

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

MEMORANDUM

TO: Sue Edwards, Team Leader I 270 Corridor

VIA: Tanya Schmieler, Park Planning Supervisor

SUBJECT: NW Elementary School #7 Mandatory Referral

DATE: July 1 2004

Park Planning and Resource Analysis staff has reviewed the NW Elementary School #7 Mandatory Referral. Staff recommends **approval** with the following comments:

- 1. The existing soccer field and playground will be permitted and maintained by M-NCPPC until Sunday November 21, 2004 and turned over to Montgomery County Public Schools (MCPS) control on Monday November 22, 2004.
- 2. MCPS consider minor revamping of the existing play equipment targeting preschool children when building the new school playground for elementary school children.
- 3. MCPS will accommodate, and play an active planning role in any future trail connection between the NW Elementary School #7 and South Gunners Branch Local Park

Soccer Field

The soccer field and playground on the NW Elementary School #7 Site were constructed by MNCPPC sometime in the 1980's. The goal was to utilize vacant Montgomery County Public Schools (MCPS) sites with needed recreation facilities and place them outside the footprint of an eventual elementary school. At such time when the site was recalled and the school subsequently constructed, the recreation facilities would revert to the school and become part of the school inventory.

Cessation of maintenance and permitting by MNCPPC and reversion to MCPS should occur concurrently to cause the least disruption to the ballfield customers and adjoining neighbors. The soccer field is currently permitted and maintained by MNCPPC and it is desired that the current arrangement continue until Sunday November 21, 2004. This date

will allow for one more full fall soccer season in an area with field shortages, and provide for 3 full weekends in November to cover any rainouts or playoffs. In addition, maintenance by MNCPPC to the November date will prove grass cutting continuity throughout the growing season. On Monday November 22, 2004 operations and maintenance responsibilities would transfer from MNCPPC to MCPS.

After transfer, the soccer field would be closed to construct the geothermal well heating system. The well drilling and associated underground piping is a 6 month process. When completed the soccer field will be restored to the current condition or better. The existing parking lot will also be closed and incorporated into the school internal traffic circulation system. The soccer field will re-open for the Fall 2006 permitting season. Permitting and scheduling will be provided by the Community Use of Public Facilities (CUPF).

Playground

The existing playground along Dairymaid Drive is used by the community and there is a verbal commitment by MCPS to preserve such use. The equipment is aging to the point where some pieces should be replaced within the next 2 to 3 years. MCPS should consider minor modernizing and revamping of the existing playground removing those pieces not appropriate for elementary school use. Replacement pieces could be targeted to community pre-school children because the new school playground will be designed for elementary school age children.

Proposed Trail between South Gunners Branch Local Park and NW ES #7

The original South Gunners Branch Local Park plans had a combination asphalt and boardwalk path connecting the park with the future school. The boardwalk was necessary due to the path crossing streams and encroaching on wetland buffers. Although environmentally challenging, the goal of a connection between park, school and two neighborhoods should continue to be pursued. The exact trail alignment between park property and school property is yet to be determined. It is recommended that MCPS accommodate, and play an active planning and future construction role in any future trail connection between the NW Elementary School #7 and South Gunners Branch Local Park.

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MEMORANDUM

TO:

Sue Edwards, Community Based Planning

VIA:

Mary Dolan, Environmental Planning

FROM:

Michael Zamore, Environmental Planning (MC)

DATE:

June 28, 2004

SUBJECT:

1. Forest Conservation Plan: Northwest Cluster Elementary School

2. Mandatory Referral No. 04305-MCPS-1: Northwest Cluster Elementary School

1. Forest Conservation Plan Recommendation

Staff recommends **approval** with the following conditions:

- a. No encroachment into stream buffers for stormwater management facilities, or sediment control facilities, without permission of the Planning Board, except for necessary outfalls and temporary sediment control facilities in non-forested portions of stream buffers. If at later stages of stormwater review and design it is determined that a stormwater management facility, or sediment control facility, is not properly sized and it must be enlarged to accommodate the proposed drainage areas the applicant will have to find additional space outside of the stream buffer. This may mean the reconfiguration of site layout, and loss of developable area outside of stream buffers.
- b. Compliance with the stormwater and sediment control regulations of the Montgomery County Department of Permitting Services.
- c. Compliance with the conditions of the approval of the Forest Conservation Plan prior to MCDPS release of sediment and erosion control permit.

2. Mandatory Referral Comments

Staff recommends approval.

Forest Conservation Law Compliance

Environmental Planning staff has reviewed the applicant's Preliminary Forest Conservation Plan. The 13.71-acre site includes 3.30 acres of forest, all of which the applicant is proposing to retain. By retaining all the existing forest the applicant will meet the requirements of Section 22A-12(b) and qualify for a 0.56-acre credit for retaining forest above the conservation threshold. The project has no afforestation or reforestation requirements.

The project has an approved Natural Resources Inventory and Forest Stand Delineation (NRI/FSD)(# 4-04250 of May 10, 2004). The NRI/FSD lists fourteen (14) specimen and twenty-one (21) significant trees, most of which are within a stream valley buffer running along the southern portion of the property. The total stream buffer area is 4.49 acres all of which will be protected.

Environmental Guidelines

The site is not located within a Special Protection Area (SPA). Part (2.02 acres) of the stream valley buffer along the southern portion of the site is within the 100-year floodplain. The site also contains 3.63 acres of wetlands of which 3.16 acres are forested. All of these resources will be protected in accordance with environmental guidelines.

Water and Sewer

Public water is available immediately from an existing 12-inch water main on Dairymaid Drive adjacent to the site. Existing 8-inch public sanitary sewer is available within the stream buffer south of the property.

Stormwater Management

Stormwater management quantity control is provided in the adjacent existing stormwater management area. Stormwater quality control will be provided on the school site. The applicant has submitted a Stormwater Management Concept Plan to the Montgomery County Department of Permitting Services for its review. This concept shows all roof runoff being diverted to the North and East sides of the school where it will be collected in pipes and discharged to the proposed infiltration trench for treatment. Onsite storage and treatment facilities will be used and the concept plan shows all stormwater management and sediment control facilities being kept out of environmentally sensitive areas.

Upon reviewing the sediment and erosion control measures proposed for the site, staff was concerned that the facilities could eventually need to be enlarged to accommodate the proposed drainage areas, at later stages of stormwater review and design. Future expansion of these facilities would likely encroach into stream valley or wetland buffers, because of their close proximity to the existing buffers. For that reason staff has placed a condition that the case should be referred back to the Planning Board in the event that resizing becomes necessary in the future.

Water Quality

The project site lies within the Gunner's Branch of the Middle Great Seneca Creek Watershed. Gunner's Branch is a large tributary that drains portions of Germantown that have relatively new developed areas with stormwater controls. Regional controls have been used in some areas. The *Countywide Stream Protection Strategy* (CSPS, 1998)

rates stream and habitat conditions within the watershed as 'fair'. CSPS lists watershed imperviousness at 23.4%, based on data available at that time. The project will add 3.34 acres of impervious surface to the site. This will bring site imperviousness to 24.3%, well below the typical imperviousness for the PD-4 base zone.

Leadership in Energy in Environmental Design (LEED)

Montgomery County Public Schools (MCPS) intends for the new Northwest Elementary School # 7, at Dairymaid/Mateny Road, Germantown, Maryland, to be the first Gold Certified school in Montgomery County. It will be the facility on which future new schools and renovation/modification of existing schools will be modeled. The school's design and construction will lend itself towards meeting the criteria for Leadership in Energy and Environmental Design (LEED) certification. Conservation of energy is a primary design factor in keeping with this concept. Other design factors include siting, landscaping, and operating/maintenance to reduce both short- and long-term environmental impacts.

The project design incorporates energy efficiency, water conservation, waste minimization, resource-efficient materials, natural day lighting and ventilation, and onsite stormwater management into the phases of building construction. The importance and consideration placed on energy conservation is reflected in the configuration and orientation of the building, the selection of materials, and the mechanical/electrical systems used. The new building will be designed to exceed ASHRAE 90.1-2001 energy requirements and BOCA Basic Energy Conservation codes as well as Montgomery County energy conservation codes. The design will incorporate the ANSI/ASHRAE/IES Energy Efficient Design for New Buildings. Energy design features that will be incorporated into the project include:

- Air lock vestibule at entry.
- An efficient relationship of fenestration and building materials to produce an efficient building envelope.
- Double-glazed thermal break windows.
- Operable windows for natural ventilation in all classrooms.
- Solar loads controlled by the use of high performance, spectrally selective, insulating glass units.
- An HVAC system that is zoned with individual room thermostats and controlled by MCPS Energy Management System.
- Lighting and power electrical systems that will utilize techniques of energy conservation.
- Plumbing systems that minimize the use of water including domestic hot water requirements.
- Plumbing systems that incorporate the use of graywater for toilet flushing in certain areas.
- Weather-tight windows and doors.

Based on these factors, MCPS expects Northwest Cluster Elementary School # 7 to earn enough points to qualify for Gold certification by the United States Green Building Council (USGBC).



Version 2.1 Registered Project Checklist

June 29, 2004

Northwest Elementary School #7
Germantown, Maryland

Yes	?	No		Germantown	, Maryland
8	1	5	្រុះធ្វេត្តា	nable Sites	14 Points
			Prereq 1	Erosion & Sedimentation Control	Required
1			Credit 1	Site Selection	1
		1	Credit 2	Urban Redevelopment	1
		1	Credit 3	Brownfield Redevelopment	1
			Credit 4.1	Alternative Transportation, Public Transportation Access	. 1
1			Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
		1	Credit 4.3	Alternative Transportation, Alternative Fuel Vehicles	1
1			Credit 4.4	Alternative Transportation, Parking Capacity and Carpooling	1
		1	Credit 5.1	Reduced Site Disturbance, Protect or Restore Open Space	. 1
1			Credit 5.2	Reduced Site Disturbance, Development Footprint	1
		1	Credit 6.1	Stormwater Management, Rate and Quantity	1
1			Credit 6.2	Stormwater Management, Treatment	1
1			Credit 7.1	Landscape & Exterior Design to Reduce Heat Islands, Non-Roof	1
11	•	_	Credit 7.2	Landscape & Exterior Design to Reduce Heat Islands, Roof	1
1		İ	Credit 8	Light Pollution Reduction	1
Yes	?	No	t o like of a control of the contro		
5		Ĺ			- Foms
1			Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
1			Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
1			Credit 2	Innovative Wastewater Technologies	1
1			Credit 3.1	Water Use Reduction, 20% Reduction	. 1
1			Credit 3.2	Water Use Reduction, 30% Reduction	1
Yes	?	No			
6	2	9	KSGO	/Re/Naniosadnege	17 Points
<i>"</i> }			Prereq 1	Fundamental Building Systems Commissioning	Required
* 7			Prereq 2	Minimum Energy Performance	Required
1			Prereq 3	CFC Reduction in HVAC&R Equipment	Required
3		6	Credit 1	Optimize Energy Performance	1 to 10
\sqcup		1	Credit 2.1	Renewable Energy, 5%	1
$\downarrow \downarrow$		1	Credit 2.2	Renewable Energy, 10%	1
		1	Credit 2.3	Renewable Energy, 20%	1
1		<u> </u>	Credit 3	Additional Commissioning	1
\square		igsquare	Credit 4	Ozone Depletion	1
		Щ	Credit 5	Measurement & Verification	1
1		Ш	Credit 6	Green Power	1
Yes	?	No			
7	1	5	I market in the		i d Foiπs
			Prereq 1	Storage & Collection of Recyclables	Required
		1	Credit 1.1	Building Reuse, Maintain 75% of Existing Shell	1
		1	Credit 1.2	Building Reuse, Maintain 100% of Shell	1

		,		
	1	Credit 1.3	Building Reuse, Maintain 100% Shell & 50% Non-Shell	.1
1		Credit 2.1	Construction Waste Management, Divert 50%	1
1		Credit 2.2	Construction Waste Management, Divert 75%	1
	1	Credit 3.1	Resource Reuse, Specify 5%	1
	1	Credit 3.2	Resource Reuse, Specify 10%	1
1		Credit 4.1	Recycled Content, Specify 5% (post-consumer + ½ post-industrial)	1
1		Credit 4.2	Recycled Content, Specify 10% (post-consumer + ½ post-industrial)	. 1
1	1_	Credit 5.1	Local/Regional Materials, 20% Manufactured Locally	1
1		Credit 5.2	Local/Regional Materials, of 20% Above, 50% Harvested Locally	1
		Credit 6	Rapidly Renewable Materials	1
1	1	Credit 7	Certified Wood	1
Yes ?	No			
8 6	1		Environmental Quality	15 Comis
		Prereq 1	Minimum IAQ Performance	Required
7		Prereq 2	Environmental Tobacco Smoke (ETS) Control	Required
1		Credit 1	Carbon Dioxide (CO ₂) Monitoring	1
	1	Credit 2	Ventilation Effectiveness	1
		Credit 3.1	Construction IAQ Management Plan, During Construction	1
		Credit 3.2	Construction IAQ Management Plan, Before Occupancy	1
1	1	Credit 4.1	Low-Emitting Materials, Adhesives & Sealants	1
1		Credit 4.2	Low-Emitting Materials, Paints	1
1		Credit 4.3	Low-Emitting Materials, Carpet	1
1		Credit 4.4	Low-Emitting Materials, Composite Wood & Agrifiber	1
		Credit 5	Indoor Chemical & Pollutant Source Control	1
		Credit 6.1	Controllability of Systems, Perimeter	1
1		Credit 6.2	Controllability of Systems, Non-Perimeter	1
·		Credit 7.1	Thermal Comfort, Comply with ASHRAE 55-1992	1
		Credit 7.2	Thermal Comfort, Permanent Monitoring System	1
1		Credit 8.1	Daylight & Views, Daylight 75% of Spaces	1
1		Credit 8.2	Daylight & Views, Views for 90% of Spaces	1
Yes ?	No	•		
5			tion & Besign Process	5 Points
	\Box	Credit 1.2	Innovation in Design: Exemplary Performance, Local/Regional Materia	1
		Credit 1.3	Innovation in Design: Green Ed Program (design tied into program)	1
		Credit 1.4	Innovation in Design: Exemplary Performance, Water Use Reduction	1
	\sqcap	Credit 1.4	Innovation in Design: Acoustical Educational Space	1
	\Box	Credit 1.4	Innovation in Design: Green Housekeeping Program	1
		Credit 1.4	Innovation in Design: Ecol. Based Landscape Design/Pest Control	1
		Credit 1.4	Innovation in Design: Portland Cement Reduction in Cast-in-Place Co	1
1		Credit 2	LEED™ Accredited Professional	1
Yes ?	No	•		
39	20	Project	Totals (pre-certification estimates)	69 Points
33	120	TOJECI	Totals (pre-certification estimates)	ON LOUIS

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points