



**MEMORANDUM**

DATE: March 31, 2016

TO: Montgomery County Planning Board

VIA: Mike Riley, Director of Parks  
Mitra Pedoeem, Acting Deputy Director *Mitra Pedoeem*

FROM: Daniel Hertz, Project Manager

SUBJECT: Department of Parks Nature Centers

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**DEPARTMENT OF PARKS NATURE CENTERS**

Montgomery County Parks operates four nature centers, Black Hill Visitor Center and Nature Programs, Brookside Nature Center, Locust Grove Nature Center, and Meadowside Nature Center as shown on Attachment 1. The nature centers provide learning opportunities for youths and adults in a variety of ways including school programs, scout programs, public programs for all ages, special events, summer camps, birthday parties, volunteer opportunities, internships, engaging interpretive exhibits, live animal exhibits, native plant gardens, trails, and nature play areas. We program to over 45,000 people a year and are visited by over 150,000 people a year. Ninety-nine percent of our children's programs include meaningful outdoor experiences. Providing outdoor experiences and connecting people to nature is an investment in the future and health of our county. Numerous studies suggest that spending time in the outdoors has wide-ranging physical as well as mental health benefits; and addresses a host of health problems including ADHD, obesity, diabetes, and stress. Children with regular access to the outdoors show increase achievement in science, math, and language arts and develop better skills in problem-solving and critical thinking.

The Montgomery Parks nature centers are leaders in providing outdoor and environmental programming and promoting environmental literacy in our community especially among our youth. We provide experiential, resource-based school programs to over 10,000 students and educators a year. Maryland is the first in the country to adopt a statewide Environmental Literacy Graduation Requirement. To support schools in meeting these mandated environmental literacy graduation requirements, the nature centers are now waiving the fee for our curriculum based environmental education programming for all K-12 school groups in Montgomery County.

**Black Hill Visitor Center and Nature Programs** is located in Black Hill Regional Park in Boyds, MD. This center is a certified Maryland Association for Environmental and Outdoor Education (MAEOE) Green Center and interprets local natural and cultural history with a special focus on lake ecology and watershed interpretation. Other features at this center include our “Outdoor Classrooms”, a meadow managed by prescribed burns, a beautiful view of Little Seneca Lake, and the first water trail in Montgomery Parks. Signature programs and events for this site include pontoon boat programs, kayaking programs, Waterfowl Festival, Monarch Fiesta Day, Harvest Festival, native plant sale, and fishing and survival skills camps. The center currently has a staff of five career employees, a \$466,000 annual operating budget, and a \$31,000 annual revenue budget.

**Brookside Nature Center** is located in Wheaton Regional Park in Wheaton, MD. Around 1960, Montgomery Parks acquired a private parcel of land that was contiguous with acreage the county already owned. Together this land would become the county’s first regional park. On this parcel were two houses. The larger house was renovated and named Brookside Nature Center and officially opened to the public in 1961. The nature center provides interpretation of the surrounding forest, pond, stream, and meadow ecosystems; and has a special interpretive emphasis on the importance of trees. Other special features at this nature center include a wooded nature play area, interpretive boardwalks, and the Harper 1870s Homestead Cabin. Signature programs and events for this site include maple sugaring days, Winter Solstice Celebration, Honey Harvest Days, the Maryland Master Naturalist program, and Scout Camp-Ins. Brookside Nature Center currently has a staff of five career employees, a 527,000 annual operating budget, and a \$26,000 annual revenue budget.

**Locust Grove Nature Center** is located in Cabin John Regional Park in Bethesda, MD. This facility opened originally as a toboggan run in 1972. It was later repurposed into a nature center. Locust Grove provides a natural sanctuary from the surrounding urban bustle and interprets the local urban wildlife and ecology. It was the first center in Montgomery Parks to have a Nature Play Area and was showcased in Regional workshops on the design, installation and benefits of Nature Play Areas. Signature programs and events for this site include Cider Days, Nocturnal Neighbors, Immersion school programs, and programs for tots. Locust Grove Nature Center currently has a staff of 2.5 career employees and operates with a \$257,000 annual budget and a \$25,000 revenue budget.

**Meadowside Nature Center** is located in Rock Creek Regional Park in Rockville, MD. It opened in 1972 and is dedicated to Col. Lathrop E. Smith, a local conservationist who promoted the preservation of Rock Creek. Of the four Montgomery Parks nature centers, it is the only one designed and built to be a nature center. Meadowside is a certified Maryland Association for Environmental and Outdoor Education (MAEOE) Green Center and interprets the rolling hills, springs, streams, woods, and meadow habitats that surround it. Meadowside has a special interpretive focus on birds of prey (raptors). It is home to several permanently injured, non-releasable birds of prey including an American Bald Eagle. Signature programs and events at this site include the Pawpaw Festival, Raptor Festival, free live Raptor programs every Saturday, Nature Matters Lecture Series, Educator’s Open House, and Boy Scout Merit Badge programs. The center currently has a staff of 5.5 career employees, a \$530,000 annual operating budget, and a \$30,000 annual revenue budget.

## **BACKGROUND AND HISTORY OF MAYDALE NATURE CENTER**

The Maydale Nature Center is a one-story, 2,500 square foot, concrete block building located within the Maydale Conservation Park in Colesville as shown on Attachment 2. The building is approximately 70 years old and in deteriorated condition. The Department of Parks acquired this building along with 19.5 acres surrounding it in 1971. The original 19.5 acres together with an additional five acres acquired in 1976 make up the 24.5-acre Maydale Conservation Park. M-NCPPC began seasonal outdoor programming at Maydale in 1976 and Maydale operated as an adjunct responsibility of Brookside Nature Center until 1979. During these years, Parks conducted seasonal programming in the park and the building was used as a park residence. At some point between 1980 and 1985, programming at Maydale changed to include activities that took place inside the old house as well as on the grounds.

Maydale closed as a staffed nature center in late 1992 as part of a cost cutting plan to address to budget constraints but was re-opened in 1994 when Parks leased the building for \$1.00 per year to the Friends of Maydale, a 501(c)(3) non-profit entity formed by local community members. Friends of Maydale then entered into a cooperative agreement with Montgomery County Public Schools (MCPS) which allowed MCPS to operate an early childhood environmental education program serving six East County elementary schools.

During the time MCPS used the building, Parks funded repairs to the building's furnace and MCPS funded repairs to the building's roof. A 2007 condition assessment conducted by Facility Engineering Associates, P.C. for Parks classified the building as being in poor condition and identified a number of costly repairs that would be required immediately and over a 20-year span. FEA estimated the total capital cost of the required repairs over the 20-year span at \$260,000 (including inflation). Although MCPS estimated that the minimum cost required to make the building useable would be on the order of \$50,000 (this estimate included only immediate needs), neither MCPS nor Parks had funds available to repair the building and it was closed again in September 2008.

The MCPS nature programs were relocated to the MCPS Lathrop E. Smith Center, approximately nine miles from Maydale. The Friends of Maydale continued to use the Maydale building for storage until the lease was terminated in February 2010; and the building has remained vacant since then.

## **OVERVIEW OF MAYDALE CONSERVATION PARK PROPERTY**

The Left Fork of the Upper Paint Branch stream system flows through the Maydale Conservation Park. This stream system is a unique, nationally recognized coldwater fishery that is the only suburban stream system in Montgomery County with a long-term self-sustaining brown trout population, and the Paint Branch watershed offers excellent habitat to a wide variety of terrestrial and aquatic wildlife. Consequently, it has been designated as one of the five Special Protection Areas (SPAs) in the County, along with Clarksburg, 10-Mile Creek, Piney Branch, and the Upper Rock Creek.

In 2010, the Department of Parks completed approximately 1,600 linear feet of stream restoration in the left fork of the Paint Branch in Maydale Conservation Park. A well-developed forested floodplain exists adjacent to the watercourse, but invasive plant species are an on-going problem within the park and require continuing follow-up efforts.

The Upper Paint Branch, 10-Mile Creek, and Upper Rock Creek SPAs have development restrictions outlined in the Overlay Zone for each area. Impervious surface limitations for development projects in the Upper Paint Branch SPA restrict development to an eight percent imperviousness limit for new projects. The amount of impervious surface at Maydale was reduced in 2011 by the elimination of approximately 3,300 square feet of the parking lot. The impervious surface coverage now stands at approximately two percent of the Maydale Conservation Park land area.

Eight parking spaces remain in the existing parking lot, and the lack of parking on site implies that a new facility could accommodate only small groups. It may be possible to bring groups in using small school buses, but it might not be possible to bring buses in and turn them around. Staff is investigating this – a trial run will be made using an MCPS bus in April.

#### **RECENT ACTIVITIES REGARDING THE FUTURE USE OF MAYDALE**

In 2015, as a result of the community's continuing interest in the use of the Maydale Conservation Park, community leaders, County and State elected officials and their staff members, and Parks staff members formed a working group to consider alternate plans to restore a nature education program to the Maydale Conservation Park. The working group held a community meeting in June 2015 in order to ascertain the extent of community interest in restoring programming at this park. This meeting was well-attended by community members who were enthusiastic about replacing the obsolescent building with a facility for a variety of programs.

Following that meeting, the working group began to review the merits and the costs of demolishing the existing building and replacing it with various types of buildings. Three alternatives emerged: (1) recycling an office trailer currently located at the Shady Grove Maintenance Facility; (2) constructing a new open-air building; and (3) installing a modular building designed to accommodate the Sustainable Education Every Day (SEED) program. All of the alternatives include repairing an existing storage shed located near the building site.

All of the alternatives involve the construction of new foundations, ADA-compliant access (including upgrades to the parking, driveway, and sidewalks), any required storm water management improvements, and a fire pit. Given the sensitive and singular nature of this area, none of the alternatives proposes to increase the amount of impervious surface in Maydale Conservation Park. In fact, each alternative has a smaller footprint than the building to be demolished.

Each alternative is described below:

- (1) The Recycled Trailer option re-purposes an existing 1,200 sq. ft. Parks Department portable (as shown on Attachment 3) which will become available when the Parks Department's Northern Regional office moves to the new Multi-Agency Service Facility in 2017. After moving the building from Shady Grove to Maydale, it would be outfitted with a new roof, insulation, windows, and siding. The interior would be reconfigured and repainted, and bathrooms would be installed. The building would be connected to existing utility lines for plumbing, HVAC, and lighting systems. This option includes fixtures, furniture and equipment for nature education programs and a 400 sq. ft. sheltered deck for outdoor programs which brings the total facility size to 1,600 sq. ft. Staff estimated the capital cost of this alternative at \$331,000 and the annual operating expense at \$101,000.
- (2) The Open-Air Center option consists of a 1,600 sq. ft. sheltered deck with a unisex restroom as illustrated in Attachment 4. Enclosed space would be constructed within the shelter so that programs may be conducted during inclement weather. The open-air center would have to be connected to electric, water, and sewer lines. The building would have electric service for lighting and equipment but no heating or air conditioning. This option includes fixtures, furniture and equipment for nature education programs. Staff estimated the capital cost of this alternative at \$318,000 and the annual operating expense at \$100,000.
- (3) SEED Classroom option as shown in Attachment 5 is a modular building, produced in conjunction with the Sustainable Education Every Day program. It is made of non-toxic materials and incorporates net-zero energy and net-zero water features by means of solar panels and water collection. Consequently, this option does not require utility hookups or utility expense. The standard 1,000 sq. ft. building comes equipped with materials necessary for the SEED environmental education program. This option includes a 400 sq. ft. sheltered deck for outdoor programs for a total facility size of 1,400 sq. ft. Staff estimated the capital cost of this alternative at \$498,000 and the annual operating expense at \$95,000.

## **FUNDING CONSIDERATIONS**

### **Capital Improvements Program Funding**

Creation of the capital improvements program involves inputs from county residents, staff, master plans and studies, and directives from the Planning Board and Council. New projects requests are reviewed and prioritized through a series of evaluation criteria within the context of existing CIP projects and the backlog of other projects waiting to be included in the CIP. The nature center at Maydale has been a candidate project in the CIP but higher priority projects have precluded it becoming an active stand-alone CIP project.

In its FY2017 budget request, the Planning Board asked for \$750,000 for Minor New Construction level-of-effort projects for non-local parks, an increase of \$600,000 over FY2016. The level-of-effort increases are required to keep up with rising costs of maintaining the existing park system, meet environmental and accessibility mandates, and address smaller scale, coordinated renovations under a "new method" of development. The "new method" allows

Parks to do smaller scale projects in a coordinated manner as level-of-effort projects rather than going through the lengthier process of creating stand-alone CIP projects.

Although the County Executive proposed \$16.4 million in cuts to Minor New Construction and other level-of-effort projects, the Council has tentatively restored \$13.7 million, including the funding requested for Minor New Construction. This partial restoration leaves other vital projects such as Pollution Prevention and Stream Protection projects in the CIP underfunded.

While the Planning Board's FY2017 CIP request did not include funds specifically designated for Maydale, the State Legislature and the County Council have taken significant actions to secure funding for a Maydale Nature Center. The Department's FY2017 operating budget request did not include operating funds for Maydale.

Montgomery County Councilmember Tom Hucker proposed a budget amendment that included an additional \$250,000 Minor New Construction level-of-effort project appropriation for the Maydale Nature Center (PDF# 998799). On March 8, 2016, the Montgomery County Council tentatively agreed to fund this PDF. The Council's agreement to provide \$250,000 for Maydale was on top of other commitments to restore funding cuts recommended by the County Executive. State Delegates Eric Luedtke and Anne Kaiser have introduced a bond bill in the amount of \$75,000 to support the planning, design, construction, and capital equipping of the Maydale Nature Center. The Department of Parks testified in favor of this bill in hearings at the Senate Budget and Taxation Committee and the House Appropriations Committee on March 12, 2016.

The bond bill requires Parks to furnish matching funds, and Parks intends to meet this requirement using part of the funds made available by the \$250,000 Maydale PDF.

The total of \$325,000 provided by the bond bill and the Maydale PDF falls within the range of the estimated capital costs of two of the alternatives under consideration, but not the SEED Classroom. Since the building type has not been decided and the design work has not been initiated, the cost estimates at this point are tentative. Additional capital funding will certainly be required if the SEED Classroom alternative is selected and may be required for the other two alternatives.

### **Operating Cost Funding**

A new Maydale facility will incur new annual costs for programming, staffing, maintenance, utilities, and repair. While the Council has committed to supporting the capital funding for this nature center, this commitment must be accompanied by a commitment to provide operating funds. Up to now, this commitment on the operating side has only been implicit, but operating budget impact for this project must also be recognized and formalized by the Council by increasing the Department's operating budget by approximately \$100,000 on a continuing basis starting when a new building would come on line in FY2018.

## **CONCLUSION AND RECOMMENDATIONS**

Two of the three alternatives under consideration are nearly equivalent from a financial point of view. Whereas the capital cost of the Trailer alternative has been estimated to be \$331,000 with an estimated annual operating expense of \$101,000, the Open-Air alternative has an estimated capital cost of \$318,000 and an estimated annual operating expense of \$100,000. The SEED Classroom is more than 50 percent more expensive than the other two alternatives.

All three of the alternatives can accommodate groups of up to approximately 30 students, but only the Trailer and SEED options can accommodate them in an enclosed space. The Open-Air building provides only a roof, a restroom, and a small enclosed multi-purpose space. As preliminarily envisioned, the Open-Air option would have room for more activation components (fixed binoculars, interpretive signs) to allow the public to interact with the Maydale Conservation Park during non-programmed hours.

Key physical and programmatic similarities and differences between the alternatives are summarized in the table below:

	<b>Recycled Trailer w/Deck</b>	<b>Open-Air Center</b>	<b>SEED Classroom</b>
<b>Physical Characteristics</b>			
Building Type	Manufactured	Post-and-Beam	Modular
Foundation Type	Block on Footers	Footers	Footers
Enclosed Floor Area (Includes Restroom)	1,200 sq. ft.	250 sq. ft.	1,000 sq. ft.
Sheltered Deck Area	400 sq. ft.	1,350 sq. ft.	400 sq. ft.
Total Floor Area	1,600 sq. ft.	1,600 sq. ft.	1,400 sq. ft.
<b>Site Development</b>			
Utility Hookups Required?	Yes	Yes	No
ADA-Compliant Access, Driveway, Sidewalk & Handicap Parking Upgrades Required?	Yes	Yes	Yes
Additional Restroom Construction Required?	Yes	Yes	No
<b>Programmatic Characteristics</b>			
Outdoor Activation Components?	Some	Many	Some
Display Cases?	Yes	No	Yes
Tables and Chairs?	Yes	No	Yes

Each of the alternatives has unique advantages:

- The Trailer alternative recycles an existing facility and provides year-round classroom space.
- The Open-Air alternative has more room for outdoor activation components that will allow the public to interact with the Maydale Conservation Park during non-programmed hours.
- The SEED Classroom incorporates environmental education into its design and operations (no toxic building materials used, zero net water, zero net energy, use of solar energy, rainwater collection, composting toilets, etc.) and comes with an instructional program demonstrating how to use the building as a teaching tool.

Although the SEED Classroom offers an outstanding program, it is relatively expensive and the Maydale working group has expressed a preference for the Trailer option. Staff wishes to continue internal discussions and discussions with stakeholders about the way the facility would be used during programmed and non-programmed hours before coming to the Board with a final recommendation of which alternative to select.

In any event, keeping up with the current park system and providing the much needed “refresher” renovations under the new method of development, the funding for level-of-efforts proposed by the Board in its FY2017 budget request is absolutely vital and is arguably the most important of any restorations the Council should make to the CIP. *As such, any funding for Maydale should not come until all level-of-effort projects are restored to the level requested by the Board. Similarly, a new Maydale nature center will require additional operating expenses on a recurring basis beginning in FY2018 and the County Council must make these funds available.*

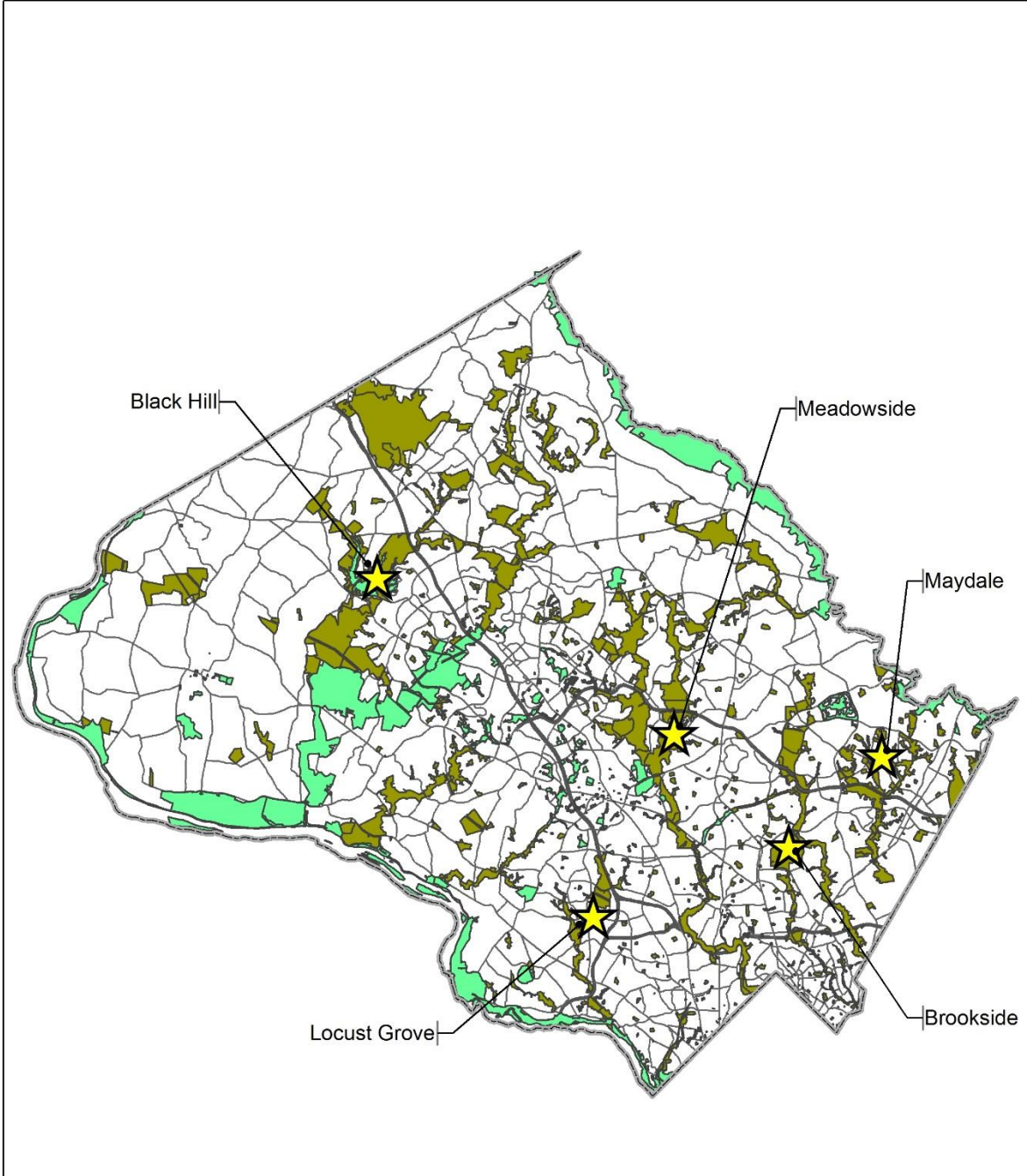
**ATTACHMENTS:**

1. Location Map
2. Maydale Site Map
3. Recycled Trailer
4. Open-Air Center
5. SEED Classroom



**ATTACHMENT 1**  
**LOCATION**  
**MAP**

**M-NCPPC Nature Centers**



**Parkland  
Status & Owner**

-  Existing M-NCPPC
-  Existing Non-M-NCPPC

23,000 Feet  
Map Compiled: 3/30/2016



1180 CONSTITUTION DR. CARR  
SERVING NATURAL RESOURCES DEPARTMENT  
1000 PARKING & SERVICE CENTER  
1180 CONSTITUTION DR. CARR, MONTGOMERY CITY  
20818  
1180 CONSTITUTION DR. CARR, MONTGOMERY CITY  
20818  
1180 CONSTITUTION DR. CARR, MONTGOMERY CITY  
20818




**ATTACHMENT 2**  
**SITE MAP**

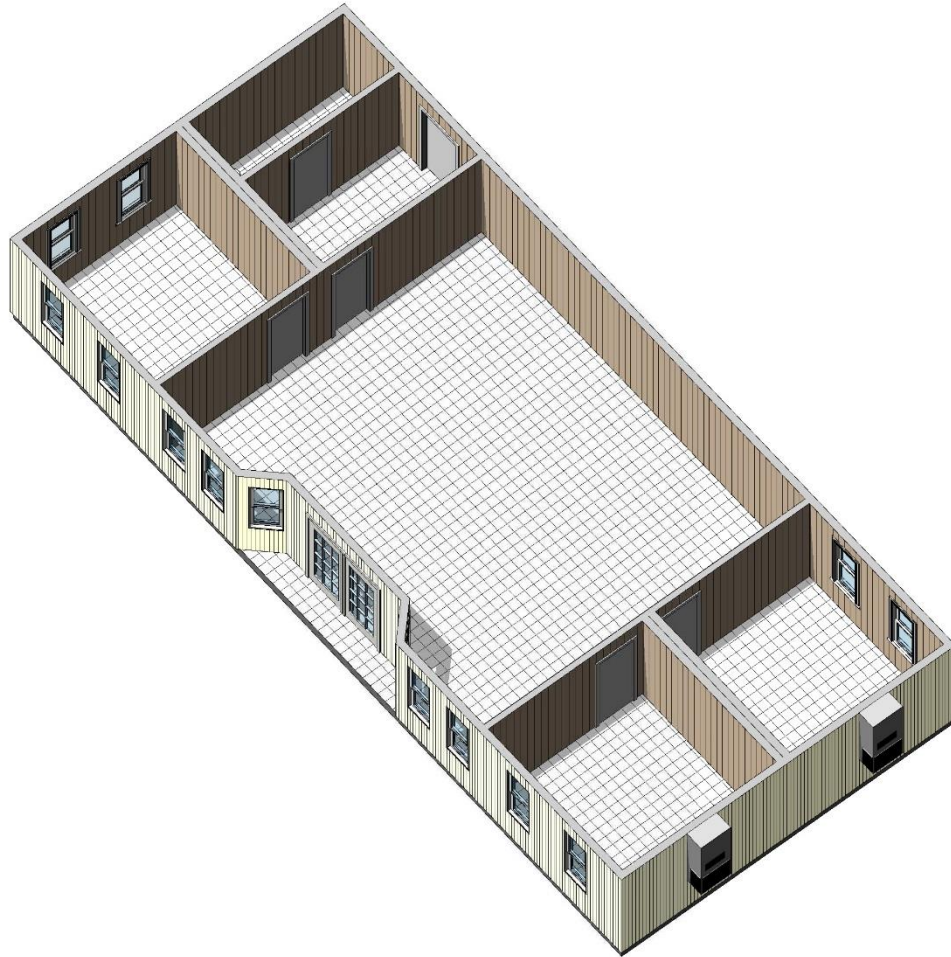
**Maydale Conservation Park**

1638 Maydale Dr., Colesville, MD 20905



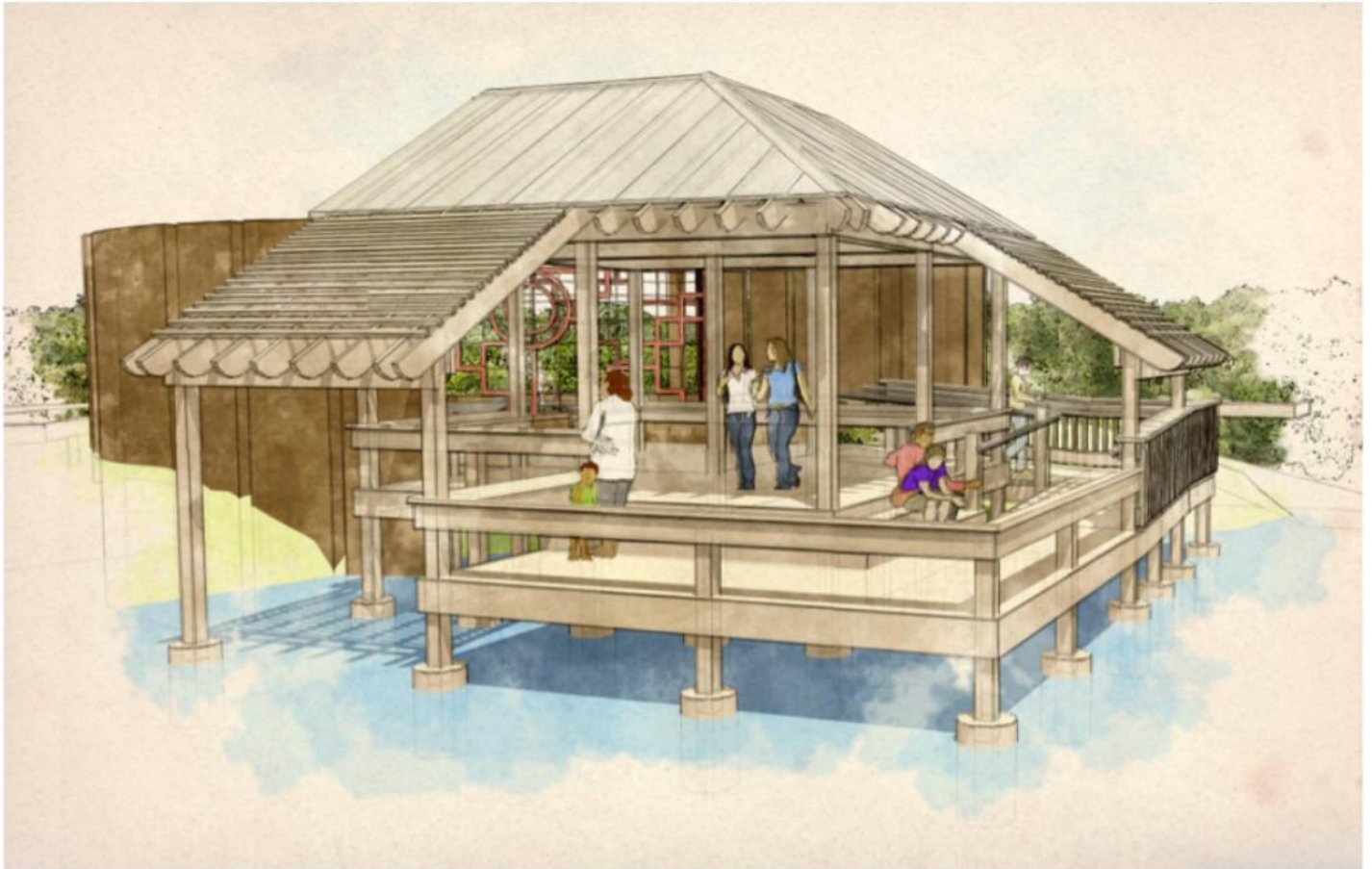
MNCPPC	Acreage	24.51	Region	N	Date	03-30-2016	
	Facility Code	S04	Area	OM			

**ATTACHMENT 3**  
**RECYCLED TRAILER**



AS-2450  
DOUBLE WIDE  
SALES CENTER

**ATTACHMENT 4**  
**OPEN-AIR CENTER**



**ATTACHMENT 4**  
**SEED CLASSROOM**

