #1	238*	163*	92*	101*
Regina Drive & Northern Driveway #2	86	95	103	111
Regina Drive & Middle Driveway #3	(Not Existing)		301	204

*The CLV values in the total future traffic condition are less than those in the existing traffic condition because driveway #1 would no longer be access to the bus loop and the north side parking area.

The CLV values for the studied intersections are less than the applicable congestion standard of 1,600 for the Kensington/Wheaton Policy Area. Thus, the proposed school addition satisfies the LATR requirement of the APF test.

Policy Area Mobility Review

To satisfy the Policy Area Mobility Review (PAMR) requirement of an APF test, developments located in the Kensington/Wheaton Policy Area are required to mitigate 10% of new peak-hour trips generated by their proposed land use(s).

The projected trip generation rate during the morning peak hour is 0.49 trips per student based on actual driveway counts. The morning trip generation rate for a private school with grades K to 8 in the *Local Area Transportation Review/Policy Area Mobility Review Guidelines* is 0.92 peak-hour trips per student. Thus, the proposed school addition would generate 0.43 fewer peak-hour trips per student, which is equal to a 47% trip reduction and more than the required 10% PAMR mitigation.

The students arriving and leaving by school bus was observed to be between 83% and 86% during the morning peak hour and the afternoon peak hour, respectively. Thus, most of the trip reduction can be achieved by continuing to bus the students. Therefore, the proposed school addition satisfies the PAMR requirement of the APF test.

Environment

Staff approved a Natural Resource Inventory/Forest Stand Delineation (NRI/FSD #420110400) on December 8, 2010. The 11.03-acre site contains 3.41 acres of forest but no streams, wetlands, or environmental buffers. The property is within the Lower Rock Creek (Use I) and Northwest Branch (Use IV) watershed. The proposed project does not have any activities planned within any streams, wetlands or environmental buffers and is in compliance with the *Environmental Guidelines*.

This property is subject to Chapter 22A (Forest Conservation Law) of the Montgomery County Code. However, the proposed development is exempt from the requirements of submitting a Forest Conservation Plan per NRI/FSD #42012033e, approved on September 6, 2011. The proposed development meets the criteria of Section 22A-5(t), *modification to an existing developed property*, because;

- 1. The modification will not remove move than 5,000 square feet of forest;
- 2. The modification does not affect any forest in a stream buffer or located on property in a special protection area which must submit a water quality plan and;
- 3. The modification does not require approval of a new subdivision plan.

The proposed addition and transportation improvements will require the removal of 1,630 square feet of forest. Forest loss has been minimized by the use of retaining walls to minimize the area disturbed.

While this project does not need to comply with County Council Bill 17-06, Montgomery Green Buildings Law, there are a number of design features that work towards the County's goal of creating sustainable communities. For example, the proposed project includes light monitors, solar tubes, and large storefront windows with sunshades and light shelves that promote day lighting, which reduces energy consumption and promote learning. The addition will have a vegetated roof, which serves as a stormwater management feature, reduces heat island effect and particulate matter in the air, and reduces energy consumption by serving as additional insulation. A 1,200 gallon metal rainwater cistern will be located in the courtyard, to store rainwater for reuse. Also, the parking area incorporates permeable paving, increasing water infiltration and reducing the amount of stormwater management facilities needed.

A stormwater management concept plan has been approved by the Department of Permitting Services (DPS). (See Attached Letter)

Community Outreach

Staff notified via mail local citizen associations, adjoining and nearby property owners, and other interested parties of the submittal and invited comments. To date, staff has not received any comments or requests for this proposal.

Conclusion

Staff recommends transmittal of the proposed mandatory referral with the comments noted at the beginning of the staff report.

List of Attachments

- 1. Vicinity Map
- 2. Existing Site Plan
- 3. Mandatory Referral Site Plan
- 4. Perspective Views of Proposed Addition
- 5. Proposed Elevations
- 6. Landscape Plan
- 7. SWM Concept Approval Letter

Vicinity Map



Georgian Forest Elementary School – Addition Hord Coplan Macht, Inc.

Existing Site Plan



Georgian Forest Elementary School – Addition Hord Coplan Macht, Inc.

	LEGEND concrete sidewalk		EXISTING AND PI BUILDING FOOTPRIN
			EXISTING BUILDING
	CONCRETE PAVEMENT		MAIN ADDITION
	NEW BUILDING		LTL SUITE NET INCREASE
	PROPOSED CANOPY		(MAIN ADDITION + LTL)
	NEW ASPHALT PAVIN (PARKING/DRIVEWAY)		
	BASKETBALL POLE		EXISTING AND PROPOSED PA SPACE SUMMARY
			EXISTING PARKING LOT PROPOSED PARKING LOT
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R-90	MIN	PROVIDED	
REAR	25'	205'	
FRONT	30'	155'	
SIDE	8'	155'	
SUM OF SIDES	25'	485'	





Georgian Forest Elementary School - Addition Hord Coplan Macht, Inc.







DEPARTMENT OF PERMITTING SERVICES

Isiah Leggett County Executive

July 29, 2011

Greg Fox, P.E. A. Morton Thomas & Associates, Inc. 12750 Twinbrook Parkway, Suite 200 Rockville, Maryland 20852

Re: Stormwater Management *CONCEPT* Request for Georgian Forest Elementary School SM File #: 240026 Tract Size/Zone: 11.03 Ac. / R-90 Total Concept Area: 2.51 Ac. Parcels: P106 & P28 Watershed: Lower Rock Creek

· · · /33 03 2011

Carla Reid

Director

Dear Mr. Fox:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is **acceptable**. The stormwater management concept proposes to meet required stormwater management goals via 3 micro-bioretention facilities, permeable pavement and a green roof.

The following **conditions** will need to be addressed **during** the detailed sediment control/stormwater management plan stage:

- 1. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
- 2. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
- 3. An engineered sediment control plan must be submitted for this development.
- 4. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.
- Landscaping shown on the approved Landscape Plan as part of the approved Site Plan are for illustrative purpose only and may be changed at the time of detailed plan review of the Sediment Control/Storm Water Management plans by the Mont. Co. Department of Permitting Services, Water Resources Section.
- 6. An asbuilt drawing is required for the existing on-site stormwater management facilities. Any discrepancies from the original approved design drawings shall be addressed during the asbuilt review process for this project.

This list may not be all-inclusive and may change based on available information at the time.

255 Rockville Pike, 2nd Floor • Rockville, Maryland 20850 • 240-777-6300 • 240-777-6256 TTY www.montgomerycountymd.gov



Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is not required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Mike Geier at 240-777-6342.

Sinceret

Richard R. Brush, Manager Water Resources Section Division of Land Development Services

RRB: tla CN240026 Georgian Forest Elem.mjg.doc

cc: C. Conlon SM File # 240026

ESD Acres:	2.5
STRUCTURAL Acres:	0
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