# Project Update

# Alfred Kiger Savoy Elementary School Modernization and Co-Location Project

December 1, 2006



Prepared For: District of Columbia Public Schools

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## Savoy Elementary School Modernization and Co-location Project Thurgood Marshall Academy DPR Savoy Recreation Center December 1, 2006 Update

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## Savoy Elementary School Modernization and Co-Location Project Thurgood Marshall Academy Public Charter High School DPR Savoy Recreation Center December, 2006 Update

The Savoy Elementary School Modernization and Co-Location project is designed to meet a number of important goals for DCPS and the District. It will improve the teaching and learning conditions for Savoy Elementary School so they are in excellent condition, can support a high quality curriculum and will be fully accessible to children and adults with physical disabilities. The modernization will ensure the facility is right sized to meet its enrollment, but with room to grow, should this be needed to support the neighborhood development and change in Anacostia.

Regarding goals of the District, the Savoy Modernization and Co-location project implements priorities to co-locate and share public land and space among other public entities. The project provides physical education, athletic, health and fitness space to the students of the Thurgood Marshall Academy Public Charter School, as well as those at Savoy Elementary School. In addition, the Department of Recreation, which has operated after school and youth programming at Savoy for many years, will operate expanded programs from the new shared use gymnasium facility.

Finally, as a part of Main Street growth and development, there will be approximately 6,400 square feet of space available on the second floor of the health and fitness areas on Martin Luther King, Jr. Blvd that will be available for commercial use. This will provide DCPS with income that can support the maintenance and operations of the facility. In addition, there will be store fronts on MLK, Jr Blvd. These are designed to support museum, art or retail displays in support of culture, education and business on the main street.

#### **Current Condition**

- Savoy, a PreSchool-6th Grade, 330 student, 40 year old school, while a structurally sound building, has an obsolete design with classrooms far too small. It lacks specialty spaces including a gym, science, technology, music and art rooms, and has windows, mechanical and electrical systems which have exceeded their useful life.
- In 2005 TMA occupied a newly renovated and expanded former school house adjacent to Savoy to house its 360 student, college prep high school. While the facility boasts state of the art design, it lacks a gymnasium, health and fitness spaces crucial to its educational mission.
- Department of Parks and Recreation's Savoy Recreation Center shares space in Savoy with no separation from the school and spaces not designed for their present use. The program's greatest need is a full sized gymnasium with direct access from Martin Luther King Avenue and full separation from Savoy.

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#### **Feasibility Study Recommendations**

During the Feasibility Study Process, several schemes were analyzed and discussed with the three users. Scheme 2 was determined to successfully meet the academic and recreational needs of Savoy, TMA and DPR. This scheme has been further studied; plans are now in the Design Development Stage and feature:

- Complete modernization of Savoy including window and systems replacement and reconfiguring of small classrooms to meet current educational requirements. A new early childhood playground will be developed adjacent to the multipurpose room.
- Creation of a new cafeteria/multipurpose room with a separate entrance for evening and community use.
- Demolition of existing multipurpose room and entrance wall on MLK Avenue.
- Development of a 26,000 square foot community center which fronts on MLK and has direct access from Savoy. The facility includes a full sized gym with bleachers, stage, separate storage room and office for each user; locker rooms and fitness room for TMA; and shared multipurpose/classrooms. Museum quality storefront display cases on MLK front of building; and a 6,900 square foot second floor available for lease to an office tenant.
- 36 car parking lot under the community center with access through TMA's parking lot. TMA will grant an access easement.
- A Building Use and Operating Agreement to detail each user's rights and responsibilities.

#### Status of Project

- Schematics were reviewed by DCPS Office of Facilities Management.
- Architects have completed nearly 85% of design development and these plans are under review by DCPS.
- New estimates have been secured for 50% design development plans, with project in budget.
- \$26,313,000 in funding has been identified.

DCPS	19,563,000	FY2007 CIP—Modernization and co-location funds.		
DPR	3,000,000	FY2008		
TMA	500,000	Federal Appropriation FY2006		
	\$1,250,000	Neighborhood Investment Fund FY2007		
	\$1,500,000	Office of Property Management FY2006 and reprogrammed		
		to DCPS.		
	\$500,000	From per pupil facilities allowance.		
Total	\$26,313,000			

• Project will be LEED certified, consistent with District of Columbia's priority for green building.

This project is being implemented by a unique approach. DCPS commissioned a Feasibility Study to develop a plan. However, since TMA was required by the Deputy Mayor's Office, from whom it purchased its building, to pursue the development of the shared use gymnasium, it had funds from the Federal Government (\$.5m) and Neighborhood Investment Fund Grant (\$1.25m) which have enabled TMA to contract for Design Development and project management. Through working with the local school and DCPS Office of Facilities Management, the design is nearly complete and construction documents will be completed by spring 2007. The construction is on schedule to commence summer 2007 under the supervision of the Project Management Team which is overseeing the design of the project and using a construction management firm qualified under the DCPS pre-qualification process.

The Team is working closely with OFM staff, the school communities and DPR to ensure the needs, standards and design requirements of each are met. Savoy will move off site during the summer of 2007 for one school year. The construction will be complete for the start of the 08-09 school year.

A Building Use Agreement is being drafted by a law firm on a pro bono basis in cooperation with the DCPS Office of Strategic Partnerships. It will include the schedule of use for each entity, allocation of space, and detail operational issues including custodial, maintenance and security requirements. A management committee will be established by the three primary users to oversee the operation of the building. The lease payments of the second floor tenants will be used for operational expenses and to establish a maintenance reserve fund for the upkeep of the building.









BOOM - CANADA





SECOND FLOOR PLAN







IGA

BCWIE - GRIDLEY



GARAGE FLOOR PLAN

SCALE I'-8 0 8 16 32 40

ACCHIECE CORDLEY ACCHIECE CORDLEY ACCHIECE CORDLEY ACCHIECE CORDLEY ACCHIECE CORDLEY ACCHIECE CORDLEY



# SAVOY ENTRANCE ELEVATION (NORTH)



EAST ELEVATION



SAVOY ELEMENTARY SCHOOL

2400 Shannon Pl S.E.



MARTIN LUTHER KING JR. ENTRANCE ELEVATION (SOUTH)



WEST ELEVATION













# PERSPECTIVE OF MARTIN LUTHER KING JR. ENTRANCE





NOTE: The probable construction schedule is only an estimate and should be verified by the General Contractor



# **LEED** for Schools

## Q. What is the United States Green Building Council?

A. The USGBC is a national nonprofit organization whose mission is to promote the design and construction of buildings that are environmentally responsible, profitable, and healthy places to live and work.

#### Q. What is green building?

A. Design and construction practices that reduce or eliminate the negative impact of buildings on the environment and on occupants

#### Q. Why is it important?

- A. Buildings in the U.S. account for:
  - 65.2% of total electricity consumption/36% of primary energy use
  - 30% of total greenhouse gas emissions
  - 136 million tons of construction and demolition waste (approx. <sup>3</sup>/<sub>4</sub> of landfill mass)
  - 12% of potable water

### Q. What are the benefits of green building?

A. Economic benefits include:

- Competitive first costs i.e. 'green' doesn't have to cost more because integrated design allows high benefit at low cost by developing synergies between disciplines and between technologies
- Reduced operating costs green building can lower utility costs significantly and lower maintenance costs by selecting durable materials and systems

### A. Productivity benefits include:

- Improved performance (est. \$29 168 billion in national productivity losses per year; student performance is better in daylit schools)<sup>1</sup>
- Reduced absenteeism and turnover (providing a healthy environment improves faculty, staff and student well-being; a well designed and healthy school can support recruiting and retention efforts; better indoor air quality = fewer sick days)

<sup>&</sup>lt;sup>1</sup> Nicklas and Bailey, "Analysis of the Performance of Students in Daylit Schools," Innovative Design, Raleigh, NC, www.innovativedesign.net.

Hathaway, Hargreaves, Thompson, and Novitsky, 1992, "A Study Into the Effects of Light on Children of Elementary School Age - A Case of Daylight Robbery," Policy and Planning Branch, Planning and Information Services Division, Alberta Education, Canada.

#### Q. Why use the Leadership in Energy and Environmental Design (LEED) building rating system?

A. the rating system was designed to:

- Define 'green' by providing a standard for measurement and prevent "greenwashing" (false or exaggerated claims) to protect building owners
- Promote whole-building, integrated design processes
- Use as a design guideline

#### Q. How do I get my building certified?

- A. Four easy steps:
  - Step 1 Project Registration (www.usgbc.org)
  - Step 2 Technical Support
  - Step 3 Documentation Review
  - Step 3 Building Certification

#### Q. What are the benefits of having a LEED Certified building?

A. The certification process provides:

- Third party verification of successful green/high performance design
- Eligibility for building permits in some circumstances as well as state and local government incentives
- LEED certification plaque to mount on building
- Enhanced community profile

#### Q. What are some useful resources?

A. Some websites that may provide more information include:

- USGBC & LEED information, rating systems and resources: http://www.usgbc.org/DisplayPage.aspx?CategoryID=19
- Montgomery County Public Schools green building program: <u>http://www.greenschoolsfocus.org/</u>
- High Performance School Buildings for All Children: <u>http://www.21csf.org/csf-home/Documents/BEST/WINGSPREAD.pdf</u>
- US Department of Energy High Performance Schools overview: http://www.rebuild.org/attachments/presentations/OverviewELY11504.pdf
- California High Performance Schools Program: http://www.chps.net/
- High Performance Schools Design Training free online training course: http://www.hpschooldesigntraining.com/nyserda/home.jsp



20 November 2006

- To: Jennifer Battle, Project Manager DC Public Schools – OFM
- From: Iris Amdur, Principal GreenShape LLC

#### Re: Savoy School LEED Certification

As you know, the Savoy School design team focused on making the building as sustainable as possible from the beginning of the design process. GreenShape facilitated a charrette with the BGA team on October 16<sup>th</sup> to identify the feasibility of pursuing certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Rating System for New Construction Version 2.2. In this brief overview, we will outline the measures that would require DCPS buy-in and approval in order for the team to move forward and pursue LEED Certification.

#### Savoy LEED Approach

In order to earn LEED certification, all prerequisites must be met and the project must earn at least 26 of the total 69 available points on the LEED checklist. The design team has identified 28 points that we feel are within reasonable reach of the project. The LEED Scorecard and detailed tracking form outlining the team's overall approach are attached.

#### DCPS Buy-in and Support is Needed

**LEED Prerequisites:** There are two prerequisites that the design team must meet that will require DCPS's commitment in order to achieve:

1. Storage and Collection of Recyclables

LEED Materials Prerequisite 1

**LEED Requirement**: Collect and recycle paper, corrugated cardboard, glass, plastics and metals.

**Proposed Strategy**: We understand that DCPS does not currently have a contract in place to address occupant recycling requirements. There may be opportunity to

616 4th Street NE Washington, DC 20002 T 202-544-1400 F 202.318.4078 www.greenshape.com partner with the DC Department of Parks and Recreation for the collection of recyclables for this project as part of the joint use agreement for the space. DPR has already committed to pursuing LEED ratings for their properties, and may be able to extend their existing contract to address the needs of this facility. If this avenue is not successful, GreenShape will provide support to help identify another strategy for accommodating occupant recycling for this project as required.

**DCPS Action Requested:** Please confirm whether DCPS is willing to commit to finding a way to put a recycling program in place for this building.

#### 2. Minimum Energy Performance

LEED Energy and Atmosphere Prerequisite 2

**LEED Requirement**: Design the building project to comply with ASHRAE/IESNA Standard 90.1-2004. This will result in approximately 16% lower operating energy costs than a building designed to current DC codes.

#### **Proposed Strategy:**

- We recommend the installation of dimmable light ballasts with photo sensors (Just Right Light ballasts) on all T8 light fixtures within 15ft. of the windows (in the daylight zone) as a strategy to meet the energy performance standards laid out by ASHRAE 90.1-2004.
- Just Right Light ballasts with photo sensors automatically and continuously adjust lamp output to compensate for light depreciation and to take advantage of any available daylight contributions. The upfront project cost will be approximately \$8000 with an energy cost savings payback period of 3 to 5 years.
- D.C. Energy Office has shown interest in supporting the use of this technology in previous DPR project and may be able to provide some funding support. GreenShape is available to assist in coordinating with the D.C. Energy Office if this option is desired.
- GreenShape is also available to provide more information on the daylight dimming ballasts and to provide examples of buildings where this technology has been successfully employed.

**DCPS Action Requested:** Please confirm that DCPS is in support with use of this technology.

#### Next Steps

In order to move forward with LEED certification for the Savoy School project, the design team will need a commitment from DCPS to institute a Recycling Program and approval to pursue the energy saving technologies laid out in this memorandum. Please provide approval and or feedback to Bowie Gridley Architects and feel free to contact GreenShape with any questions or clarifications you may require.



Cost Estimates Progressions: Feasibility thru 25% Savoy Elementary School Renovation / Addition 29-Nov-06

Proje	ct Item/Phase	Feasibility Estimate	15% Estimate	25% Estimate
			August-06	November-06
Hard	Costs			A10 80 1 0 10
0001	Building Construction Base Cost	\$14,767,590	\$16,521,553	\$16,504,842
0002	Added Second Level at Joint Use Facility	NIC	NIC	Included
0003	Design Contingency	\$1,209,272	\$1,652,156	\$1,650,484
0004	Construction Contingency	\$1,478,000	\$1,089,479	\$907,766
0005	Hard Costs Subtotal	\$17,454,862	\$19,263,188	\$19,063,092
0006	Escalation	\$1,977,404	\$1,622,003	\$1,620,364
0007	Hard Costs Escalated Value	\$ 19,432,266.00	\$20,885,191	\$20,683,456
Soft (	Costs			
0001	Soft Cost	\$3,097,554	\$3,268,704	\$3,234,371
0002	Miscellaneous Specialty Equip	\$50,000	\$50,000	\$50,000
0003	FFE / Interior Allowance	\$720,180	\$720,180	\$720,180
0004	Soft Costs Subtotal	\$3,867,734	\$4,038,884	\$4,004,551
Off Si	ite Costs			
0001	Off Site Facility Costs	\$500,000	\$500,000	\$500,000
0002	Off Site Transportation Cost	\$850,500	\$850,500	\$850,500
0003	Off Site Costs Subtotal	\$1,350,500	\$1,350,500	\$1,350,500
Deduct 2nd Floor Not Incl. in Feasibility Prog.		\$0	\$0	(\$1,500,000)
	Project Estimate Subtotal	\$24,650,500	\$26,274,575	\$24,538,507
Addit	ional Scope			
0001	Add second floor @ Joint Use Facility	\$1,500,000	\$1,500,000	\$1,500,000
	Adjusted Project Estimate	\$26,150,500	\$27,774,575	\$26,038,507