



MCPB Item #  
January 15, 2009

To: Montgomery County Park Board  
Via: Mary Bradford, Director of Parks  
Mike Riley, Deputy Director of Parks  
From: Carrye Palleschi, Park Property Manager  
Date: December 31, 2008  
Re: **Westmoreland Hills Ancillary Building and Future Park Options**  
Public Testimony will be taken

*Mary R Bradford*  
*Carrye Palleschi*

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### Recommended Planning Board Action

**Staff Recommendation 1 – Approve Demolition of the Westmoreland Hills Park Ancillary Building**  
**Staff Recommendation 2 – Approve Future Disposition/Demolition of Park Buildings Authorization at the Director of Parks Level or designee**

### Background and Summary of Staff findings

The Westmoreland Hills Local Park is located in Little Falls Stream Valley Park. The Westmoreland Hills Local Park consists of a park ancillary building, playground, softball field, multi-use field and two tennis courts (see Figure 1).

The park ancillary building is a pre-fabricated house, built in 1942, donated to the park system after being declared surplus by the Navy in 1956, and used as a Recreation building by the community through the Park Permit Office.

In February 1993, the Department of Parks identified the building for closure, and offered use of the ancillary building to the Westmoreland Citizens Association (WCA) through a lease agreement effective June 1, 1994:

In 2007, the Department of Parks conducted a condition assessment of 31 Recreation Buildings and 9 Ancillary Buildings. Based on the findings of the condition assessment, and the subsequent structural evaluation, the building is no longer safe or suitable for public use, (see Attachments 1 and 2).

The Department of Parks met with the WCA on May 12, 2008 to review the findings, and discussed the need to close the building, which resulted in the closure of the building effective August 31, 2008.

On October 22, 2008, the Department of Parks met with the WCA, and the Westmoreland Community to address questions regarding the condition and closure of the building.

On November 6, 2008, the lease agreement between WCA and the Department of Parks was mutually terminated because the WCA agreed that since the building is vacant and considered an attractive nuisance, the building should be prepared for demolition as soon as possible. Department of Parks Staff prepared this recommendation as follow up to the poor condition of the building, and its ultimate closure.

The removal of the Park ancillary building provides an opportunity for a possible future public private partnership with Westmoreland Community and the Department of Parks.

The Department of Parks continues its efforts to assess the condition of its infrastructure to include more park buildings, and other facilities and amenities, all in various stages of their life cycle. In the future, it is recommended the Director of Parks or designees have the authority to approve the disposition and/or demolition of park buildings.

#### **Staff Recommendations**

##### **Approve Demolition of Westmoreland Hills Park Ancillary Building**

In 2007, Facility Engineering Associates (FEA) determined the building to be in poor condition, citing evidence of water infiltration, and the presence of mildew odor throughout (see Attachment 1)

A subsequent structural assessment by FEA identified "interior locations showed significant structural deterioration ...deterioration appeared to be widespread rather than isolated in the building...potential microbial growth in the wall cavity and possible insect damage..." Overall, FEA states "based on the extent of the deterioration; we recommend reconstruction rather than component repair." (see Attachment 2).

Based on this analysis, the Department of Parks is recommending recommends the immediate demolition of the building.

##### **Approve Future Disposition/Demolition of Park Buildings Authorization at the Director of Parks Level or designee**

The Department owns a wide range of Park buildings and structures, some of which have exceeded their useful lifecycle, the costs to improve and maintain are significant, and exceed the Department's resources, do not meet the needs of the Department (mission), are vacant and have become an attractive nuisance in the community, and/or present hazardous life/safety conditions (environmental and/or structural). Following proper public notice, and in the absence of significant community concerns, Commission owned park buildings that have no potential use as a park facility or require substantial expense to maintain may be demolished, or disposed of by sale or action as determined by the Department Director or designee in accordance with applicable law.

Your approval is requested for Recommendations 1 and 2.

#### **Attachments:**

Figure 1 – Westmoreland Hills Local Park

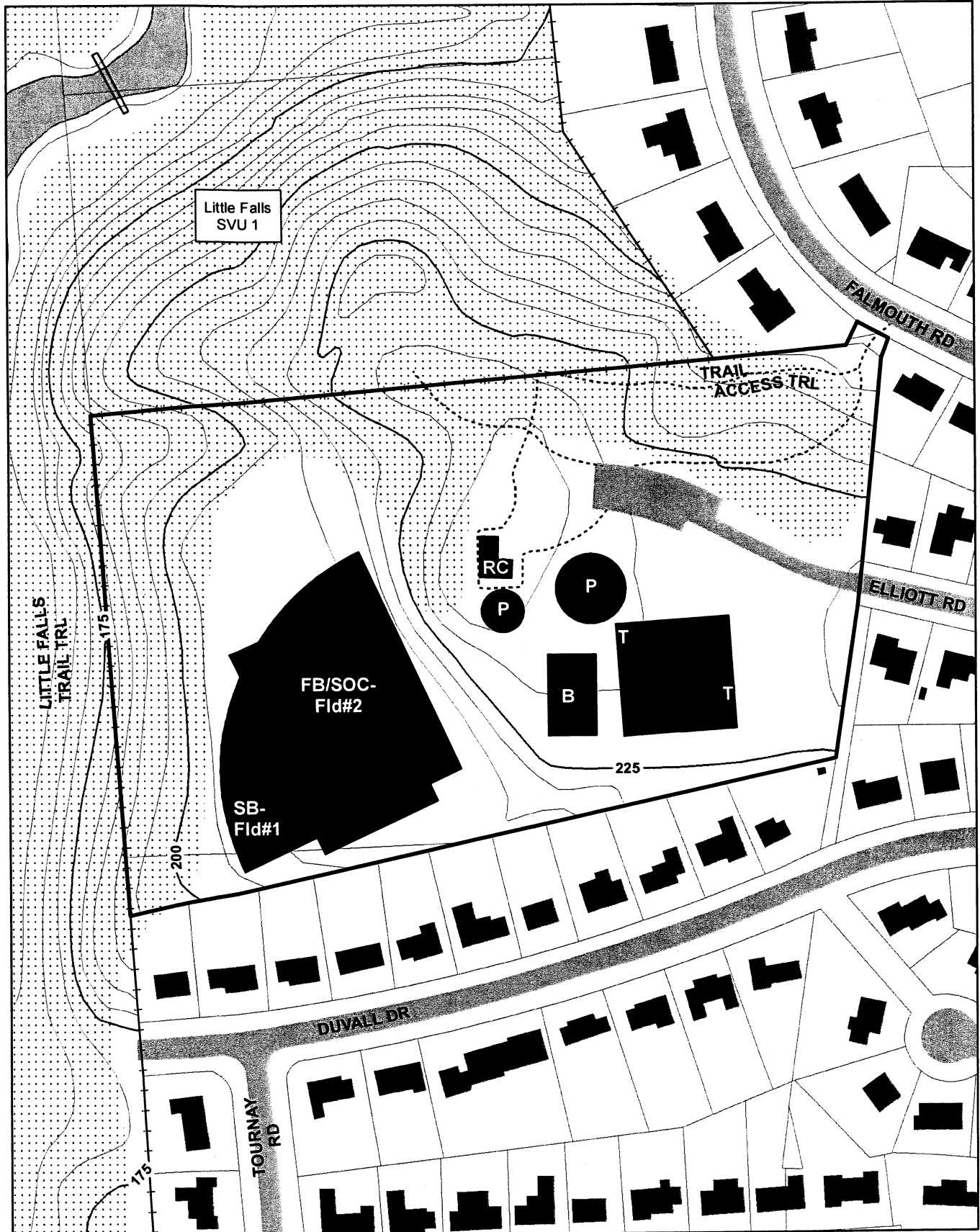
Attachment 1 – FEA Condition Assessment Report

Attachment 2 – FEA Structural Assessment Report

Figure 1

# Westmoreland Hills LP

5315 Elliott Drive, Bethesda, MD 20816

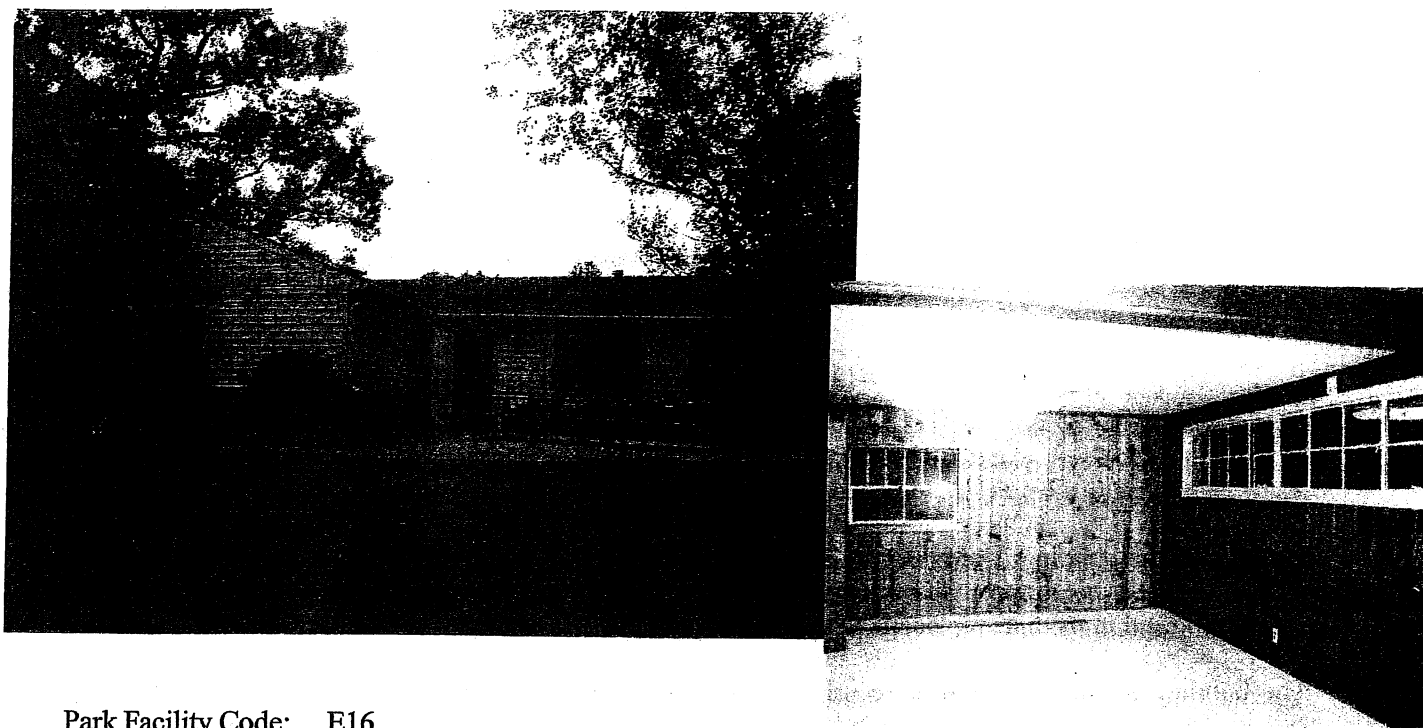


Acresage 10.074  
Facility Code E16

Region S  
Area CJ

Date 08-15-2007  
N  
1" = 150'

## Westmoreland Hills Local Park Recreation Building



Park Facility Code:	E16		
Center Address:	5315 Elliott Drive Bethesda, Maryland 20816	Square Footage:	1,330
Planning Area:	35	GPS:	N 38.95187 W 77.10964
Region Area:	South-Cabin John	CRV:	\$115,710
Date Built:	1942 - Army Surplus Building 1955 - Acquired by M-NCPPC	FCI:	0.2123

### Discussion

The Westmoreland Hills Local Park Ancillary Building (Property E16) was built in 1942, and has a total area of 1,330 square feet. The building has a stone and vinyl exterior at each elevation.

It was reported that the exterior walls located behind the vinyl siding were rotting, and a mildew odor was noticed throughout the building. It was reported, but not visually observed by FEA, that the exterior walls were rotting and the building has been exposed to water infiltration, which is possibly compromising the integrity of the structure. We recommend a structural evaluation be performed to help determine the cause of the moisture infiltration, the extent of deterioration, and the integrity of the exterior wood walls. This type of investigation should include opening and observing the wall system construction, and noting the condition of the underlying structural elements. For budgeting purposes, we have included the replacement and refinishing of the exterior wood walls in 2007, but have not assumed a cost to repair or remediate any structural issues, which would need to be determined as part of the evaluation.

We also recommend that a mold evaluation and air sampling be performed at the time of the structural evaluation. This is so mold samples can be taken from inside the exterior wall cavity. Once the evaluation is complete, recommendations for remediation or repairs should be followed. Actual cost for repairs for any structural

## Westmoreland Hills Local Park Ancillary Building

findings is not included in capital expenditure forecast due to unknown problems. Any damage to the building prior to and after the evaluation should be repaired. Peeling paint was also observed on the exterior walls that we recommend be tested for lead before any exterior repairs are performed.

The asphalt-shingle roof was replaced in 1998, and has a total area of approximately 2,600 square feet. There were no reports of leaks in the roof, and none were observed during FEA's site visit.

The building has several various-sized steel frame windows, located at the exterior elevations. The facility has two exterior doors which were observed to be corroded and in overall poor condition. We recommend that these doors are replaced and, if necessary, painted in 2007.

Interior finishes in the building included wood paneling walls, drywall ceilings, vinyl floor tile in the main recreational room, kitchen, and restrooms. In general, the interior finishes were in fair condition. We recommend the interior wood wall paneling be stained for aesthetic reasons, provided the mold evaluation and air sampling test is conducted and determines that the paneling can remain.

Heating for the building is provided by a natural gas-fired furnace that was installed in 2002, and appeared to be in overall good condition. The six-gallon domestic water heater located in the mechanical room was not functioning and immediate replacement is recommended.

The building is equipped with a security access system that has been abandoned in place. The system was provided to monitor the interior spaces with door sensors and motion detectors. Fire and life safety elements include egress lighting and emergency exit lights. Replacement of the security and fire alarm system is recommended in 2007, as one project.

It was observed that the fire suppression supply line (from the domestic water supply) was not equipped with a backflow preventer. Although not required by code, we recommend that a backflow preventer is installed on the fire suppression water piping in 2007, to reduce potential health concerns with the domestic water serving the building. In addition, we noted that the main shut-off valve for the domestic water service is located prior to the tap for the fire suppression water line. Even though a fire suppression system is not required for the mechanical room, during times that the domestic water supply is closed, there would be no suppression water for a fire. We recommend the fire suppression water line is reconfigured to connect to the domestic water line prior to the main service shut-off valve, so fire suppression is available if needed.

Surface cracks were observed in the concrete sidewalk panels around the perimeter of the building. The cracks should be repaired to reduce the potential for further deterioration or tripping hazards.

FEA recommends that the domestic water provided from the city water system be tested every five years to ensure water quality. The sanitary system for the building is connected to public sewer. FEA recommends that the waste lines cleaned every three years.

### **Immediate Recommendations**

The following projects were identified as immediate repairs or replacements, and are recommended for correction in 2007. Typically, projects recommended in 2007 (Year 1) are deficiencies, deferred maintenance items, code violations, or life safety issues.

Westmoreland Hills Local Park  
Ancillary Building

Description	FCA Class	Total
Structural Investigation (Determine Integrity of Exterior Walls)	Life Safety	\$4,400
Replace Exterior Doors	Functionality	\$2,600
Prepare and Paint Exterior Doors	Aesthetics	\$200
Mold Evaluation and Air Sampling	Environmental	\$1,665
Replace Domestic Water Heater	Functionality	\$550
Domestic Water Testing	Functionality	\$500
Install Double-check BFP (3/4") for Fire Suppression System	Environmental	\$780
Reconfigure Fire Suppression Pipe for Connection Before Domestic Water Shut-off	Life Safety	\$1,000
Perform Electrical Inspection and Testing	Functionality	\$500
Replace Security and Fire Alarm System	Functionality	\$2,870
Repair Exterior Concrete Surface Cracks	Functionality	\$400
Clean Waste Lines	Functionality	\$700
<b>Total</b>		<b>\$16,165</b>

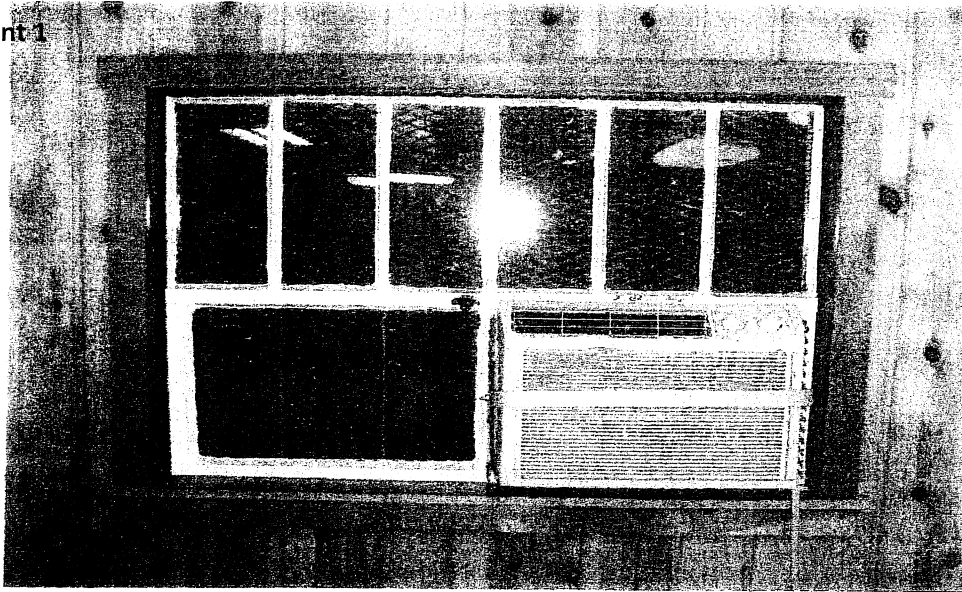
### Summary

Overall, the Westmoreland Hills Local Park Ancillary Building was in poor condition.

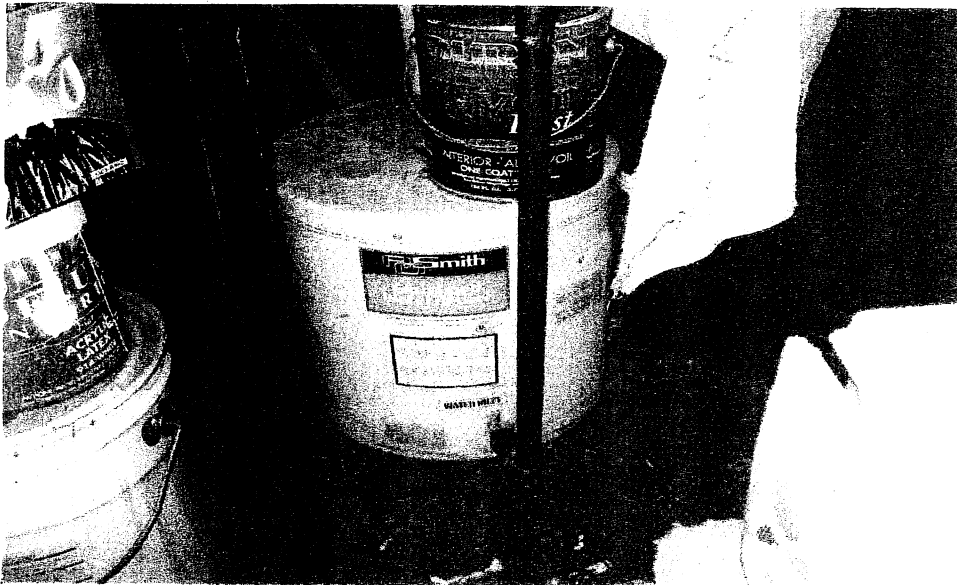
The facility appeared to have active preventive maintenance programs implemented for the heating systems. There was no evidence of active maintenance programs for the exterior or interior building assets, or electrical and plumbing systems. The recommended preventive maintenance program for the Recreation and Ancillary Buildings advises that a building inspection is conducted at each facility every six months to visually observe and note conditions needing repair, for which work requests will be generated. The inspections should also include minimal maintenance on an as-needed basis, such as removing debris from roof gutters and drains, lubricating door and window hardware, and replacing interior lights.

In addition, our maintenance program recommendations include active recurring maintenance tasks for the exterior, interior, electrical, and plumbing components of the buildings.

The cleanliness of the building reflected a custodial level of moderately dingy.



**PHOTOGRAPH 1:**  
Painted Window with Air  
Conditioner Unit



**PHOTOGRAPH 2:**  
Non-operational Domestic  
Water Heater



**PHOTOGRAPH 3:**  
Abandoned Security System  
in Building

E16 WESTMORELAND HILLS RECREATION BUILDING

Asset Tag	Description (Asset Definition)	Date Purchased	Months of Useful Life	Months of Remaining Life	Replacement Cost
Westmoreland Hills Local Park Recreation Building-B2010	Exterior Walls	1/1/1986	360	120	\$39,600
Westmoreland Hills Local Park Recreation Building-B2020	Exterior Windows	1/1/1942	540	-228	\$5,400
Westmoreland Hills Local Park Recreation Building-B2030	Exterior Doors	1/1/1942	300	-468	\$2,110
Westmoreland Hills Local Park Recreation Building-B3010	Roof Covering	1/1/1998	240	144	\$10,400
Westmoreland Hills Local Park Recreation Building-C1020	Interior Doors	1/1/1942	600	-168	\$1,600
Westmoreland Hills Local Park Recreation Building-C3010	Wall Finish	1/1/1942	360	-408	\$4,150
Westmoreland Hills Local Park Recreation Building-C3020	Floor Finish	1/1/1996	180	60	\$966
Westmoreland Hills Local Park Recreation Building-C3030	Ceiling Finish	1/1/1942	600	-168	\$1,932
Westmoreland Hills Local Park Recreation Building-D2010	Plumbing Fixtures	1/1/1996	900	780	\$2,900
Westmoreland Hills Local Park Recreation Building-D2020	Domestic Water Distribution	1/1/1955	900	288	\$8,530
Westmoreland Hills Local Park Recreation Building-D2030	Sanitary Waste	1/1/1955	900	288	\$6,650
Westmoreland Hills Local Park Recreation Building-D3020	Heat Generation	1/1/2002	216	168	\$1,300
Westmoreland Hills Local Park Recreation Building-D4010	Sprinklers	1/1/1985	600	348	\$500
Westmoreland Hills Local Park Recreation Building-D5010	Electrical Service and Distribution	1/1/1957	600	12	\$1,400
Westmoreland Hills Local Park Recreation Building-D5020	Lighting and Branch Wiring	1/1/1957	300	-312	\$15,800
Westmoreland Hills Local Park Recreation Building-D5030	Communications and Security	Unknown	180	0	\$2,870
Westmoreland Hills Local Park Recreation Building-G2030	Pedestrian Pavement	1/1/1955	600	-12	\$4,000
					\$110,108

E16 WESTMORELAND HILLS RECREATION BUILDING  
ASSET DEFINITIONS



E16 WESTMORELAND HILLS RECREATION BUILDING

Title	Type	Category	2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017 - 2021		2022 - 2026		Totals
			EUL	RUL	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Years 11 - 15	Years 16 - 20											
Replace Exterior Vinyl Siding	CIP	P - CR = Planned	30	2																							\$4,600
Stone Repairs - Tuckpointing and Stone Replacement	Operating	P - RM = Planned	10	5							\$385													\$385			\$770
Structural Investigation (Determine Integrity of Exterior Walls)	CIP	P - DM = Planned	N/A	1	\$4,400																						\$4,400
Replace Exterior Windows and Security Screens	CIP	P - CR = Planned	45	2	\$5,400																						\$5,400
Replace Exterior Doors	CIP	P - CR = Planned	25	1	\$2,600																						\$2,600
Prepare and Paint Exterior Doors	Operating	P - RM = Planned	5	1	\$200									\$200													\$800
Replace Asphalt-Shingle Roof	CIP	P - CR = Planned	-20	12																							\$10,400
Replace Interior Doors	CIP	P - CR = Planned	50	2	\$1,600																						\$1,600
Prepare and Paint Interior Doors	Operating	P - RM = Planned	5	2	\$156										\$156												\$622
Prepare and Stain Interior Wood Wall Paneling	Operating	P - RM = Planned	10	2	\$1,875																						\$3,750
Men's Restroom Renovation	CIP	P - CR = Planned	15	5					\$1,800																		\$3,600
Women's Restroom Renovation	CIP	P - CR = Planned	15	5					\$1,800																		\$3,600
Kitchen Renovation	CIP	P - CR = Planned	15	5	\$1,930																						\$3,860
Mold Evaluation and Air Sampling	CIP	P - DM = Planned	N/A	1	\$1,665																						\$1,665
Replace Interior Vinyl Floor Tile	CIP	P - CR = Planned	15	5					\$2,660																		\$5,320
Prepare and Paint Interior Ceilings	Operating	P - RM = Planned	5	2	\$2,660																						\$5,320
Replace Domestic Water Heater	CIP	P - CR = Planned	15	1	\$550																						\$1,100
Plumbing Renovations	CIP	P - CR = Planned	50	10																							\$14,630
Allowances for Plumbing Repairs	Operating	P - RM = Planned	5	4					\$732																		\$2,926
Domestic Water Testing	Operating	P - RM = Planned	5	1	\$500									\$500													\$2,000
Replace Furnace	CIP	P - CR = Planned	18	14																							\$1,300
Install Double-check BFP (3/4") for Fire Suppression System	CIP	P - DM = Planned	N/A	1	\$780																						\$780
Reconfigure Fire Suppression Pipe for Connection Before Domestic Water Shut-off	CIP	P - DM = Planned	N/A	1	\$1,000																						\$1,000
Replace Panelboard	CIP	P - CR = Planned	50	2	\$1,400																						\$1,400
Perform Electrical Inspection and Testing	Operating	P - RM = Planned	3	1	\$500				\$500																		\$1,000
Electrical Renovations	CIP	P - CR = Planned	50	10																							\$13,300
Allowances for Electrical Repairs	Operating	P - RM = Planned	5	4					\$1,330																		\$5,320
Replace Exterior Lighting	CIP	P - CR = Planned	25	4	\$2,500																						\$2,500
Replace Security and Fire Alarm System	CIP	P - CR = Planned	15	1	\$2,870																						\$2,870
Repair Exterior Concrete Surface Cracks	Operating	P - RM = Planned	5	1	\$400																						\$400
Clean Waste Lines	Operating	P - RM = Planned	3	1	\$700																						\$700
<b>Total (Present Value)</b>					\$16,165	\$17,691	\$0	\$5,762	\$8,575	\$1,100	\$4,016	\$0	\$2,062	\$29,130	\$0	\$2,062	\$29,130	\$0	\$2,062	\$29,130	\$21,137	\$19,987	\$21,137	\$28,427	\$19,987	\$21,137	\$125,623
<b>Total (Including 2.5% Inflation)</b>					\$16,165	\$18,133	\$0	\$6,205	\$9,465	\$1,245	\$4,657	\$0	\$2,512	\$36,379	\$0	\$2,512	\$36,379	\$0	\$2,512	\$36,379	\$28,427	\$30,413	\$28,427	\$30,413	\$30,413	\$36,379	\$153,600

E16 WESTMORELAND HILLS RECREATION BUILDING  
FACILITY CONDITION ASSESSMENT PLANNED WORK REQUESTS

E16 WESTMORELAND HILLS RECREATION BUILDING

Asset Tag	Description (Serialized Inventory)	Manufacturer	Model	Serial No	Location	Install Year	PM Template
Westmoreland Hills Local Park Recreation Building-D2020	Domestic Water Heater	A.O. Smith	IEL16900	AC82-23924-900	Mechanical Room	1/1/1982	None
Westmoreland Hills Local Park Recreation Building-D3020	Furnace	Rheem	RGDC-10EC1JS	GND202-F485-5909	Mechanical Room	1/1/2002	D3055 122 1950
Westmoreland Hills Local Park Recreation Building-D4010	Sprinklers	Unknown	Unknown	Unknown	Mechanical Room	1/1/1975	D4015 150 1950
Westmoreland Hills Local Park Recreation Building-D5010	Panelboard	Square D	Unknown	Unknown	Main Rec Room	1/1/1957	D5015 260 1950
Westmoreland Hills Local Park Recreation Building-D5030	Detection and Alarm Fire Alarm	Unknown	Unknown	Unknown	Interior Areas	Unknown	D5035 810 1950



**Report of**

**Engineering Consulting Services**  
**Randolph Hills Recreation Building**  
**Westmoreland Hills Recreation Building**  
**Ken-Gar Palisades Recreation Building**



**FEA Project No.: R01.2006.004801**  
**December 11, 2007**



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**Fairfax, VA 22030**  
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December 11, 2007

Montgomery County Department of Parks  
c/o Park Planning and Resources Division  
1109 Spring Street  
Silver Spring, MD 20910

**ATTN: Mr. Mark Wallis**

**SUBJECT: Engineering Consulting Services: Limited Structural Evaluation  
Randolph Hills Recreation Building – Spring, Maryland  
Westmoreland Hills Recreation Building – Bethesda, Maryland  
Ken-Gar Palisades Recreation Building – Kensington, Maryland  
FEA Project No. R01.2006.004801**

Dear Mr. Wallis:

Facility Engineering Associates, P.C. (FEA) is pleased to submit our report of the structural evaluation of the above referenced properties to the Maryland-National Capital Park and Planning Commission (M-NCPPC). Our services were performed in general accordance with our proposal dated August 24, 2007 that was authorized by the Montgomery County Department of Parks on November 3, 2007. Included in this report are a property description, a review of our scope of work, observations, repair recommendations, and a corresponding opinion of cost for each of the three park locations.

## 1.0 INTRODUCTION

FEA had provided M-NCPPC with a report of infrastructure inventory and assessments of park components for recreation and ancillary buildings located at 40 Montgomery County Park properties, for a total of 44 buildings in March 2007. This investigation included the recreation buildings at Randolph Hills Local Park, Westmoreland Hills Local Park, and Ken-Gar Palisades Local Park. The subject buildings were three of the six buildings acquired by M-NCPPC in the 1950s. They had been originally constructed in 1942 and used as residential Army Surplus buildings. After they were acquired by M-NCPPC, they were moved to their current locations and converted for recreational use.

Based on the findings of the general facility condition assessment, FEA's March 2007 report included a recommendation for a structural evaluation for each of the subject buildings. It was reported to FEA, but not previously validated by observation, that the exterior walls of the buildings were rotting and had been exposed to water infiltration, which may have compromised the integrity of the structures.

Our understanding of project background information is based on conversations with Mr. Mark Wallis of M-NCPPC and findings from previous site visits to the facilities.

## 2.0 PURPOSE

The purpose of our services was to assess the condition of the interior and exterior wall components of the recreation buildings located at Randolph Hills Local Park, Westmoreland Hills Local Park, and Ken-Gar Palisades Local Park to identify deficiencies and to suggest repair options. It was our understanding that opinions of cost for repairs to identified deficiencies would be used by the Planning Division to assist them in their decision to repair or eliminate each of the facilities.

## 3.0 EVALUATION PROCEDURES

Our scope of service for this evaluation included a drawing and document review, a wall assessment by means of exploratory openings, and the preparation of an assessment report. The evaluation was visual in nature and not destructive to the properties except at the locations of the exploratory openings to gain access to hidden conditions.

FEA personnel Laura Cavanaugh and Duke Hetland met with Mark Wallis of M-NCPPC at each of the subject buildings on November 13, 2007, at which time they gathered information about building history, use, and performance; made observations of the interior and exterior wall finishes; and indicated to the contractor the locations where representative exploratory openings would be made. On November 20, 2007, FEA returned to the sites to observe the openings. During these visits, conditions were explored visually and by means of probing, and photographs were taken as documentation. The openings were then closed by the contractor.

Our scope of services includes only those specifically indicated. The assessments did not include any environmental services such as sampling or testing of asbestos, lead-based paint, lead-in-water, indoor air quality, PCB's, radon, mold, or any other potentially hazardous materials, air-borne toxins or issues not outlined in this scope of services. We did not make any formal comparison of structural components to construction codes, and we did not take cosmetic concerns into consideration as part of our recommendation.

## 4.0 FINDINGS AND RECOMMENDATIONS

No construction drawings were provided to FEA to review, so the document review portion of the evaluation consisted of a review of the report of existing conditions presented to M-NCPPC by Steven J. Karr, AIA, Inc. on September 25, 1995. The Karr report included observations of Randolph Hills and Ken-Gar Palisades, but Westmoreland Hills was not a part of this study. The study revealed that, at Randolph Hills, the building "exhibits severe deterioration of the perimeter wood sill plate supporting the perimeter wood frame bearing walls." It had been reported to FEA that conditions had not changed and that repairs had not been made since that assessment. The Karr report also included comments that both the Randolph Hills and Ken-Gar Palisades buildings exhibited deflection of the roof members.

The following is a summary of our observations of the conditions at each building, our recommendations for repairs needed to restore structural integrity, and opinions of costs for these repairs. It should be noted that the opinions of cost are based on repairs to address structural deficiencies of the buildings to meet current construction standards with the intent of maintaining the buildings' current use. Opinions of cost are based on our experience with similar projects, our understanding of the local construction industry, the nature of the repairs needed for each building, the size of the buildings, and the average cost for community centers as found in the RS Means Square Foot Costs Manual, 2007 Edition.

#### 4.1 Randolph Hills Recreation Building

Randolph Hills Recreation Building was one-story and had a total area of 1,320 square feet. The building had brick masonry and wood siding at exterior elevations, and it was built on a concrete slab-on-grade. It was reported to FEA that some modifications to the building had been made over the years, including resizing and replacement of windows. During the site visit, a mildew odor was noticed throughout the building's interior.

For the structural evaluation, three exploratory openings were made: one in the wall in the back mechanical room, one in the interior of the north-east wall of the main room, and one in the interior of the south-west wall of the main room. The opening in the mechanical room was made at the reported location of an opening made during the 1995 building study. This opening revealed limited deterioration, but, due to evidence of newer wood from a localized repair, the condition at this location should be considered separately from that of the overall building. In each main room opening, several linear feet of baseboard and wall panels beneath the chair rail were removed. At these locations, FEA observed severe structural deterioration due to water infiltration. The wooden sill plates and studs were in extremely poor condition, and high levels of moisture were found. There appeared to be potential microbial growth in the wall cavity as well as possible insect damage. Our assessment indicated the conditions observed were widespread and not isolated to the exploration locations. Also, deflection of the roof decking was noted, but significant structural defects were not observed.

Photographs of the observed conditions at Randolph Hills can be found in Appendix A.

To correct the deficiencies noted, the recommended repairs would generally include removal of wall finishes, replacement of structural members, and abatement of hazardous materials. Also, modification to roof framing components in order to meet current code requirements may be needed. Essentially, M-NCPPC should expect overall removal, reframing, and reconstruction of building wall elements as well as a possible reconstruction of the foundation in order to restore this building. Based on the extent of deterioration, we recommend reconstruction rather than component repair. Our opinion of cost is based on this approach.

Our opinion of cost for the recommended repairs for the Randolph Hills Recreation Building is \$175,000 to \$200,000.

#### 4.2 Westmoreland Hills Recreation Building

Westmoreland Hills Recreation Building was one-story and had a total area of 1,330 square feet. The building had a stone masonry and vinyl siding exterior. It was reported to FEA that some modifications to the building have been made over the years, including the addition of exterior stone planter boxes adjacent to building walls and the resizing and replacement of windows. A mildew odor was noticed throughout the building during the site visit.

For the structural evaluation, exploratory openings were made at the exterior of the north wall and in three interior locations along the base of the walls for a total of four openings. There was minimal evidence of deterioration at the exterior exploratory opening, but the interior locations showed significant structural deterioration. Based on our assessment, deterioration appeared to be widespread rather than isolated in the building. At the interior openings, FEA observed extensive wood element deterioration due to water infiltration, which could have been caused by several potential sources. There also appeared to be potential microbial growth in the wall cavity and possible insect damage.

The roof framing was observed to be constructed of 2x4 members. Deflection of the roof decking was noted, but significant structural defects were not observed.

Photographs of observed conditions at Westmoreland Hills can be found in Appendix B.

To correct the deficiencies noted, recommended repairs include removal of wall finishes, replacement of structural members, and abatement of hazardous materials. Also, it is possible that modification of roof framing components in order to meet current code requirements is needed. Essentially, M-NCPPC should expect overall removal, reframing, and reconstruction of building wall elements as well as a possible reconstruction of the foundation in order to restore this building. Based on the extent of deterioration, we recommend reconstruction rather than component repair. Our opinion of cost is based on this approach.

Our opinion of cost for the recommended repairs for the Westmoreland Hills Recreation Building is \$175,000 to \$200,000.

#### 4.3 Ken-Gar Palisades Recreation Building

The Ken-Gar Palisades Recreation Building was one-story with a total area of 1,500 square feet. The building had wood siding on exterior elevations, with the exception of vinyl siding at the end gables. The elevated wood floor decks are constructed over a "crawl" space.

During our evaluation, an opening to provide access to the crawl space was installed and an exploratory opening on the exterior of the east wall was made. FEA also observed conditions in the attic. The exterior opening revealed severe deterioration of wood elements at that location of the building perimeter. Foundation sill plates, wall elements, floor elements, and joists supporting the wall plate were all deteriorated where there was close proximity to soil and moisture. However, while the condition was severe, it appeared to be localized; joints and support elements adjacent to deteriorated sections were observed to be in satisfactory condition. There was evidence that modifications to the exterior wall had been made on the east gable. The crawl space investigation revealed that the floor system was well supported by means of a system of concrete block and wood framing. The condition of framing members, as observed from the crawl space, was generally good. Significant deterioration was not observed. Observations from the crawl space indicated that the elevated structure was not exposed to poor drainage on the west half of the building. The deterioration at the east wall was limited to an isolated area.

The presence of soot found in the attic indicated the occurrence of a fire at some point in the building's history. Observations indicated that the roof was not deteriorated. The floor framing was observed to be in good condition.

There was evidence of past displacement of the main room walls. It could not be verified whether this displacement was active or whether it was a condition caused by original construction or relocation.

Photographs of observed conditions at Ken-Gar Palisades can be found in Appendix C.

Overall, this building was in fair condition. To correct the deficiencies noted, we recommend partial-height repairs of the structural framing and replacement of finishes along the east wall (approximately a 20-foot-long area). Also, general framing improvements may be added for stability.

To improve overall long-term performance of the building, ventilation should be improved in the crawl space and attic.

Our opinion of cost for the recommended repairs for the Ken-Gar Palisades Recreation Building is approximately \$25,000.

If you have any questions regarding this report, or require additional information, please do not hesitate to contact us.

Very truly yours,  
**FACILITY ENGINEERING ASSOCIATES, P.C.**



Laura M. Cavanaugh  
Staff Engineer



Mark E. Leeman, P.E. (VA)  
Associate

Attachments:

- Appendix A – Randolph Hills Photographs
- Appendix B – Westmoreland Hills Photographs
- Appendix C – Ken-Gar Palisades Photographs



**APPENDIX A: RANDOLPH HILLS PHOTOGRAPHS**



Figure A-1: Randolph Hills Recreation Building

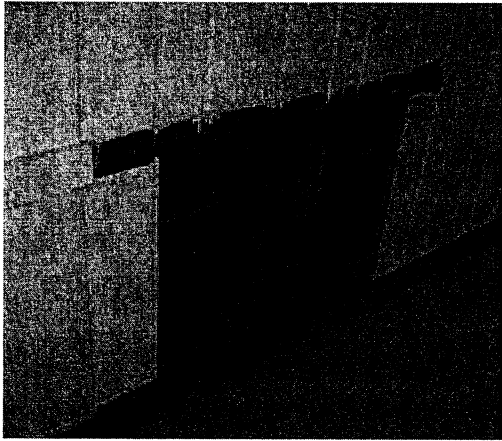


Figure A-2: Interior opening, South-West wall

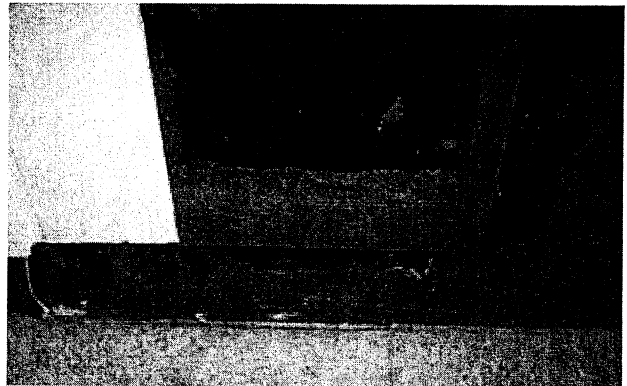


Figure A-3: Interior opening, South-West wall

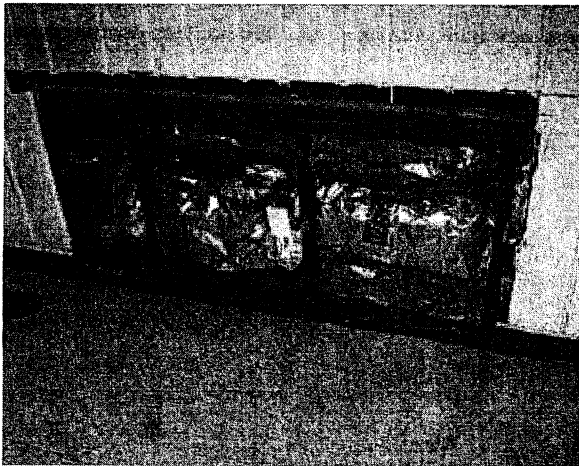


Figure A-4: Interior opening, North-East wall



Figure A-5: Interior opening, North-East wall

Figure A-6: Significant deterioration

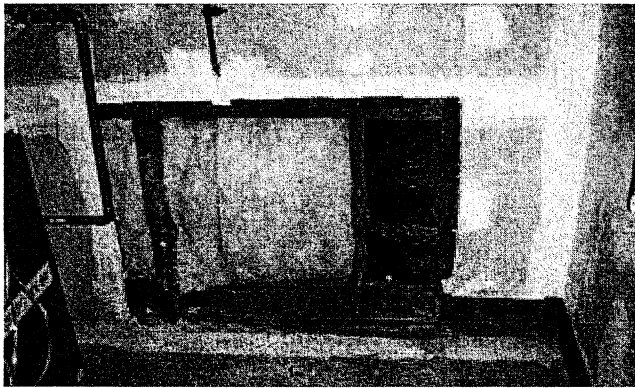


Figure A-7: Mechanical room wall opening

Figure A-8: Mechanical room wall opening

**APPENDIX B: WESTMORELAND HILLS PHOTOGRAPHS**



Figure B-1: Westmoreland Hills Recreation Building

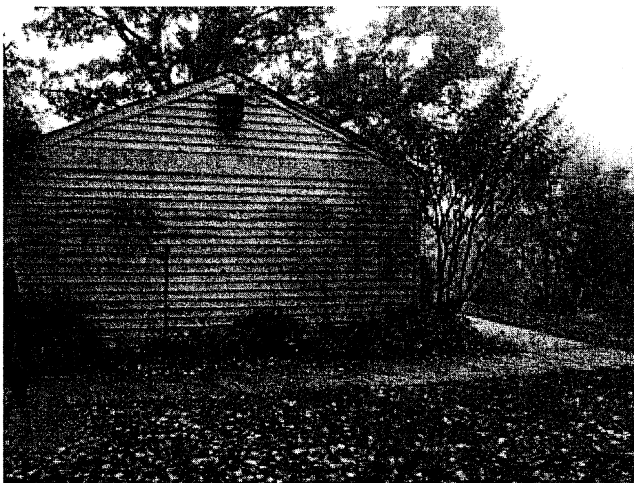


Figure B-2: North wall



Figure B-3: North wall exterior opening

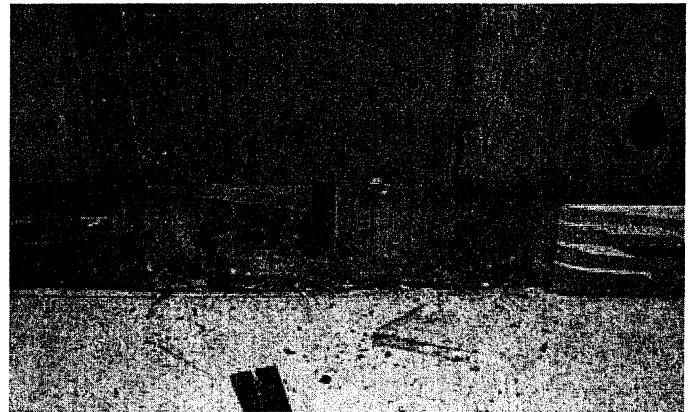
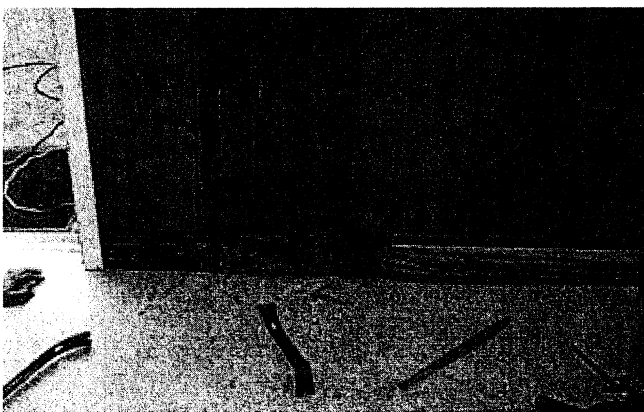


Figure B-4: Interior opening, South of front door

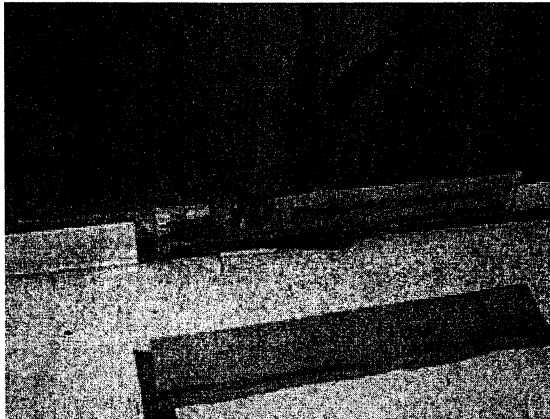


Figure B-5: Interior opening, South of front door

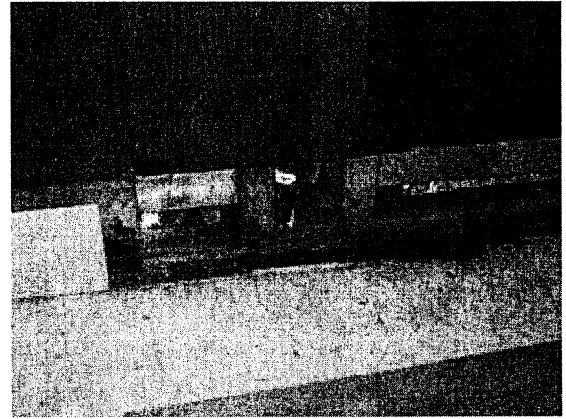


Figure B-6: Interior opening, East wall

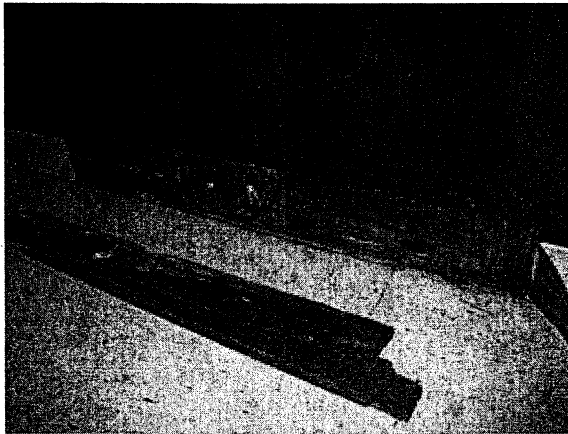


Figure B-7: Interior opening, East wall



Figure B-7: Interior opening, North of front door

Figure B-8: Interior opening, North of front door

APPENDIX C: KEN-GAR PALISADES PHOTOGRAPHS



Figure C-1: Ken-Gar Palisades Recreation Building

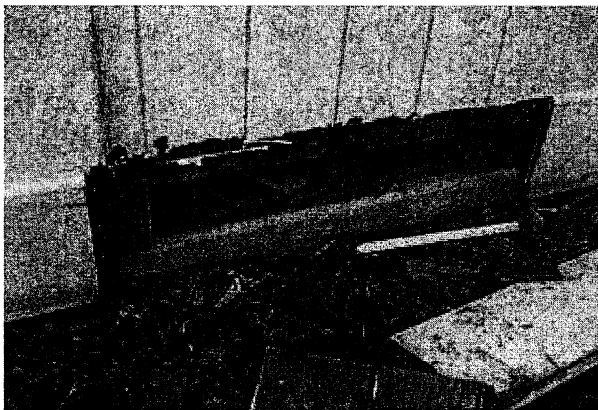


Figure C-2: Exterior wall opening, East wall



Figure C-3: Exterior opening, East wall



Figure C-4: Exterior opening, East wall

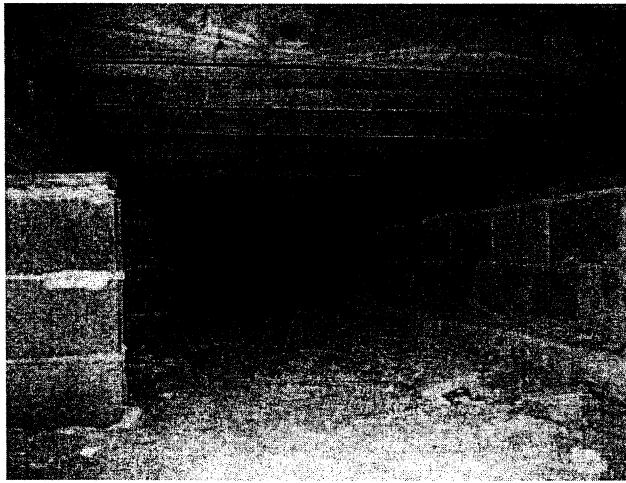


Figure C-6: Crawl space

Figure C-5: Roof framing in attic



Figure C-7: Crawl space wall