1980 Darnestown Road, Beallsville HPC Case No. 17/01-09 A] Beallsville Historic District



#### HISTORIC PRESERVATION COMMISSION

Isiah Leggett County Executive

David Rotenstein Chairperson

Date: June 25, 2009

#### **MEMORANDUM**

TO:

Carla Reid, Director

Department of Permitting Services

FROM:

Josh Silver, Senior Planner

Historic Preservation Section

Maryland-National Capital Park & Planning Commission

513027 7531911

SUBJECT:

Historic Area Work Permit #506356, building stabilization

The Montgomery County Historic Preservation Commission (HPC) has reviewed the attached application for a Historic Area Work Permit (HAWP). This application was **Approved with conditions** at the June 24, 2009 meeting.

- 1. The applicant must submit a tree protection plan to HPC staff for approval prior to submitting the permit set of plans.
- 2. The applicant must submit a building relocation plan to HPC staff for approval prior to submitting the permit set of plans.

The HPC staff has reviewed and stamped the attached construction drawings.

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant:

M-NCPPC Montgomery County Department of Parks

Address:

19801 Darnestown Road, Beallsville

This HAWP approval is subject to the general condition that the applicant will obtain all other applicable Montgomery County or local government agency permits. After the issuance of these permits, the applicant must contact this Historic Preservation Office if any changes to the approved plan are made.





## HISTORIC PRESERVATION COMMISSION 301/563-3400

# APPLICATION FOR HISTORIC AREA WORK PERMIT

	Contact Person: Live Hueller / Losey Lampl
# 11-001-00914917	Daytime Phone No.: 301-650-4390/301-563-3414
Tax Account No.: 11-001-00914906	
Name of Property Owner: Depot of Pource	Daytime Phone No.:
Address: 1109 Spring St. S. lver Spar	m 20910
Contractor: BellArchitexts	Phone No.: <u>202 - 546 - 4 57</u> 0
Contractor Registration No.:	
Agent for Owner:	Daytime Phone No.:
LOCATION OF BUILDING/PREMISE	
House Number: 19801 Street	Darnestown Rd.
Town/City: Beauts ville Nearest Cross Street:	
·-	
Liber: 1855 Folio: 068 Parcet: 300 + 4	107 (Mars + 9xid C) 22)
PART ONE; TYPE OF PERMIT ACTION AND USE	
1A. CHECK ALL APPLICABLE: CHECK ALL AP	PLICABLE:
	Slab 🗔 Room Addition 🗀 Porch 🗀 Deck 🗀 Shed
19 Move □ Install □ Wreck/Raze □ Solar □	Fireplace
☐ Revision ☐ Repair ☐ Revocable ☐ Fence/Wall	(complete Section 4) Other: Stavolize
1B. Construction cost estimate: \$	
1C. If this is a revision of a previously approved active permit, see Permit #	
PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITION	S
2A. Type of sewage disposal: 01 □ WSSC 02 ☑ Septic ¥	03 1 Other Knot in place at this time
28. Type of water supply: 01 □ WSSC 02 ☑ Well	03 🗆 Other:
PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL	
3A. Heightfeetinches	V/A
3B. Indicate whether the fence or retaining wall is to be constructed on one of the follo	wing locations:
☐ On party line/property line ☐ Entirely on land of owner	☐ On public right of way/easement
Therefore and the late of the state of the s	
I hereby certify that I have the authority to make the foregoing application, that the approved by all agencies listed and I hereby acknowledge and accept this to be a cond	lication is correct, and that the construction will comply with plans lition for the issuance of this permit.
Chey Land	Auge 1 2009
Signature of owner or authorized agells	Date
<b>X</b>	
	on, Historic Preservation Commission
Disapproved: Signature:	03/ Date: /2/17//0
Application/Permit No.: 5130 Aur Date Filed	Date Issued:

Fdit 6/21/99

**SEE REVERSE SIDE FOR INSTRUCTIONS** 



# CENTENNIAL CONTRACTORS ENTERPRISES, INC.

December 14, 2010

Dave Mossburg 16641 Crabbs Branch Way Rockville, MD 20855

Re:

**Darby Store Moving Letter** 

72145-0009

Dear Mr. Mossburg,

The following describes our intent upon NTP to move the Darby Store per contract documents:

Stage equipment around the jobsite. Excavate as necessary around the store. Measure & mark out the foundation for steel. Cut or knock out holes in the foundation. Excavate as necessary under the store. Stack up cribbing piles where necessary. Install the main beams length-ways on the cribbing piles under the store. Install the cross beams (if necessary) width-ways on top of the main beams and approximately 4" to 8" below the center beam/sill plates. Using wooden blocking and wedges, shim the beams up tight to the center beam, the sill plates and any other bearing points including decks and porch roofs. Set hydraulic jacks onto blocking in the center of each cribbing pile and hook them up to the unified jacking machine. Using the Unified Jacking System, raise the store up 8". Add in 6" of blocking to each cribbing pile. Raise the store another 6" to 8". Add in another 6" of blocking to each cribbing pile. Lower the store onto the blocking and reset the jacks up 12". Repeat steps 10 through 14 until the store is 3' to 4' above the foundation wall. Set up cribbing piles in the direction the store is being moved. Install the roll beams level on those cribbing piles and in under the main beams supporting the store. Install heavy duty steel roller skates between the roll beams and the main beams. Using hydraulic jacks or a skidloader, slide the store slowly to the end of the roll beams. Reset the roll beams and slide the store until the store is over the new foundation. Set up the supporting cribbing piles for lowering the store onto the new foundation. Lower the store using the jacking procedure in reverse until it sets on the foundation. Make sure all center supports are in place including any bearing points under the store. Lower the steel beams away from the sill plate. Remove the steel beams and the wooden cribbing piles. Remove all equipment from the jobsite.

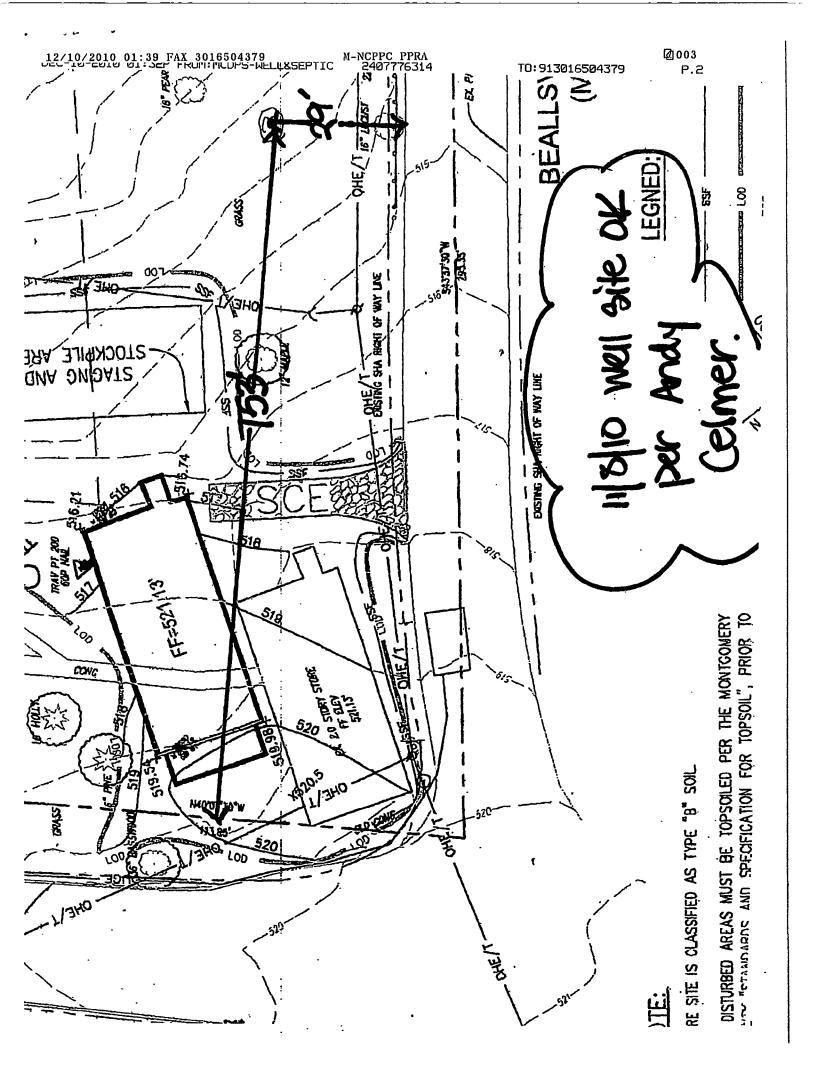
Should you have any questions, please contact me at (301) 738-9670.

Sincerely,

√ason Lynch

Project Manager II/SSR

Centennial Contractors Enterprises, Inc.





### MONTGOMERY COUNTY PLANNING DEPARTMENT THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

November 19, 2010

Julie Mueller
Parks Department
1109 Spring Street, Suite 800
Silver Spring, MD 20910

Re:

Forest Conservation Plan Exemption Request

Darby Store Relocation NRI/FSD # 42011063E

Dear Ms. Mueller:

The Montgomery County Planning Department has reviewed the above mentioned plan to determine its compliance with Chapter 22A of the Montgomery County Code (Forest Conservation Law). The Environmental Planning Division confirms the exemption from submitting a forest conservation plan for the relocation of the Darby Store. The plan submitted on October 21, 2010 qualifies for a modification to an existing development property because the proposed plan does not: 1) remove more than 5,000 square feet of forest; 2) does not affect any forest in a stream buffer; and 3) does not require a subdivision plan.

The confirmation of this exemption from submitting a forest conservation plan is only applicable to the relocation of the Darby Store. If there is a future need to obtain a sediment control permit, a new determination on the applicable of the forest conservation law must be made for that specific regulated activity.

A pre-construction meeting and an inspection of all tree protection measures by the forest conservation inspector is required before any land disturbing activities occur on site. If you have any questions concerning this approval, please contact me at 301 495-4730.

Sincerely.

Mark Pfeffeffe

Forest Conservation Program Manager

Cc:

Plan 42011063E

Justin Frye 301 306-3092



#### HISTORIC PRESERVATION COMMISSION

Isiah Leggett
County Executive

David Rotenstein Chairperson

Date: June 25, 2009

#### **MEMORANDUM**

TO:

Carla Reid, Director

Department of Permitting Services

FROM:

Josh Silver, Senior Planner

Historic Preservation Section

Maryland-National Capital Park & Planning Commission

513027 75 31911

SUBJECT:

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THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERENCE TO THE ABOVE APPROVED HAWP CONDITIONS AND MAY REQUIRE APPROVAL BY DPS OR ANOTHER LOCAL OFFICE BEFORE WORK CAN BEGIN.

Applicant:

M-NCPPC Montgomery County Department of Parks

Address:

19801 Darnestown Road, Beallsville

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246 777-170

## HISTORIC PRESERVATION COMMISSION 301/563-3400

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•	Contact Person: Like Hueller/Long Lampl
# 11-001-00914917	
Tax Account No.: 11-001-00914906	
Name of Property Owner: Dept. of Pouck	Daytime Phone No.:
Address: 1109 Spring St. Silver Sp.	10910
Contractor: BellArchitects	-
Contractor Registration No.:	
Agent for Owner:	Daytime Phone No.:
LOCATION OF BUILDING/PREMISE	
House Number: 19801 Street	Darnestown Rd
Town/City: Beullsville Nearest Cross Street	
Lot: Block: Subdivision:	
Liber: 1855 Folio: 068 Parcet: 300 +	407 (Map + grid cuzz)
PART ONE: TYPE OF PERMIT ACTION AND USE	
	APPLICABLE:
	☐ Slab ☐ Room Addition ☐ Porch ☐ Deck ☐ Shed
「 Move ( install □ Wreck/Raze □ Solar [	☐ Fireplace ☐ Woodburning Stove ☐ Single Family
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I hereby certify that I have the authority to make the foregoing application, that the a approved by all agencies listed and I hereby acknowledge and accept this to be a co	pplication is correct, and that the construction will comply with plans andition for the issuance of this permit.
Signatural of owner or authorized each	June 1 2007
Together any a delinated agent	Dote
Approved: For Chairm	uson, Historic Preservation / /
Disapproved: Signature:	(JS) Date: /2/17/10
Application/Permit No.: # 5/13/37	Date Issued:

**SEE REVERSE SIDE FOR INSTRUCTIONS** 

Edit 6/21/99



# CENTENNIAL CONTRACTORS ENTERPRISES, INC.

**December 14, 2010** 

Dave Mossburg 16641 Crabbs Branch Way Rockville, MD 20855

Re:

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72145-0009

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Should you have any questions, please contact me at (301) 738-9670.

Sincerely,

Jason Lynch / Project Manager II/SSR

Centennial Contractors Enterprises, Inc.



#### DEPARTMENT OF PERMITTING SERVICES

Islah Leggett County Executive

Carla Reid Director

### WELL LOCATION PERMIT

Issue Date:

12/10/2010

Permit No:

553208

Expires:

12/10/2011

THIS IS TO CERTIFY THAT:

MONTGOMERY COUNTY DEPARTMENT OF PARKS

1109 SPRING STREET #800 SILVER SPRING MD 20910

HAS PERMISSION TO DRILL A WATER-SUPPLY (WELL) SYSTEM TO SERVE A RESIDENTIAL DWELLING. THE CONDITION SPECIFIED BELOW ARE PART OF THIS PERMIT. ANY CHANGES IN THE TERMS OF THE PERMIT OR IN THE USE OF THE BUILDING SHALL BE BY WRITTEN APPROVAL OF THE APPROVING AUTHORITY ONLY.

LIMITS OF THE WELL LOCATION: (SEE AUSO THE ATTACHED SITE PLAN)

153 FT. FROM THE

113.85

LOT LINE AND

FT, FROM THE

ROAD

LOT LINE

#### SPECIAL CONDITIONS:

Existing well to be abandoned per COMAR 26.04.04 standards. See site plan for well site for replacement well. Any location change from th primary well site must have written approval by this department prior to drilling. Well to be at least 100 feet from any septic system. All structures must be at least 30 feet from well. This property is in category W-6 and / or S-6 where there is no planned community service and an individual system may be installed on an indefinite basis without firm obligation to connect to community system when and if it becomes available.

NO BUILDING SHALL BE OCCUPIED UNTIL A CERTIFICATE OF POTABILITY HAS BEEN ISSUED BY THE DEPARTMENT OF PERMITTING SERVICES FOR THE WATER SUPPLY SYSTEM.

PREMISE ADDRESS:

19811 DARNESTOWN RD

BEALLSVILLE MD 20839-0000

LOT

N/A

BLOCK: N/A

**ELECTION DISTRICT** 

PARCEL

GRID

LIBER PERMIT FEE:

\$176.00

TAX ACCOUNT NO .:

PLATE

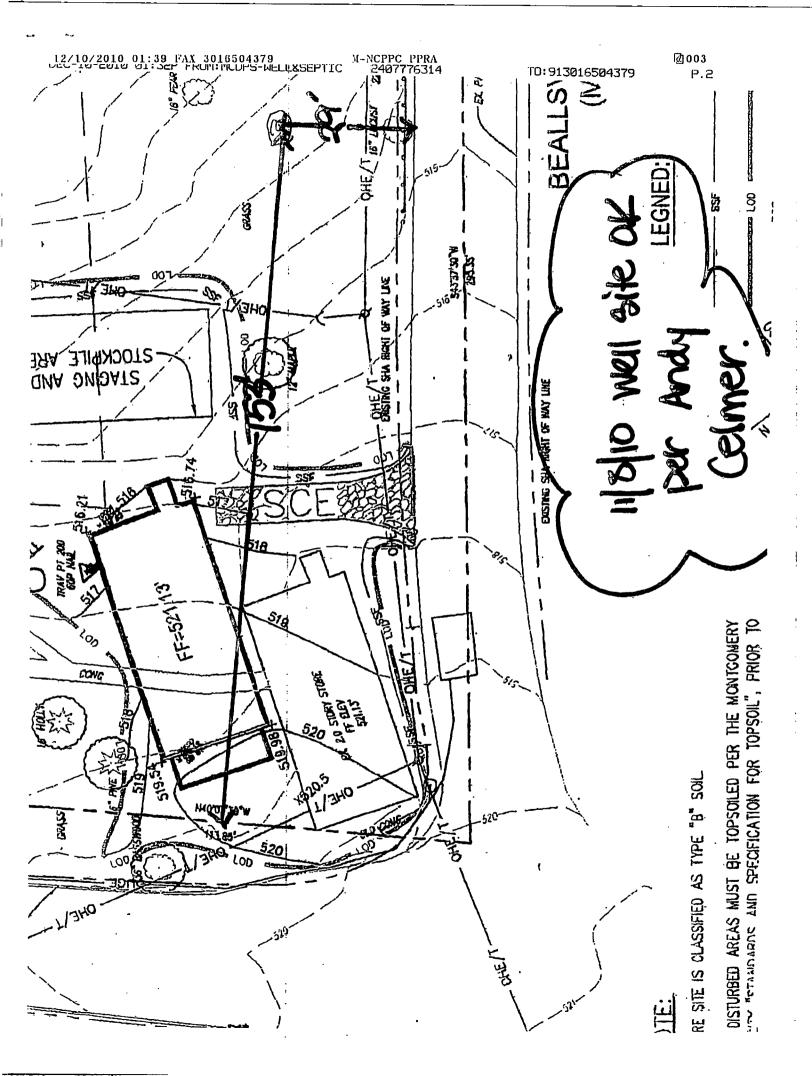
**FOLIO** 

SUBDIVISION

BARNESVILLE OUTSIDE

Director, Department of Permitting Services

Phone: (240) 777-6306





### MONTGOMERY COUNTY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

November 19, 2010

Julie Mueller
Parks Department
1109 Spring Street, Suite 800
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Sincerely.

Forest Conservation Program Manager

Cc:

Plan 42011063E

Justin Frye 301 306-3092

### MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: 19801 Darnestown Road, Beallsville Meeting Date: 6/24/2009

**Resource:** Outstanding Resource **Report Date:** 6/17/2009

Beallsville Historic District

Public Notice: 6/10/2009

Applicant: M-NCPPC Montgomery County

Department of Parks (Julie Mueller, Agent) Tax Credit: No

Review: HAWP Staff: Josh Silver

Case Number: 17/01-09B

**PROPOSAL:** Building stabilization

#### **STAFF RECOMMENDATION**

Staff recommends that the HPC approve this HAWP application with the following conditions:

- 1. The applicant must submit a tree protection plan to HPC staff for approval prior to submitting the permit set of plans.
- 2. The applicant must submit a building relocation plan to HPC staff for approval prior to submitting the permit set of plans.

#### BACKGROUND

On March 25, 2009 the HPC reviewed and unanimously approved with two conditions a proposal for the relocation of the subject building per the attached site plan. (See Circles 10-11...). The conditions of approval stated:

- 1. The applicant must submit a tree protection plan to HPC staff prior to submitting the permit set of plans.
- 2. A Historic Area Work Permit application must be submitted showing details of the proposed relocation and stabilization programs for the building.

#### ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Outstanding Resource within the Beallsville Historic District

STYLE: Vernacular

DATE: 1921

The Darby Store rests on a concrete foundation directly on the northwest corner of Darnestown and Beallsville Road. The building is a symmetrical, one-bay wide, two-story, balloon-frame structure measuring 54'4" x 24'6", clad in horizontal wood siding. Presently the building contains a tarp-covered roof due to a no longer extant original metal roof. Windows are double-hung, 2/2 throughout the building with the exception of an attic window on the south elevation which is tripartite in design.

#### **PROPOSAL**

The applicant is proposing to stabilize the subject building in preparation for relocating the building to the HPC approved location.

The proposed stabilization includes general reinforcements to structural building elements, repair and/or replacement where necessary of any deteriorated exterior materials and finishes and soffit and corner board repairs. The proposed work includes laying a new foundation with a full basement in the new location. (See Circles 2-17 for the proposed building stabilization program).

#### **APPLICABLE GUIDELINES**

When reviewing alterations and new construction within the Beallsville Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the, Montgomery County Code Chapter 24A (Chapter 24A), and the Secretary of the Interior's Standards for Rehabilitation (Standards). The pertinent information in these documents is outlined below.

#### Montgomery County Code; Chapter 24A

- (a) The commission shall instruct the director to deny a permit if it finds, based on the evidence and information presented to or before the commission that the alteration for which the permit is sought would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or ultimate protection of the historic site or historic resource within an historic district, and to the purposes of this chapter.
- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:
  - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
  - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
  - (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
  - (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or
  - (5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or
  - (6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.
    - (c) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.
    - (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic

resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

#### Secretary of the Interior's Standards for Rehabilitation:

- #1 A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
- #3 Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- #4 Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- #5 Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- #6 Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and where possible, material. Replacement of missing features will be substantiated by documentary and physical evidence.

#### **STAFF DISCUSSION**

Staff supports the proposed stabilization program for the building. At the March 2009 hearing the HPC requested the applicant return with detailed information about the proposed relocation strategy and stabilization program for the building. The applicant has retained a group of professionals experienced in building stabilization and historic architecture to assist them in developing a plan for the relocation and stabilization of the building. The proposed stabilization plan is a holistic effort aimed at stabilizing the building for its long-term use and preservation. Stabilization of the building will aid in the long-term protection of the building and remedy an unsafe condition. Stabilization of the building in place prior to its relocation on the property is necessary due to its severely deteriorated condition. The proposed stabilization plan will not substantially alter the exterior features of the building and includes material selections that match the original building fabric for locations where replacement materials are determined necessary in the field.

Staff evaluated the application for completeness and consistency with *Chapter 24A* and the *Standards*. The proposed stabilization plan is consistent with *Chapter 24A* and the *Standards* outlined above. The applicant has indicated a formal relocation plan for the building will be prepared and submitted for approval prior to submitting the permit set of plans. Staff recommends the HPC evaluate the proposed stabilization program for consistency with *Chapter 24A* and the *Standards*.

#### STAFF RECOMMENDATION

Staff recommends that the Commission approve the HAWP application with conditions specified on Circle 1 and as being consistent with Chapter 24A-8(b) (1), (2), (3) & (4);

(1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or

- (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
- (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
- (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied;

and with the Secretary of the Interior's Standards for Rehabilitation;

and with the general condition that the applicant shall present the 3 permit sets of drawings to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301.562.3400 or <u>joshua.silver@mncppc-mc.org</u> to schedule a follow-up site visit.

DPS - #8

J

## HISTORIC PRESERVATION COMMISSION 301/563-3400

# APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: Julia Mueller/ 11-001-00914917-(2004) Daytime Phone No.: 30-650-4390	Trem I am
11-001-00914917-(2004) Davime Phone No: 30-650-439.0	100
Tay Account No. 11 - 7 10 1 (17 14 91)(a ( 7 8 64 )	~ 11111
Name of Property Owner: Dept. of Parks Daytime Phone No.: 202-548-75	70
Address: 1109 Silve Spring Spring 84. #800 209	. O
Street Number . City Steet Zip Code	•
Address: UCC Silve Spring Steet Stee	( lost salsz
Agent for Owner: Daytime Phone No.:	
Dayune rivile No.	<b>-1</b>
LOCATION OF BUILDING/PREMISE	•
House Number: 1980 Street Danestown Rd	•
Town/City: Bealls ville Nearest Cross Street: Bealls ville Rol.	-
Lot: Block: Subdivision:	-
Liber: 200 Folio: 287 Parcet: 300+407 (Map+gar, d cu22)	-
PART ONE: TYPE OF PERMIT ACTION AND USE	-
1A. CHECK ALL APPLICABLE: CHECK ALL APPLICABLE:	
☐ Construct 17 Extend ☐ After/Renovate 17 A/C 17 Slab ☐ Room Addition ☐ Porch ☐ Deck ☐ Shed	
© Move □ Install □ Wreck/Raze □ Solar □ Fireplace □ Woodburning Stove □ Single Family	,
□ Revision □ Repair □ Revocable □ Fence/Wall (complete Section 4) □ Other: □ Suileline	Store -
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2B. Type of water supply: 01 T WSSC 02 D Well 03 ( Other:	-
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3A. Height feet inches	
3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:  '- On party line/property line	
'_ On party line/property line ☐ Entirely on land of owner ☐ On public right of way/easement	
I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.	-
Sisteture of Swiner or Buthorked agent 03/65/09	
	•
Approved:For Chairperson, Historic Preservation Commission	
Disapproved: Signature: Date:	
Application/Permit No.: 506356 Date Filed: Date Issued:	

**SEE REVERSE SIDE FOR INSTRUCTIONS** 

Edit 6/21/99



#### **Darby Store Move and Stabilization HAWP Application**

1.a Description of existing structure and environmental setting, including its historical features and significance.

Environmental Setting: The Darby Store (19801 Darnestown Road) is located within the Darby Historical/Cultural Park, which is composed of 25.5 acres located at the northwest intersection of Routes 109 and 28 in Beallsville. The park is part of the Agricultural Reserve. The property was purchased in 2004 for its cultural resources and open space. The Darby House (19811 Darnestown Road), Darby Store, and detached garage are contributing resources within the locally designated Beallsville Historic District. The front portion of the park facing Route 28 is protected under the "environmental setting" of the Beallsville Historic District.

History: The following information is taken from Places from the Past: The Tradition of Gardez Bien in Montgomery County, Maryland:

The [house and store] show the relationship between business and residence, and the prominence of the local merchant in a rural, turn-of-the-20<sup>th</sup>-century farming community. The Darby Store, a country store at the heart of historic Beallsville, was built in 1910 by H. C. Darby. Beallsville had evolved into an important crossroads from its beginnings when the B&O's Metropolitan Branch line of 1873 resulted in the nearby Sellman Station. Activity there brought increasing commerce to Beallsville, culminating in this pair of notable structures from the first decades of the 20th century. The store epitomizes the vernacular, two-story, front-gabled form that was common for general stores in the region around the turn of the century. By the 1920s, the store featured the area's post office as well.

The adjacent H.C. Darby House was built by the store's owner in 1921 [replacing his original residence which was located behind the store facing Beallsville Road]. It is a spacious house that exhibits the Colonial Revival style, with lingering remnants of the Queen Anne. The house is a two-story, white clapboard structure with three bays, a hipped roof, and side gables on each elevation. A one-story porch, supported by pairs of classical columns, stretches across the width of the main and east elevations. There is a two-story projecting bay at the east corner of the front elevation. The house's size reflects the economic importance of the merchant in small communities like Beallsville.

The pair of properties continued to be owned and operated by the Darby family throughout most of the 20<sup>th</sup> century. The store was run by H.D. Darby, the original owner's son, after the father retired. The continuity of the property's ownership is significant.

Exterior Description: Resting on a concrete foundation directly on the northwest corner of Darnestown and Beallsville Road, the Darby Store is a symmetrical, one-bay wide, two-story, balloon-frame structure measuring 54'4" x 24'6". The building is sheathed in horizontal, wood siding. It has a tarp-covered, pitched roof with a slight eave, and a simple, flat band of trim. The original metal roof covering is no longer extant. Windows are double-hung, two-over-two sash throughout with the exception of the attic

window on the south elevation. This window has a tripartite design with the center window being slightly taller than the two surrounding windows. There are five doors into to the building. The single, front door on the south elevation is centered between large sets of plate glass windows. It consists of a four-paneled base below a glazed section. It is topped by a glazed transom on which the letters "H.C. Darby" are painted. On the west elevation is a single, paneled door leading into the back of the front room. On the north elevation is a frame door leading down into the cellar. The east elevation has one, door near the back of the building that leads into a back room. Immediately above it, on the second floor, is a five-paneled door that is not accessible from the ground.

Interior Description: The interior of the building is divided into two-and-half stories. There is a small cellar under the northern third of the structure with a crawlspace under the remaining part of the building. The first floor is divided into two rooms, the front room being an open space, roughly two-thirds of the length of the building. The back room contains the stairs leading up to the second floor and an opening where a set of steps once led down to the cellar. The second floor is a large open space with the exception of a small room at the front, southeast corner of the building. The room is open to the rafters which are exposed.

1.b. General Description of the Project and Its Effect on the Historic Resources, the Environmental Setting, and the Historic District.

Project Description: The proposed project is to stabilize and move the Darby Store back and away from the intersection to protect the structure. The building currently rests directly next to the paving line, inside the right of way. Several years ago, a truck turning the corner from Beallsville Road to Darnestown Road, demolished the front porch of the building. There is no safe access to the building through its front door due to its proximity to the street. Initial permission to move the structure was received from the Historic Preservation Commission on March 25<sup>th</sup>, 2009. This HAWP provides specific information on exactly where the building will be relocated, as well as specific information on the stabilization of the structure. The new location is parallel and immediately next to the existing location, but pushed back from it. The new site allows for reconstruction of the front porch outside the right-of-way. The building will be far enough from the curb to allow safe entry through the front doors once again. Prior to moving the building, the structure will be stabilized. All stabilization work will be done according to the Secretary of the Interior's Standards for Rehabilitation and according to the attached plans.

Effect on Historic Resources: Although The Secretary of the Interior's Standards do not encourage moving historic buildings because of the potential loss of integrity, in this case, the Historic Preservation Commission agreed that it is in the best interest of the building to move it. The new location for the building will move it as little from its existing location as possible and will retain the angle at which the building currently relates to the corner. The stabilization itself follows the Secretary of the Interior's Standards. The only significant, noticeable difference between the existing building and the new will be that the new building will have a full basement that extends the entire length and width of the structure. The purpose of this basement will be to house all HVAC, plumbing, and electrical systems so that these systems will have as little affect on the historic fabric as possible.



Effect on Environmental Setting: There will be no effect on the environmental setting. Two trees that were located between the back end of the store and the house at the time that initial HAWP was approved, have been removed. Permission was given by the HPC staff to take them down due to their deteriorated condition. Three other trees are in the proximity of the new foundation. A 16" pine is located immediately west of the proposed front corner of the building. The engineers plan on saving this tree. However, there is a chance that its root system will be compromised by the new construction. In that case, it will need to be removed. A 10" holly is located a few feet northwest of the pine. This tree will be protected during construction to try to save it despite its proximity to the new foundation site. Finally, there is a 42" oak directly next to the road to the west of the existing building. It is not expected to be affected by the new construction. A Tree Save Plan will be developed for its preservation.

Effect on Historic District: The stabilization of the store will have no adverse effect on the historic district. All structural work will be on the interior of the building and will not be visible from the exterior. Exterior work will be cosmetic and will follow the Secretary of the Interior's Guidelines for Rehabilitation. Furthermore, according to 36 CFR Part 800.5 criteria, the relocation of the store to the proposed location will also have no adverse effect on the historic district. The undertaking will not diminish the integrity of design, setting, materials, workmanship, feeling, or association. Although the location will be changed, the proposed location is sensitive to the existing setting and is immediately next to the existing site. At its new location, the front corner of the store will relate to the neighboring Darby House. The setback of the store's front corner from the street will match the setback of the house. There is no consistent setback for buildings within the historic district. They are set willy nilly to the street and one another.

- 2. Site Plan: See attached Drawing Number:
- 3. Plans and Elevations: See attached Drawing Number:
- 4. Materials Specification: See attached Drawing Number:
- 5. Photographs: (see attached)
- 6. Tree Survey: See attached site plan for location of existing trees.
- 7. Addresses of Adjacent and Confronting Property Owners: (see attached map and real property data sheets, summarized below)

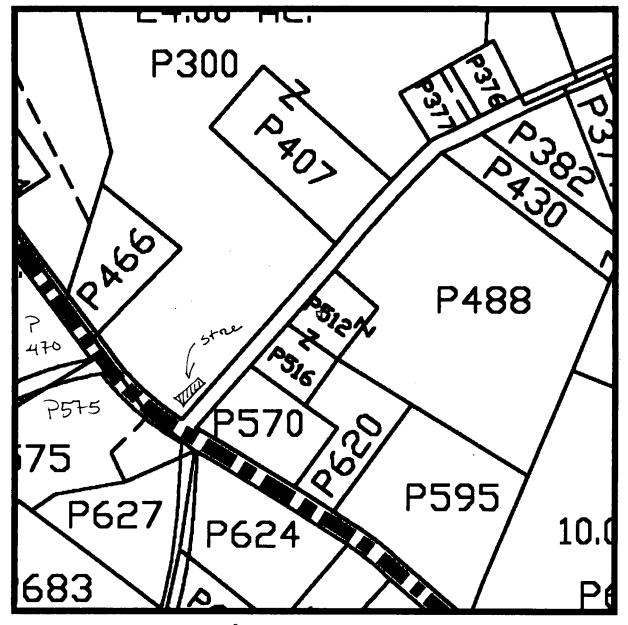
P470: Monocacy Cemetary Company, P.O. Box 81, Beallsville, MD 20839-0081
P575 and P627: Eusebio and Paula Maita, 23000 Old Hundred Road, Dickerson, MD 20842-9750
P624: G. D. Armstrong Co., Inc., P.O., Box 5098, Laytonsville, MD 20882
P570: Ronald E. and Harriet B. Magaha, P.O. Box 7, Beallsville, MD 20839-0007
P516 and P512: Upper Mont. Co. Volunteer Fire Dept., P.O. Box 8, Beallsville, MD 20839-0008
P407: Montgomery County, MD, 101 Monroe Street, 3<sup>rd</sup> Fl., Rockville, MD 20850-2540
P466: Josephine Beagle et al Tr., 10606 Stoneyhill Court, Silver Spring, MD 20901-1539





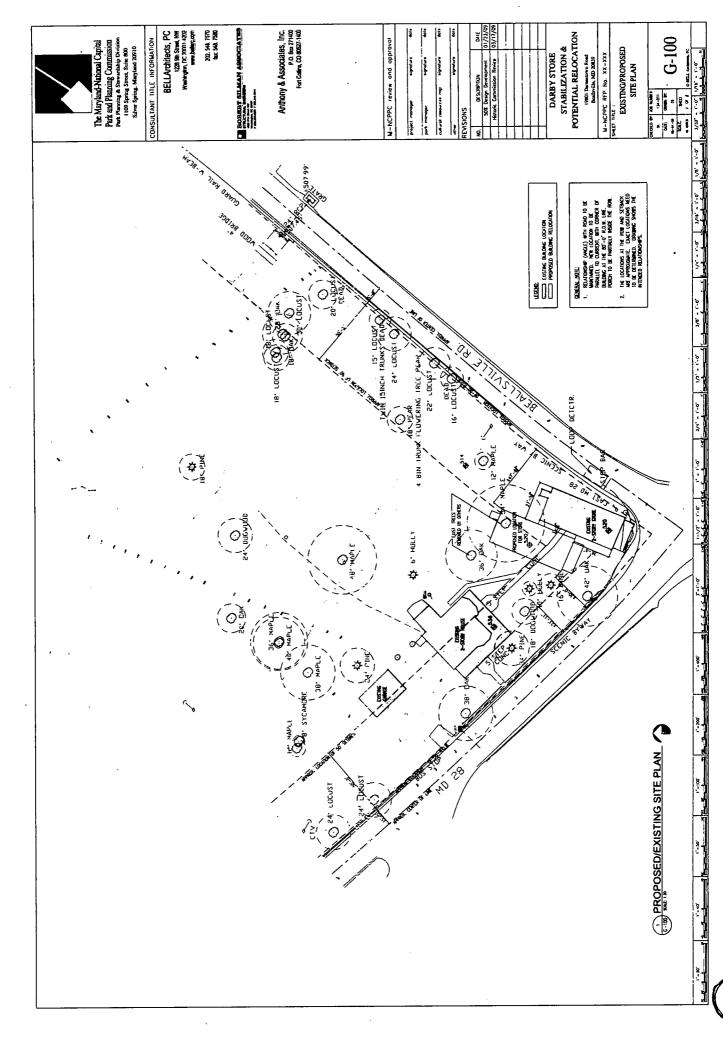
Go Back
View Map
New Search

District - 11 Account Number - 00921115



Property maps provided courtesy of the Maryland Department of Planning ©2004. For more information on electronic mapping applications, visit the Maryland Department of Planning web site at www.mdp.state.md.us/webcom/index.html





Darby Store Stabilization & Relocation 19801 Damestown Road, Beallsville, MD 20839

BELLArchitects, PC 1228 9th St., NW, Washington, D.C. 20001 www.bellarc.com 202.548.7570 fax: 548.7580

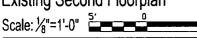
1**1107)** 134-011 June 3, 2009

## SLOPE SLOPE W ±6 SQ.FT ±8 SQ.FT <u>'</u>£15'-6³" <u>+</u>23'-4" +8 SQ.FT. +7 SQ.FT.( 42 SQ.FT. +7: SQ.FT( A +76 SQ.FT. +58 SQ.FT. $10^{1} - 4\frac{1}{4}$ +25 SQ.FT. Ţ +5 SQ.FT.

### STABILIZATION KEYNOTES

- PATCH/REPAIR DAMAGED WD. FIN. FLR. AS INDICATED TO MATCH EXIST. DIMENSIONS & SPECIES (MAPLE).
- REINFORCE SECOND FLR. JOISTS.
- PASSIVE VENTILATION IN LOWER SASH OF EXIST. WINDOW.
- AFTER BLDG. RELOCATION, REPLACE DAMAGED ROOF SHEATHING WITH NEW MEMBERS TO MATCH IN THICKNESS. ASSUME 40% REPLACEMENT
- NEW 4" GALVANIZED MTL. GUTTERS & DOWNSPOUTS.
- REPLACE EXIST. ROTTED WD. DIAGONAL WALL SHEATHING AS NEEDED.
- REMOVE ALL EASTERN SPRUCE SIDING FOR DIAGANOL WALL SHEATHING INSPECTION. SALVAGE & CATALOG WD. SIDING FOR REINSTALLATION AFTER RELOCATION
- EXIST, DOGHOUSE TO REMAIN PAINT EXTERIOR & EXIST MTL. ROOF PER SPEC.
- EXIST CHIMNEY TO REMAIN IN PLACE FOR BLDG. STABILIZATION.

**Existing Second Floorplan** 

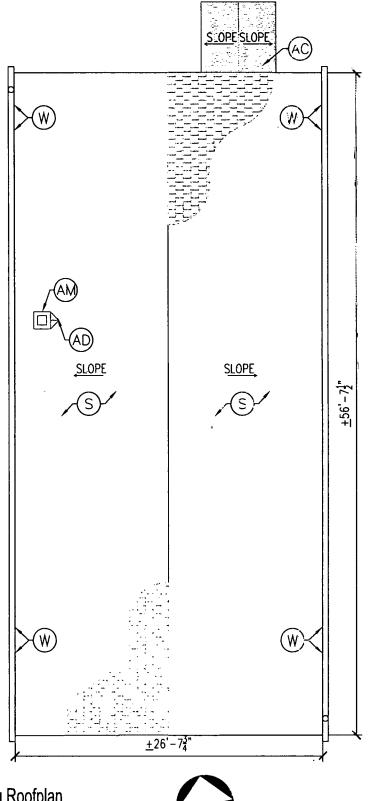




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### STABILIZATION KEYNOTES

- AFTER BLDG. RELOCATION CAREFULLY REMOVE & SALVAGE WHOLE MTL. SHINGLES. REPLACE SHINGLES WITH NEW TO MATCH EXIST. DIM. AND PROFILE.
- W NEW 4" GALVANIZED WTL. GUTTERS & DOWNSPOUTS PER DTL. 10/A301.
- EXIST. DOGHOUSE TO REMAIN PAINT EXTERIOR & EXIST MTL. ROOF PER SPEC.
- USE ON-SITE SALVAGED BRICK TO EXTEND CHIMNEY TO 24" ABOVE ROOF RIDGE BLDG. RELOCATION.
- (AD) INSTALL ROOF CRICKET AT CHIMNEY AFTER BLDG. RELOCATION



Existing Roofplan

Scale: 1/8"=1'-0"



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### **STABILIZATION KEYNOTES**

- REMOVE & DISPOSE OF EXIST. WD. FRONT PORCH
- PASSIVE VENTILATION LOUVER IN EXIST. DR. OPENING.
- ACTIVE SOLAR POWERED VENTILATION IN EXIST. WINDOW.
- AFTER BLDG. RELOCATION CAREFULLY REMOVE & SALVAGE WHOLE MTL. SHINGLES. REPLACE SHINGLES WITH NEW TO MATCH EXIST, DIM, AND PROFILE.
  - REMOVE EXIST. WDW. PLY'WD. PROTECTION FROM INTERIOR AND REATTACH TO THE EXT. OF STORE FRONT LOWER WINDOWS.
  - NEW 4" GALVANIZED MTL. **GUTTERS & DOWNSPOUTS** AFTER BLDG. RELOCATION.
  - REPAIR WD. CORNER BOARD AS NEEDED WITH MAT'L OF SAME DIM (EASTERN SPRUCE).
  - ASSUME 50% OF SILLPLATE TO BE REPLACED.
    - REPLACE EXIST. ROTTED WD. DIAGONAL WALL SHEATHING AS NEEDED.
    - REMOVE ALL EASTERN SPRUCE SIDING FOR DIAGONAL WALL SHEATHING INSPECTION. SALVAGE & CATALOG WD. SIDING FOR REINSTALLATION AFTER BLDG. RELOCATION.
  - INSTALL ROOF CRICKET AT CHIMNEY AFTER BLDG. RELOCATION
- SEAL DETERIORATING SOFFIT FROM EXT ELEMENTS AS INDICATED ON ELEV.
- USE ON-SITE SALVAGED BRICK TO EXTEND CHIMNEY TO 24" ABOVE ROOF RIDGE AFTER BLDG. RELOCATION.

**GENERAL NOTE:** ALL' EXTERIOR WD SURFACES TO BE PTD.

SOUTH FACADE GENERAL NOTE: REPLACE DAMAGED/M SSING SIDING ASSUME REPLACEMENT ΆM TOP ROOF OF 75% (EASTERN SPRUCE). +551'-11<sup>5</sup>/<sub>6</sub>" (s)W TOP OF PLATE 541'-25/6" (W)TWO SQFI. SECOND FLR. 533'-1%6" FOUR SO.FT. GROUND FLR. 521'-1%6" BASEMENT 511'-11'3/6"

**Proposed South Elevation** 

Scale: 1/8"=1'-0"

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ACTIVE SOLAR POWERED VENTILATION N SASH OF EXIST, BASEMENT WINDOW.

SHINGLES, REPLACE SHINGLES W/ NEW TO MATCH EXIST. DIM. & PROFILE. AFTER BLDG, RELOCATION CAREFULLY REMOVE & SALVAGE WHOLE MTL.

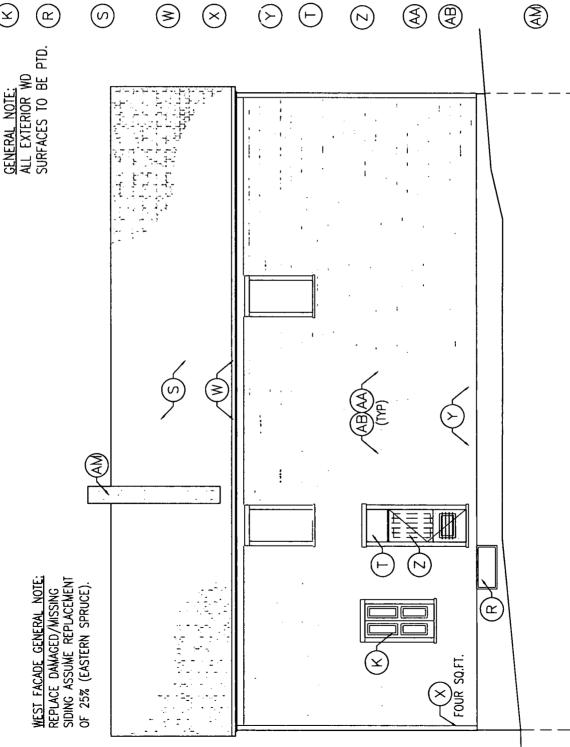
NEW 4" GALVANIZED MTL. GUTTERS & DOWNSPOUTS AFTER BLDG. RELOCATION. NEEDED WITH MAT'L OF SAME DIM REPAIR WD. CORNER BOARD AS

ASSUME 50% OF SILLPLAIE 10 BE EASTERN SPRUCE). REPLACED. COVER EXIST. TRANSOM WINDOW FROM EXTERIOR W/ PLYWOOD SCREWED TO THE FRAME - PAINT.

COVER EXIST. GLAZED DOOR OPENING WITH PLYWOOD FROM EXTERIOR & PAINT PER SPEC. REPLACE EXIST. ROTTED WD. DIAGONAL WALL SHEATHING AS NEEDED.

SIDING FOR REINSTALLATION AFTER BLDG. REMOVE ALL EASTERN SPRUCE SIDING NSPECTION. SALVAGE & CATALOG WD. OR DIAGONAL WALL SHEATHING RELOCATION.

EXTEND CHIMNEY TO 24" ABOVE ROOF RIDGE AFTER BLDG. RELOCATION. USE ON-SITE SALVAGED BRICK TO



Proposed West Elevation

Scale: 1/8"=1'-0" 5'

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Darby Store Stabilization & Relocation 9801 Damestown Road, Beallsville, MD 20839

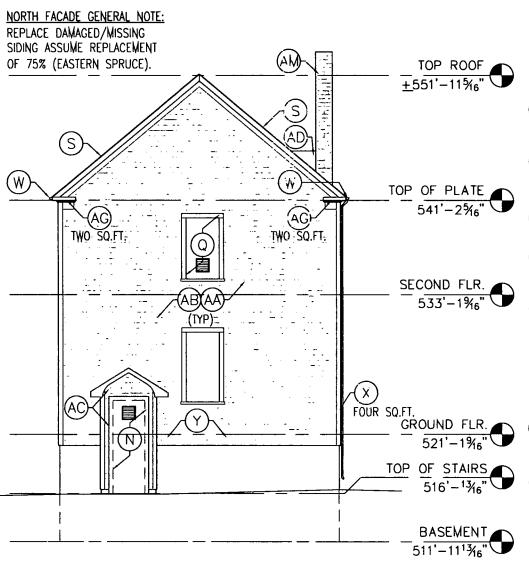
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## STABILIZATION KEYNOTES

- N PASSIVE VENTILATION LOUVER IN EXIST. DR. OPENING.
- AFTER BLDG. RELOCATION CAREFULLY REMOVE & SALVAGE WHOLE MTL. SHINGLES. REPLACE SHINGLES WITH NEW TO MATCH EXIST. DIM. AND PROFILE.
  - W NEW 4" GALVANIZED MTL, GUTTERS & DOWNSPOUTS AFTER BLDG. RELOCATION.
- X REPAIR WD. CORNER BOARD
  AS NEEDED WITH MAT'L OF
  SAME DIM (EASTERN SPRUCE).
- Y ASSUME 50% OF SILLPLATE TO BE REPLACED.
- AA REPLACE EXIST. ROTTED WD. DIAGONAL WALL SHEATHING AS NEEDED.
  - REMOVE ALL EASTERN
    SPRUCE SIDING FOR
    DIAGONAL WALL SHEATHING
    INSPECTION. SALVAGE &
    CATALOG WD. SIDING FOR
    REINSTALLATION AFTER BLDG.
    RELOCATION.
- AC) EXIST. DOGHOUSE TO REMAIN PAINT EXTERIOR & EXIST MTL. ROOF PER SPEC.
- AD) INSTALL ROOF CRICKET AT CHIMNEY AFTER BLDG. RELOCATION
- AG) SEAL DETERIORATING SOFFIT FROM EXT ELEMENTS AS INDICATED ON ELEV.
- (AM) USE ON-SITE SALVAGED BRICK TO EXTEND CHIMNEY TO 24" ABOVE ROOF RIDGE AFTER BLDG, RELOCATION.

GENERAL NOTE: ALL EXTERIOR WD SURFACES TO BE PTD.

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Proposed North Elevation

Scale: 1/8"=1'-0"

EXIST. WD. WDW. SHUTTERS TO REMAIN, PAINT ALL EXTERIOR SURFACES.  $\subseteq$ 

REMOVE & DISPOSE OF EXIST. WD. FRONT PORCH  $\geq$ 

ACTIVE SOLAR POWERED VENTILATION IN SASH OF EXIST. BASEMENT WINDOW. œ

REPLACE DAMAGED/MISSING SIDING ASSUME REPLACEMENT EAST FACADE GENERAL NOTE:

OF 75% (EASTERN SPRUCE)

CAREFULLY REMOVE & SALVAGE WHOLE MTL, SHINGLES, REPLACE SHINGLES WITH NEW TO MATCH EXISH, DIM, AND PROFILE. AFTER BLDG, RELOCATION (s)

NEW 4" GALVANIZED MTL. GUTTERS & DOWNSPOUTS AFTER BLDG. RELOCATION. eq

SAME DIM (EASTERN SPRUCE) REPAIR WD. CORNER BOARD AS NEEDED WITH MAT'L OF  $(\times)$ 

ASSUME 50% OF SILLPLATE TO BE REPLACED.  $(\succ)$ 

REPLACE EXIST. ROTTED WD. DIAGONAL WALL SHEATHING AS NEEDED. **₹** 

FOR DIACONAL WALL SHEATHING INSPECTION. SALVAGE & CATALOG WD. SIDING FOR REINSTALLATION AFTER BLDG REMOVE ALL EASTERN SPRUCE SIDING RELOCATION AB)

EXIST. DOGHOUSE TO REMAIN PAINT EXTERIOR & EXIST MTL. ROOF PER SPEC. (2)

œ

FOUR SO,FT

EXTEND CHIMNEY TO 24" ABOVE ROOF RIDGE AFTER BLDG. RELOCATION. USE ON-SITE SALVAGED BRICK TO **(3)** 

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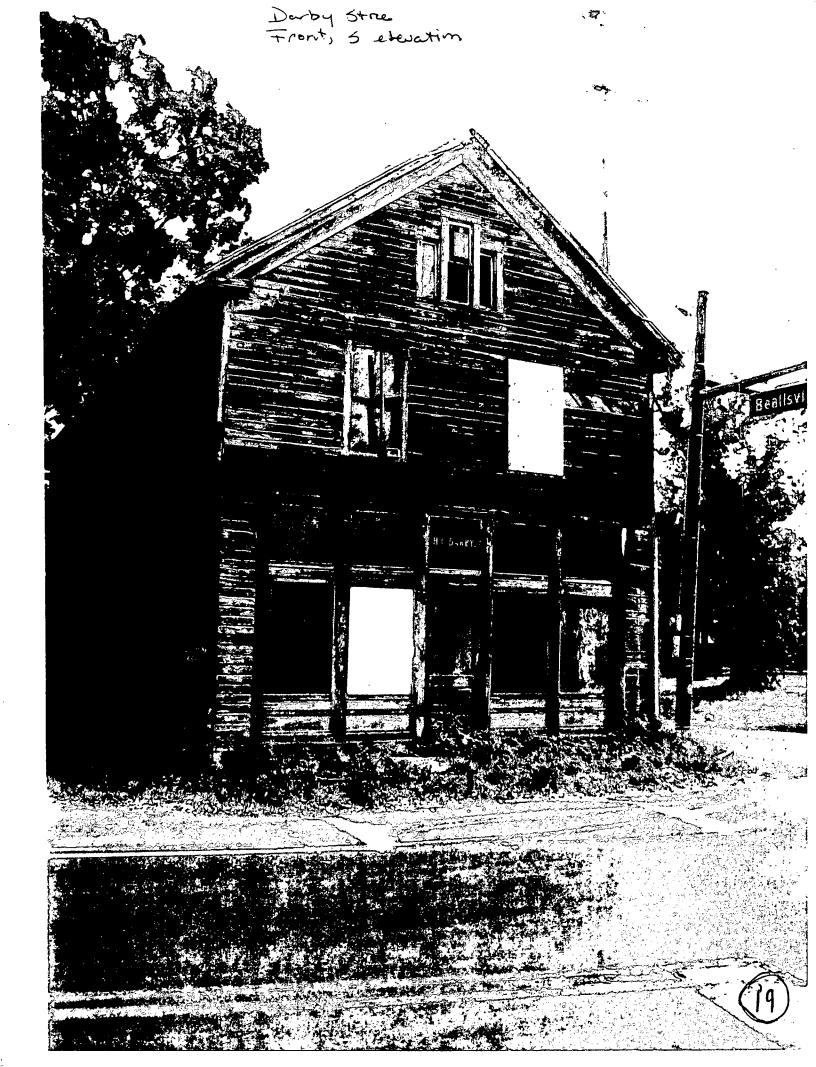
Proposed East Elevation

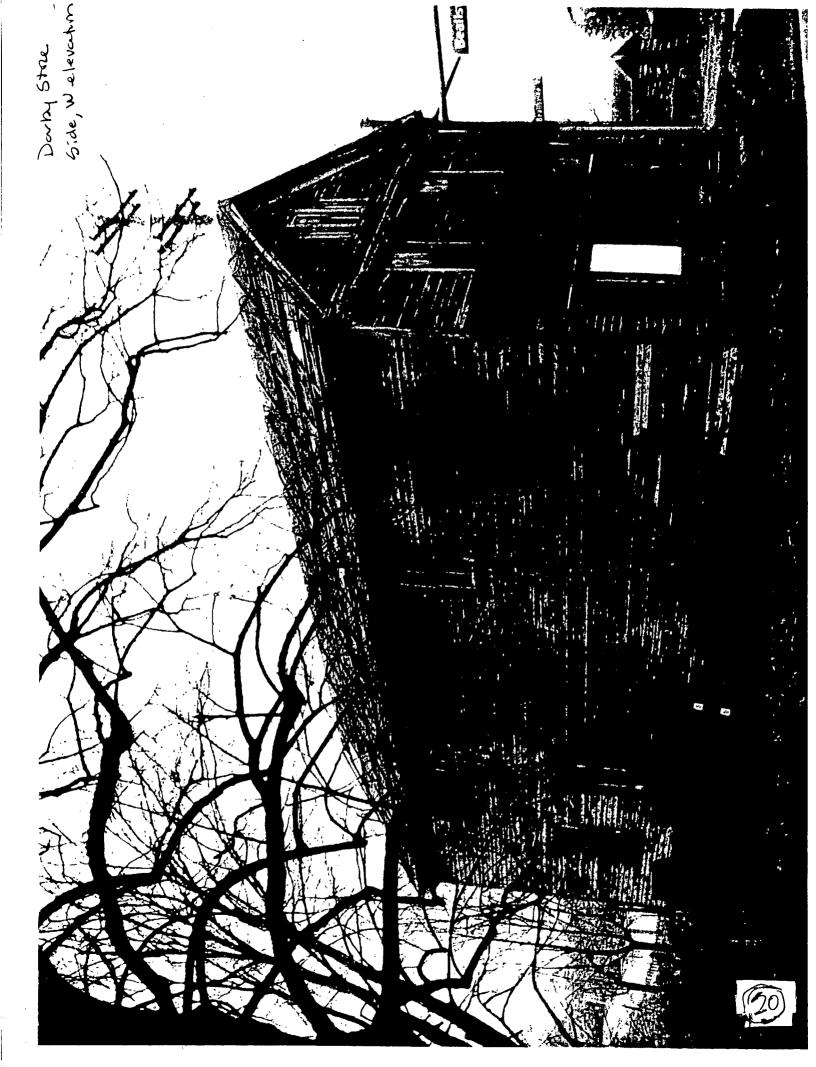
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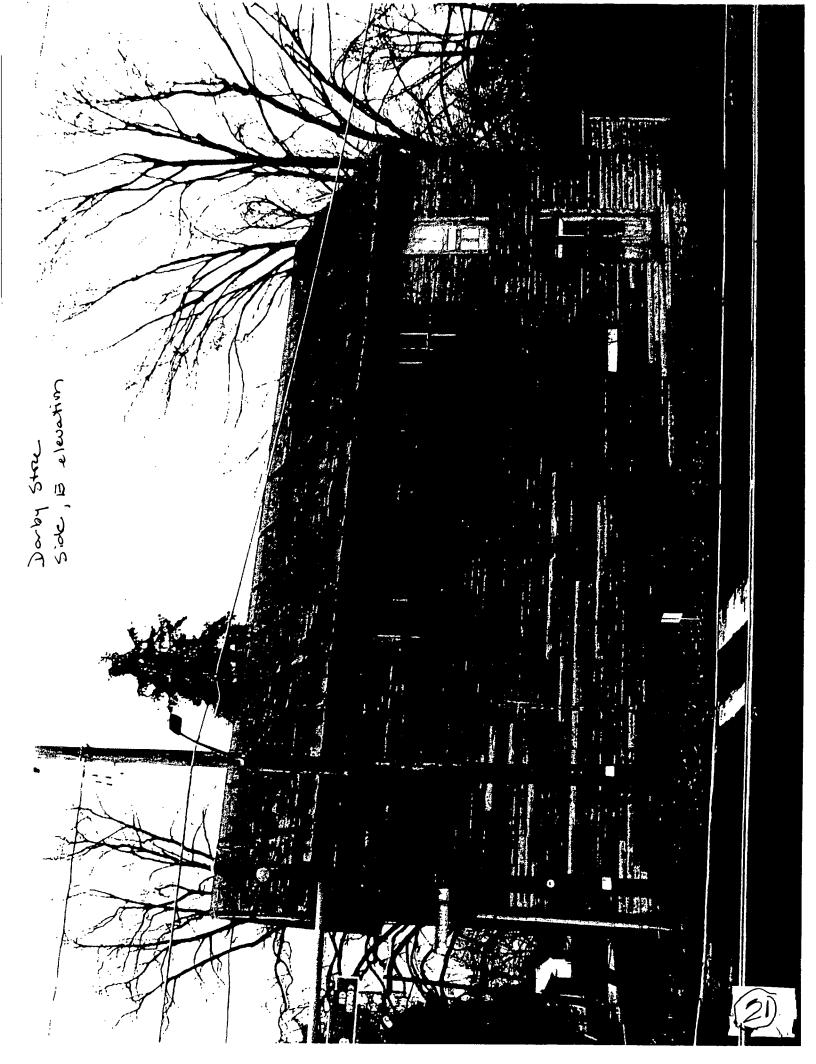
Darby Store Stabilization & Relocation 19801 Darestown Road, Beallsville, MD 20839

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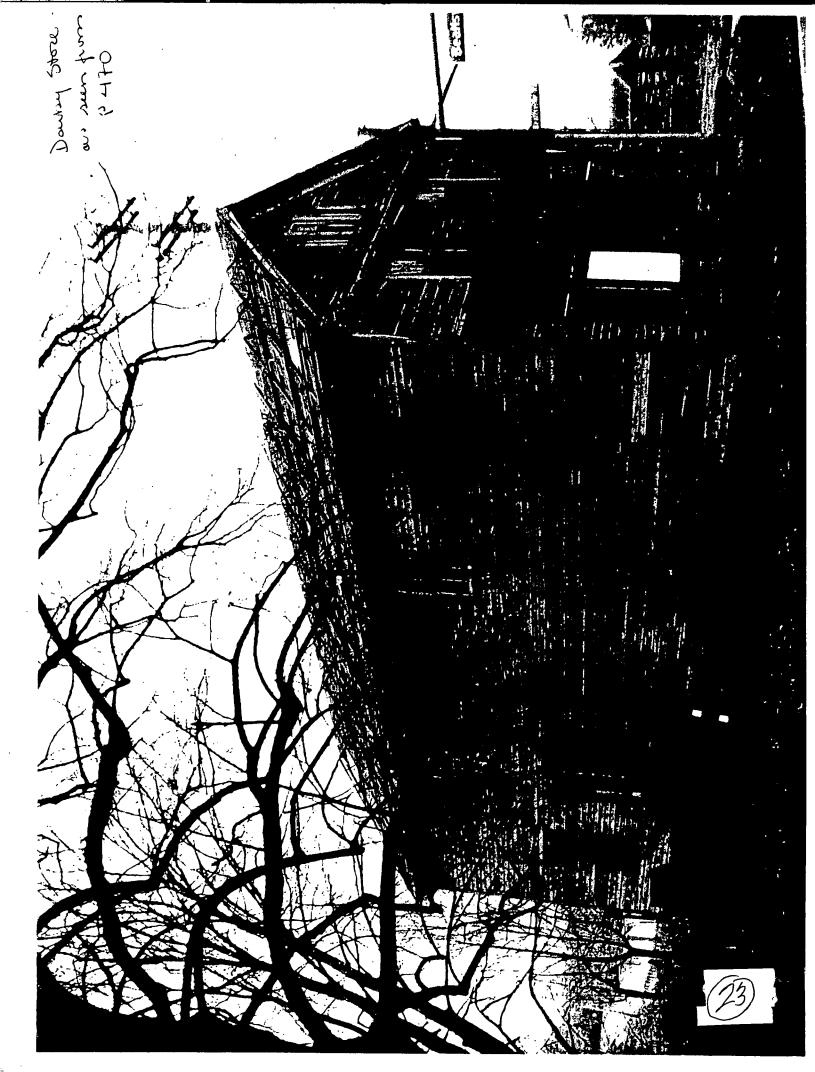


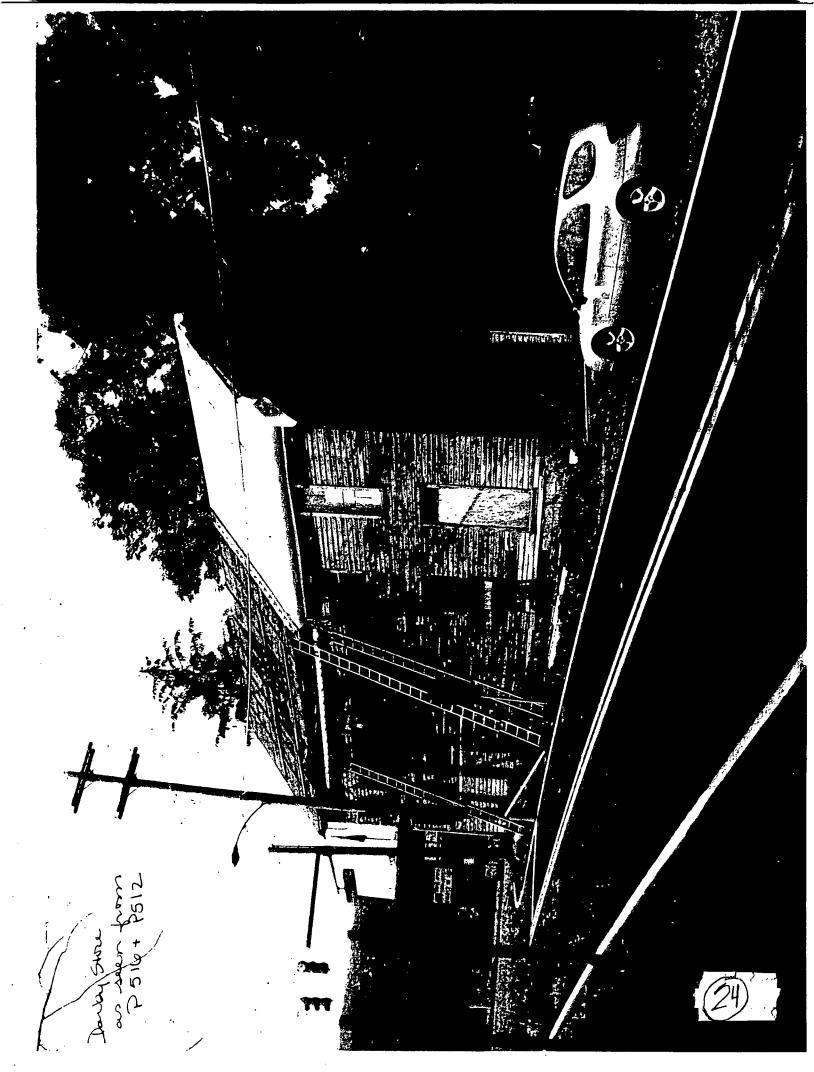


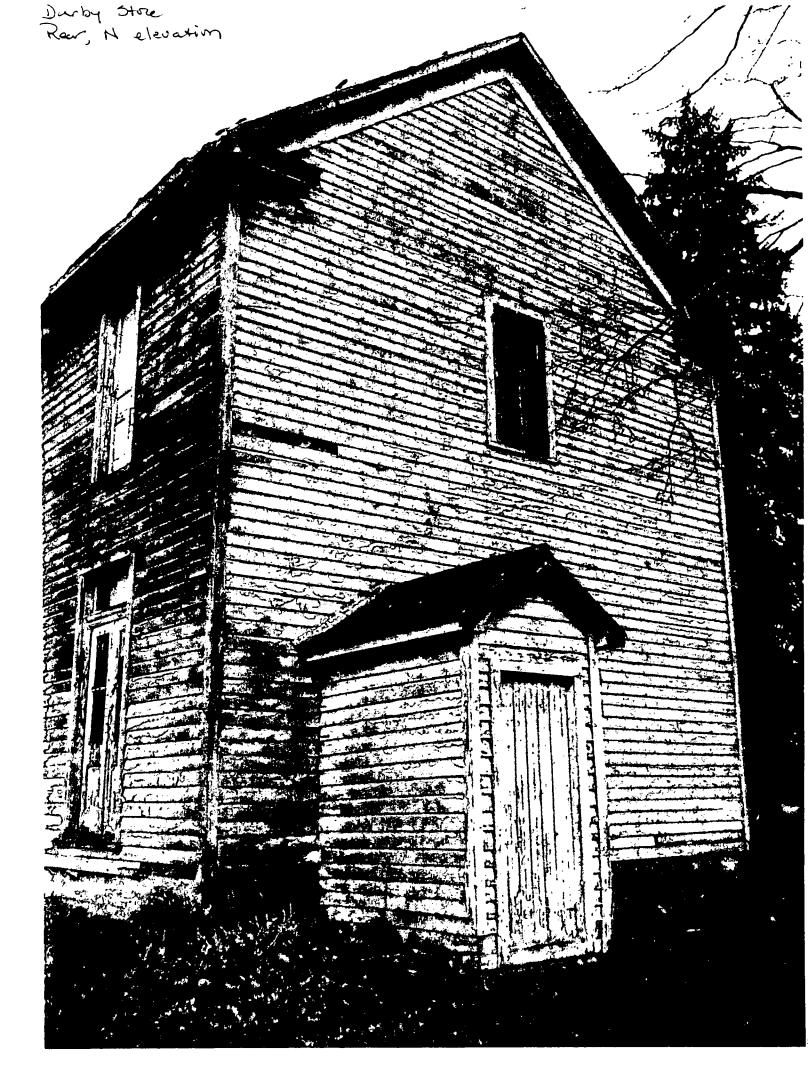












# MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address:

19801 Darnestown Road, Beallsville

**Meeting Date:** 

3/25/2009

Resource:

Outstanding Resource

Report Date:

3/18/2009

**Beallsville Historic District** 

**Public Notice:** 

3/11/2009

Applicant:

M-NCPPC Montgomery County

Department of Parks (Julie Mueller, Agent)

Tax Credit:

No

Review:

**HAWP** 

Staff:

Josh Silver

Case Number:

17/01-09A

PROPOSAL:

Building relocation

### STAFF RECOMMENDATION

Staff recommends that the HPC approve this HAWP application with the following condition:

1. The applicant must submit a tree protection plan to HPC staff prior to submitting the permit set of plans.

### ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Outstanding Resource within the Beallsville Historic District

STYLE:

Vernacular

DATE:

1921

The Darby Store rests on a concrete foundation directly on the northwest corner of Darnestown and Beallsville Road. The building is a symmetrical, one-bay wide, two-story, balloon-frame structure measuring 54'4" x 24'6", clad in horizontal wood siding. Presently the building contains a tarp-covered roof due to a no longer extant original metal roof. Windows are double-hung, 2/2 throughout the building with the exception of an attic window on the south elevation which is tripartite in design.

### **PROPOSAL**

Note: This proposal is for the relocation of the building only. The applicant will submit a separate HAWP application for rehabilitation and reconstruction projects associated with the building.

The applicant is proposing to stabilize and relocate the subject building  $27' - 5\frac{1}{2}$ " over and 26' - 9" back from its current location that is within the right-of-way of MD Route 28/Darnestown Road. The proposal is intended to protect the building from future master plan right-of-way road improvements and to provide a safe buildable area for the future reconstruction of an original porch that is missing from the front of the building.

The proposed relocation of the building requires the removal two Oak trees from the property. Since the receipt of the HAWP application the trees have been determined to be hazardous by the M-NCPPC, Certified Arborist. (See attached e-mail on Circle 16). On March 17, 2009 the Historic Preservation

Section issued a waiver for the removal of the subject trees.

### **APPLICABLE GUIDELINES**

When reviewing alterations and new construction within the Beallsville Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the, Montgomery County Code Chapter 24A (Chapter 4A), and the Secretary of the Interior's Standards for Rehabilitation (Standards). The pertinent information in these documents is outlined below.

# Montgomery County Code; Chapter 24A

- (a) The commission shall instruct the director to deny a permit if it finds, based on the evidence and information presented to or before the commission that the alteration for which the permit is sought would be inappropriate, inconsistent with or detrimental to the preservation, enhancement or ultimate protection of the historic site or historic resource within an historic district, and to the purposes of this chapter.
- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:
  - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
  - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
  - (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
  - (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or
  - (5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or
  - (6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.
    - (c) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.
    - (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

### Secretary of the Interior's Standards for Rehabilitation:

#1 A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.

### **STAFF DISCUSSION**

Staff supports the proposed relocation of the Darby Store. The proposal is a reasonable solution for ensuring the long-term protection of the structure from future master plan right-of-way improvements to MD Route 28/Darnestown Road and/or Beallsville Road and reduces the building's vulnerability to additional vehicular damage because of its location within the existing right-of-way. Future improvements to the building include reconstruction of an original front porch that was demolished by a turning vehicle.

The proposed minor relocation of the building will have minimal impact on the setting of the district and property. The proposed relocation site maintains the building's historic relationship with the main house, its historic angular articulation as a corner store at the intersection of Route 28/Darnestown Road and Beallsville Road and promotes the viability of the building for a future use.

Staff supports the proposed relocation of the building to enhance and/or aid in the protection, preservation of the building and to remedy an unsafe condition. The proposal would safely locate the building outside the existing and future road right-of-ways in manner that is sensitive to the setting of the property and historic district. Staff is recommending approval of this HAWP application with the condition specified on Circle 1.

### STAFF RECOMMENDATION

Staff recommends that the Commission <u>approve the HAWP application with condition specified on</u> <u>Circle 1</u> and as being consistent with Chapter 24A-8(b) (1), (2), (3) & (4);

- (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
- (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or
- (3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or
- (4) The proposal is necessary in order that unsafe conditions or health hazards be remedied;

and with the Secretary of the Interior's Standards for Rehabilitation;

and with the general condition that the applicant shall present the 3 permit sets of drawings to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301.563.3400 or <u>joshua.silver@mncppc-mc.org</u> to schedule a follow-up site visit.

504356



Edit 6/21/99

RETURN TO: DEPARTMENT OF PERMITTING SERVICES
255 ROCKVILLE PIKE. 2nd FLOOR. ROCKVILLE. MD 20850
240/777-6370

DPS - #8

# HISTORIC PRESERVATION COMMISSION 301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person:	- Julie Mueller Dey Lamp			
11-001-00914917-(2004) Daytime Phone	No.: 301-650-4390 /201-613-			
Name of Property Owner: Dept. of Parks Daytime Phone Address: 1109 Silve Space Space	no: 202-548-7570 3 " "			
Address: 1109 Silve Spring Spring	in 84. #800 20910			
Street Number City'	Staet Zip Code			
Address: NOG Silve Spring Spring St. #800 20910  Contractor: Bell Brenntects (arthrectore Phone No.:  Contractor Registration No.:  Only Nove Contractor Not yet succeed)				
	·			
Agent for Owner: Daytime Phone	No.:			
LOCATION OF BUILDING/PREMISE				
House Number: 19801 Street: Darn	restown Rd			
Town/City: Bealls ville Nearest Cross Street: Beal	Isville Rel.			
Lot: Block: Subdivision:				
Liber: 200 Folio: 287 Parcel: 300 + 407 (1	Maptarid cuzz)			
RART ONE: TYPE OF PERMIT ACTION AND USE				
1A. CHECK ALL APPLICABLE: CHECK ALL APPLICABLE:				
☐ Construct ☐ Extend ☐ Alter/Renovate ☐ A/C ☐ Slab ☐ Ri	oom Addition 🔲 Porch 🔲 Deck 🗀 Shed			
□ Move	Voodburning Stove Single Family			
☐ Revision ☐ Repair ☐ Revocable ☐ Fence/Wall (complete Section	n4) Dother: Building/Store -			
1B. Construction cost estimate: \$ No GST Estimate ye				
1C. If this is a revision of a previously approved active permit, see Permit #				
PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS				
20. Type of water supply. OT E.F. W330 62 also Well 63 E.F. Outer.	·			
PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL				
3A. Height feet inches	3A. Heightinches			
3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:				
☐ On party line/property line ☐ Entirely on land of owner ☐ On public rig	pht of way/easement			
I hereby certify that I have the authority to make the foregoing application, that the application is correct	t and that the construction will comply with plans			
approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issu				
$\bigcirc$ . $\varphi$ .	-1-10			
Signature of owner or authorized agent	03/65/07			
Approved:For Chairperson, Historic Pres	servation Commission			
Disapproved: Signature: Date:				
Application/Permit No.: 506356 Date Filed:	Date Issued:			

**SEE REVERSE SIDE FOR INSTRUCTIONS** 

4

### **Darby Store HAWP Application**

1.a Description of existing structure and environmental setting, including its historical features and significance.

Environmental Setting: The Darby Store (19801 Darnestown Road) is located within the Darby Historical/Cultural Park, which is composed of 25.5 acres located at the northwest intersection of Routes 109 and 28 in Beallsville. The park is part of the Agricultural Reserve. The property was purchased in 2004 for its cultural resources and open space. The Darby House (19811 Darnestown Road), Darby Store, and detached garage are contributing resources within the locally designated Beallsville Historic District. The front portion of the park facing Route 28 is protected under the "environmental setting" of the Beallsville Historic District.

History: The following information is taken from *Places from the Past: The Tradition of Gardez Bien in Montgomery County, Maryland*:

The [house and store] show the relationship between business and residence, and the prominence of the local merchant in a rural, turn-of-the-20<sup>th</sup>-century farming community. The Darby Store, a country store at the heart of historic Beallsville, was built in 1910 by H. C. Darby. Beallsville had evolved into an important crossroads from its beginnings when the B&O's Metropolitan Branch line of 1873 resulted in the nearby Sellman Station. Activity there brought increasing commerce to Beallsville, culminating in this pair of notable structures from the first decades of the 20th century. The store epitomizes the vernacular, two-story, front-gabled form that was common for general stores in the region around the turn of the century. By the 1920s, the store featured the area's post office as well.

The adjacent H.C. Darby House was built by the store's owner in 1921 [replacing his original residence which was located behind the store facing Beallsville Road]. It is a spacious house that exhibits the Colonial Revival style, with lingering remnants of the Queen Anne. The house is a two-story, white clapboard structure with three bays, a hipped roof, and side gables on each elevation. A one-story porch, supported by pairs of classical columns, stretches across the width of the main and east elevations. There is a two-story projecting bay at the east corner of the front elevation. The house's size reflects the economic importance of the merchant in small communities like Beallsville.

The pair of properties continued to be owned and operated by the Darby family throughout most of the 20<sup>th</sup> century. The store was run by H.D. Darby, the original owner's son, after the father retired. The continuity of the property's ownership is significant.

Description (Exterior): Resting on a concrete foundation directly on the northwest corner of Darnestown and Beallsville Road, the Darby Store is a symmetrical, one-bay wide, two-story, balloon-frame structure measuring 54'4" x 24'6". The building is sheathed in horizontal, wood siding. It has a tarp-covered, pitched roof with a slight eave, and a simple, flat band of trim. The original metal roof covering is no longer extant. Windows are double-hung, two-over-two sash throughout with the exception of the attic

window on the south elevation. This window has a tripartite design with the center window being slightly taller than the two surrounding windows. There are five doors into to the building. The single, front door on the south elevation is centered between large sets of plate glass windows. It consists of a four-paneled base below a glazed section. It is topped by a glazed transom on which the letters "H.C. Darby" are painted. On the west elevation is a single, paneled door leading into the back of the front room. On the north elevation is a frame door leading down into the cellar. The east elevation has one, door near the back of the building that leads into a back room. Immediately above it, on the second floor, is a five-paneled door that is not accessible from the ground.

(Interior): The interior of the building is divided into two-and-half stories. There is a small cellar under the northern third of the structure with a crawlspace under the remaining part of the building. The first floor is divided into two rooms, the front room being an open space, roughly two-thirds of the length of the building. The back room contains the stairs leading up to the second floor and an opening where a set of steps once led down to the cellar. The second floor is a large open space with the exception of a small room at the front, southeast corner of the building. The room is open to the rafters which are exposed.

1.b. General Description of the Project and Its Effect on the Historic Resources, the Environmental Setting, and the Historic District.

Project Description: The proposed project is to stabilize and move the Darby Store back and away from the intersection to protect the structure. The building currently rests directly next to the paving line, inside the right of way. Several years ago, a truck turning the corner from Beallsville Road to Darnestown Road, demolished the front porch of the building. There is no safe access to the building through its front door due to its proximity to the street. The proposal is to move the structure back about 27 feet and over about 26 feet (such that the proposed east elevation will be about 2 feet away from the former west elevation). The new location is parallel and immediately next to the existing location, but pushed back from it. The new site would allow for reconstruction of the front porch outside the right-of-way. The building would be a far enough distance from the curb to allow safe entry through the front doors once again. Prior to moving the building, the structure will be stabilized. All stabilization work will be done according to the Secretary of the Interior's Standards for Rehabilitation and according to the attached plans.

Effect on Historic Resources: The Secretary of the Interior's Standards does not encourage moving historic buildings because of the potential loss of integrity. However, in this case, if the building is to be saved and safely used in the future, it must be moved back from the curb. The move will not change how the building relates to the corner. It will still read as a corner store, angled the same way it was always angled.

Effect on Environmental Setting: [check to see how the Beallsville Historic District Environmental setting is defined]. There are two trees located at the back of the store. One will need to be removed to accommodate the relocation. This maple is currently in poor health and is scheduled to be removed [rewrite per Eugene's report] before it falls into the store and damages it. The other tree.....[finish this]

Effect on Historic District: The stabilization of the store will have no adverse effect on the historic district. All structural work will be on the interior of the building and will not be visible from the exterior. Exterior work will be cosmetic and will follow the Secretary of the Interior's Guidelines for Rehabilitation. Furthermore, according to 36 CFR Part 800.5 criteria, the relocation of the store to the proposed location will also have no adverse effect on the historic district. The undertaking will not diminish the integrity of design, setting, materials, workmanship, feeling, or association. Although the location will be changed, the proposed location is sensitive to the existing setting and is immediately next to the existing site. At its new location, the front corner of the store will relate to the neighboring Darby House. The setback of the store's front corner from the street will match the setback of the house. There is no consistent setback for buildings within the historic district. They are set willy nilly to the street and one another. Describe district a bit

- 2. Site Plan (see attached)
- 3. Plans and Elevations: N/A
- 4. Materials Specifications: N/A
- 5. Photographs: (see attached)
- 6. Tree Survey: (see attached)
- 7. Addresses of Adjacent and Confronting Property Owners: (see attached map and real property data sheets, summarized below)

P470: Monocacy Cemetary Company, P.O. Box 81, Beallsville, MD 20839-0081

P575 and P627: Eusebio and Paula Maita, 23000 Old Hundred Road, Dickerson, MD 20842-9750

P624: G. D. Armstrong Co., Inc., P.O., Box 5098, Laytonsville, MD 20882

P570: Ronald E. and Harriet B. Magaha, P.O. Box 7, Beallsville, MD 20839-0007

P516 and P512: Upper Mont. Co. Volunteer Fire Dept., P.O. Box 8, Beallsville, MD 20839-0008

P407: Montgomery County, MD, 101 Monroe Street, 3<sup>rd</sup> Fl., Rockville, MD 20850-2540

P466: Josephine Beagle et al Tr., 10606 Stoneyhill Court, Silver Spring, MD 20901-1539





# Memorandum

	Julie Mueller – M-NCPPC			
To:	Joey Lampl – M-NCPPC	Project No:	134-011	
From:	T. David Bell	Date:	March 17, 2009	
Re:	Rationale for moving Darby Store	Pages:	2	
CC:	Scott Knight, Joshua Silver	·		
☐ Urg	ent For Review For Comment .	For Reply  Please	e Recycle	

The Darby Store is located at 19801 Darnestown Road in Beallsville Maryland, on the corner of Darnestown Road and Beallsville Road. The store currently sits within three feet of the roadway, well within the 50' set back. The building is oriented with the front facing south-south-west. For protection of the historic resource and the safety of the future users of the building, it has been determined that the building should be moved.

The property lines have not been accurately determined, because of the accuracy of available information. What is depicted on the attached plans is an approximate location of the right-of-way, and set back lines. See the attached letter from the State Highway Authority regarding the absence of right-of-way information. The final location will be dimensioned based on accurate information is available or relative to existing improvements.

Based on this information, the proposed location moves the Darby Store approximately 30' from the right-of-way, but still within the 50' setback. The proposed new location maintains a reasonable distance from the right-of-way, similar to the porch of the Darby House.

Under normal circumstances, it is not desirable to move a historic building at all; however, jeopardizing people's safety is not acceptable. The Darby Store sits partially in the roadway. The Store's porch no longer stands because a truck ran it over. People currently cannot walk alongside the south or southwest face of the store without putting their lives at risk. The goal of the relocation of the store is to make a safer situation, while keeping as much of the historic setting as possible. The efforts to minimize any change to the store's original setting include:

- Minimize movement of the store in terms of distance
- Maintain current orientation of store.
- Move the structure only once to its permanent location by building a new foundation directly adjacent to the existing.
- Minimize the change in distance between the Darby Store and the Darby House.
- Maintain the height relationship between the Darby Store and Route 28 and between the Darby Store and the Darby House with the store's new placement.

1228 9th Street, NW Washington, DC 20001 www.bellarc.com

202-548-7570

fax 548-7580

090317 Memo - Move Rationale





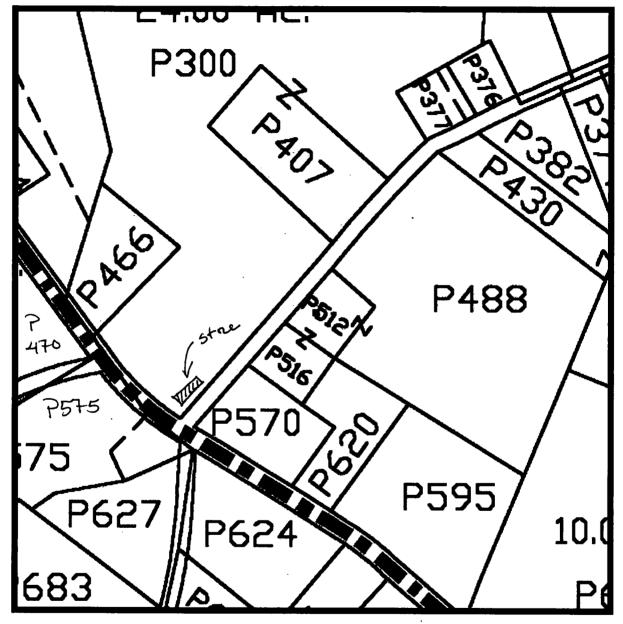
 Avoid disturbing existing, healthy, mature trees on the site in general. Any trees to be removed have been determined by a certified arborist to be in dead, dying, or hazardous condition.

1228 9th Street, NW Washington, DC 20001 www.bellarc.com 202-548-7570 fax 548-7580

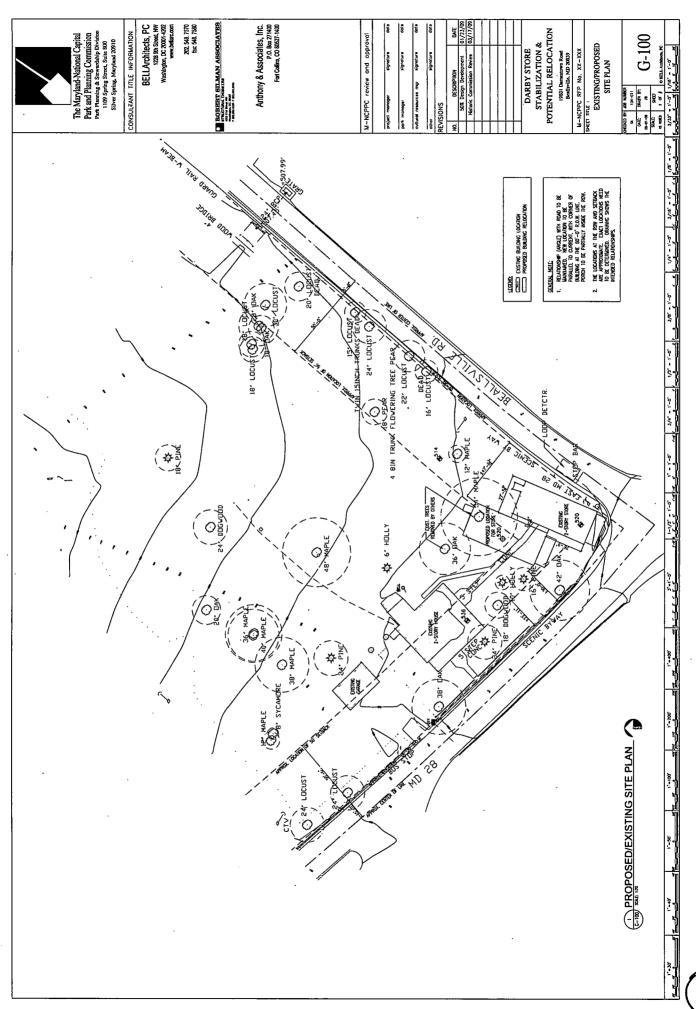


<u>Go Back</u> View Map <u>New Search</u>

District - 11 Account Number - 00921115



Property maps provided courtesy of the Maryland Department of Planning ©2004. For more information on electronic mapping applications, visit the Maryland Department of Planning web site at <a href="https://www.mdp.state.md.us/webcom/index.html">www.mdp.state.md.us/webcom/index.html</a>



131-012 March 17, 2009 Darby Store Stabilization & Potential Relocation

1228 9th St., NW, Washington, D.C. 20001 www.bellarc.com 202.548.7570 fax: 548.7580 BELLArchitects, PC



Robert L. Ehrlich, Jr., Governor | Michael S. Steele, Lt. Governor Robert L. Flanagan, Secretary Neil J. Pedersen, Administrator

MARYLAND DEPARTMENT OF TRANSPORTATION

May 1, 2006

Mr. Brent Allgood CAS Engineering 108 West Ridgeville Blvd. Mt. Airy, MD 21771

Ref:

(1) MD Route 28 (Darnestown Road)

From 2500 feet north of Jerusalem Road to 1000 feet northerly

(2) MD Route 109 (Beallsville Road)

From 2200 feet east of intersection at MD 28 to 1000 feet easterly

Contract: M-51
Montgomery County

Dear Mr. Allgood:

This information is in response to your fax dated February 21, 2006 regarding the existing right-of-way along the above project.

### (1) MD Route 28 (Darnstown Road)

Enclosed is one copy of SHA plat lettered "CNI", showing the right-of-way acquired in 1924 under contract # M-51. This plat shows the Administration's degree of title to be a <u>right-of-easement</u> to be used exclusively by the SHA for <u>highway related purposes only</u>. The actual underlying fee may still be vested either in the county or the individual property owners.

For the remaining area not covered on MD Route 28, by the above-mentioned plats, records maintained in this office indicate there are no additional SHA plats.

Further research indicates this road was originally a county road that was absorbed into the SHA system on or about 1924. This Administration has no record as to the width or status of the right-of-way (fee or easement) owned by Montgomery County prior to this road being taken into the system. In addition, there is no indication of right-of-way acquisition by the Administration during the period of State maintenance.

### (2) MD Route 109 (Beallsville Road)

Further research indicates this road was originally a county road that was absorbed into the SHA system on or about 1908 under maintenance contract # 122. This Administration has no record as to the width or status of the right-of-way (fee or easement) owned by Montgomery County prior to this road being taken into the system. In addition, there is no indication of right-of-way acquisition by the Administration during the period of State maintenance.

In the absence of right-of-way information establishing a specific width for both MD Route 28 and MD Route 109, this Administration maintains for highway related purposes only, a minimum of thirty feet, measured fifteen feet each side of the existing centerline of surfacing, plus any additional appurtenances (side ditches, shoulders, etc.) which may exist.

However, please exercise caution when using this thirty-foot minimum width, as numerous variables (encroachments, prescriptive title, dedication, etc.) may affect the right-of-way line which should be established.

If encroachments (buildings, building appurtenances, steps, masonry walls, bushes, hedges, trees, etc.) are found within the right-of-way, contact this office or the Administration's Office of Counsel.

We also suggest that you check with the National Capital Park Commission and the Land Records of Montgomery County for any property transfers or pertinent dedications to the SHA for highway purposes or public use, which may exist.

In the future, you may wish to access available SHA plats on the Maryland State Archives' www.plats.net website. When prompted for username, type plato; when prompted for password, type plato# to enable access to the site. There is no charge for using the site. For more information on the features of www.plats.net, please contact:

Mr. John Maranto, Project Manager Acquisition and Preservation Maryland State Archives Hall of Records 350 Rowe Blvd.
Annapolis MD 21401-1686 (410) 260-6410 johnm@mdarchives.state.md.us

Please contact this office if we can be of any further assistance.

Sincerely yours,

Renee Rymer, Chief

Records and Besparch Section

Ву

Bertlyn Thompson Real Estate Officer

## Silver, Joshua

From:

Rose, Eugene

Sent:

Tuesday, March 17, 2009 8:14 AM

To:

Mueller, Julie

Cc:

Manarolla, Kevin; Silver, Joshua; Lampl, Joey; Bontz, Shelley; Vismara, David

Subject:

RE: Darby Store Tree Survey Plan

Julie,

Here is my assessment of the two hazard trees on the Darby Store property.

The 54" maple directly behind the store has cracks and decay in the trunk and scaffold branches. This decay has made the tree structurally unsound and is likely to fail. Failure of any of the large branches on the store side of the tree will lead to significant damage to the store.

The 36" oak (If I recall, it is actually a maple) near the existing 2 story house has significant decay in the branches which are growing towards the house. Failure of these branches will lead to significant damage to the house.

Although both trees appear to be healthy when leafed out, they pose a significant threat to the historical structures on site and should be removed. Additionally, tree protection fencing should be utilized to protect other trees on site during construction/moving of the store.

Kevin, if you would like a copy of the site plan faxed to you, please give me your fax number. I think you can mark the trees on a copy of your own plan, though, since they are the only 54' maple and 36" oak indicated on the plan.

Eugene Rose, Senior Urban Forester, International Society of Arboriculture Certified Arborist, #MA0495, MNCPPC, Horticultural Services Division

From: Mueller, Julie

Sent: Monday, March 16, 2009 1:41 PM

To: Rose, Eugene

Cc: Manarolla, Kevin; Silver, Joshua; Lampl, Joey

**Subject:** Darby Store Tree Survey Plan

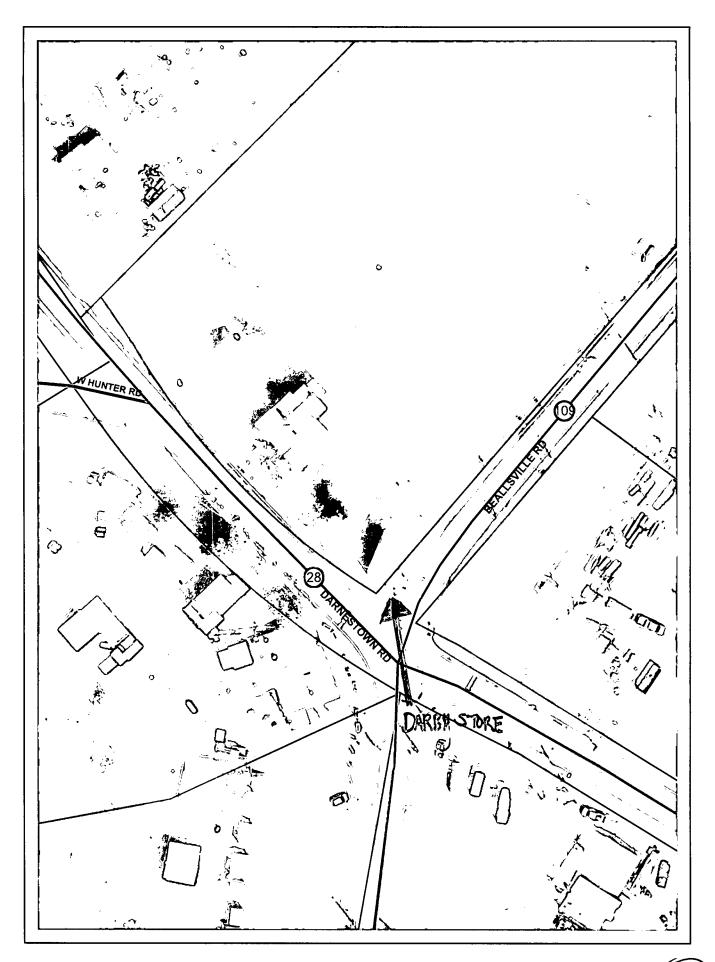
Hello, Eugene. Thanks for returning my call today. As Joey and I have mentioned in previous emails, we need the following from you:

- A few sentences describing the two trees and stating their condition. The trees are located behind and between
  the store and the house. Please be sure to state whether they are healthy, dead, dying, sick (how sick), and/or a
  hazard
- A site plan on which you note this information (site plan attached)
- Please provide your name, that you are a certified arborist, and your certification number

Per Josh, you can email the written information and fax the marked up plan directly to Kevin (address above). He is willing to accept an email, rather than a letter on stationery. Please be sure to cc me. Josh needs the information by close of business tomorrow (March 17) to complete the package that must go to the Historic Preservation Commission members the following day.

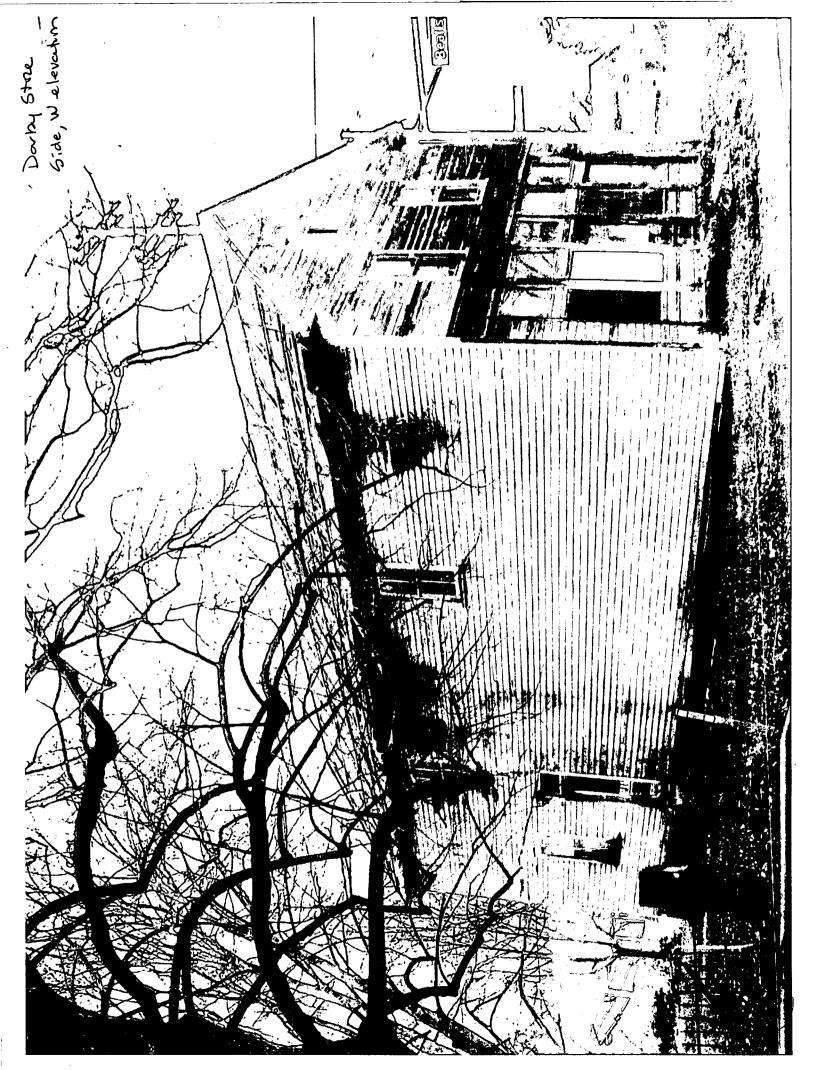
We all appreciate your help! Let me know if you have any questions. Julie

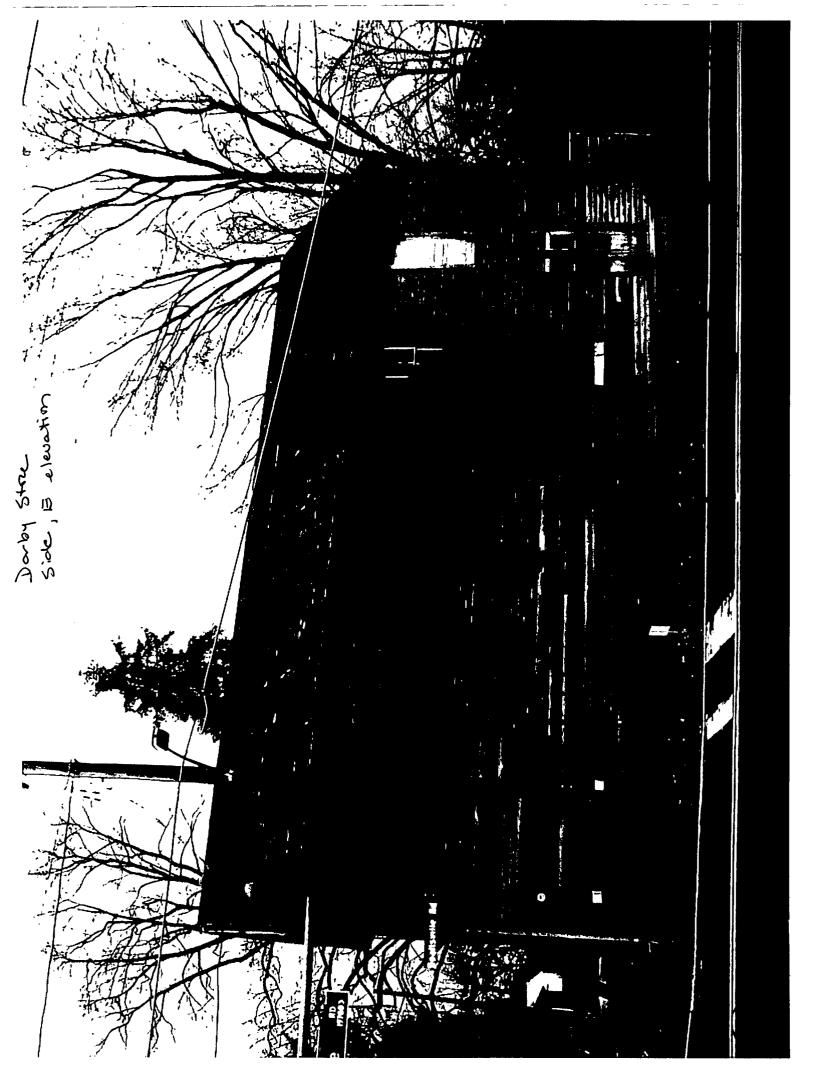




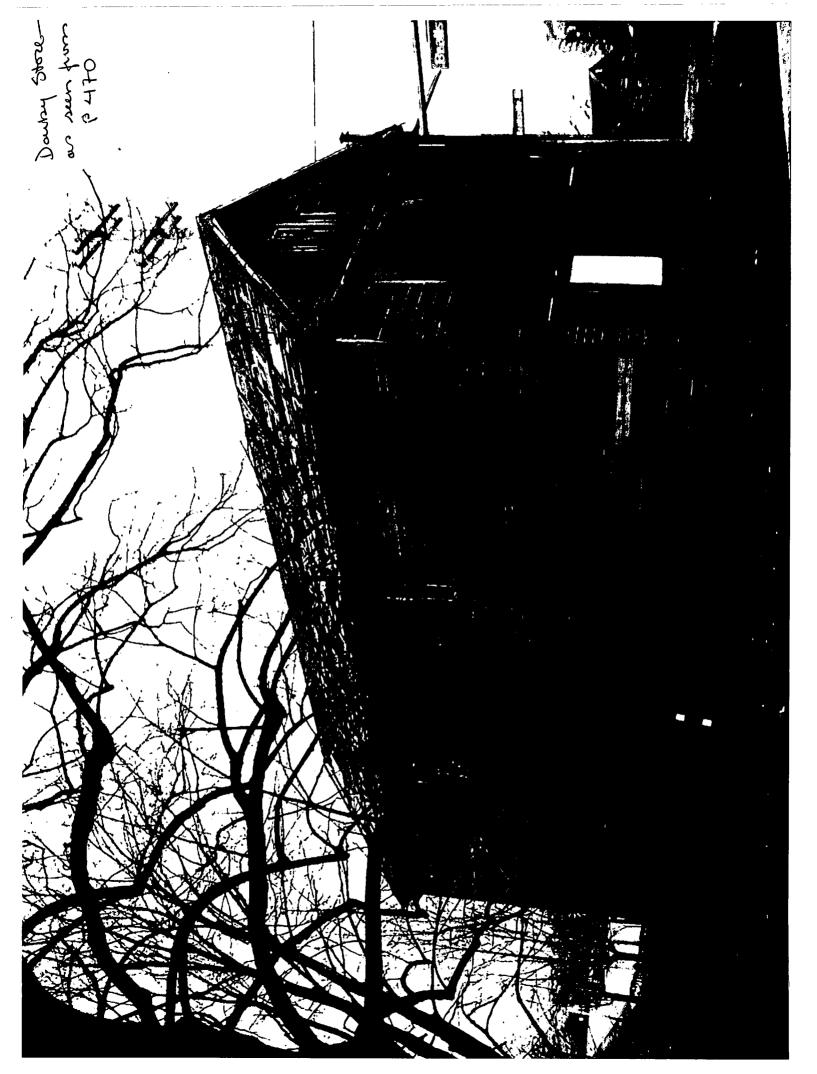


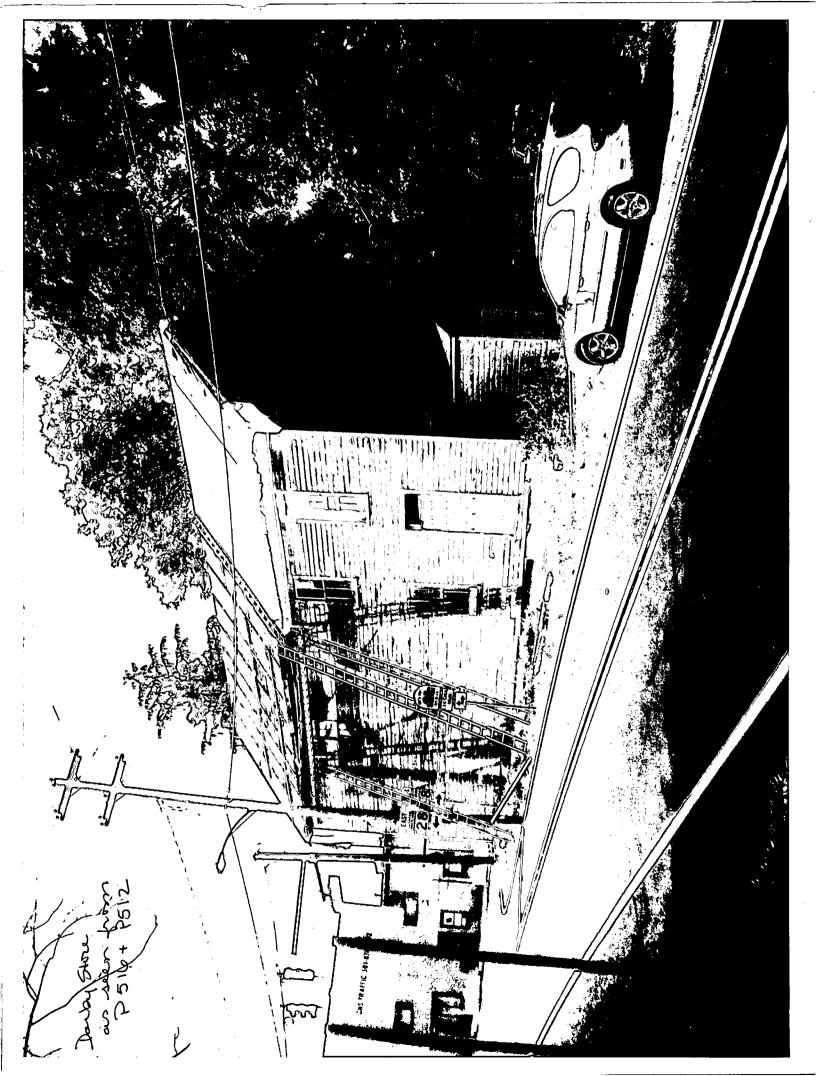


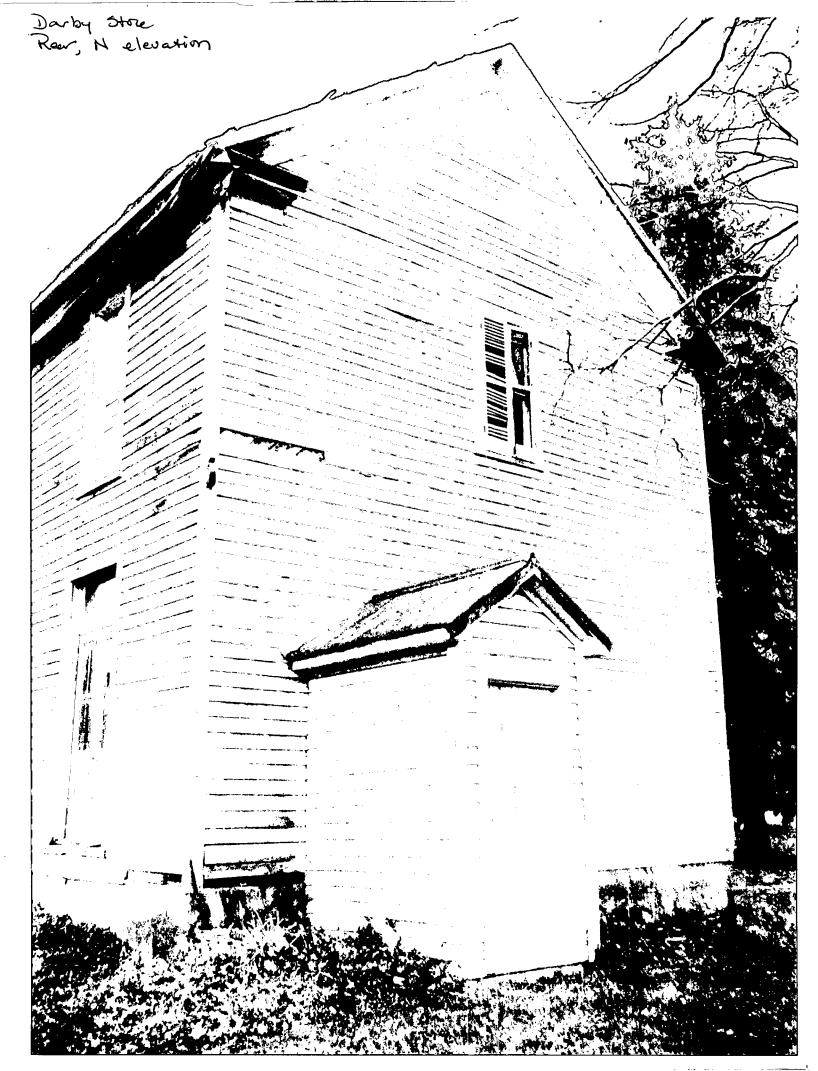




Darby Stace seen from

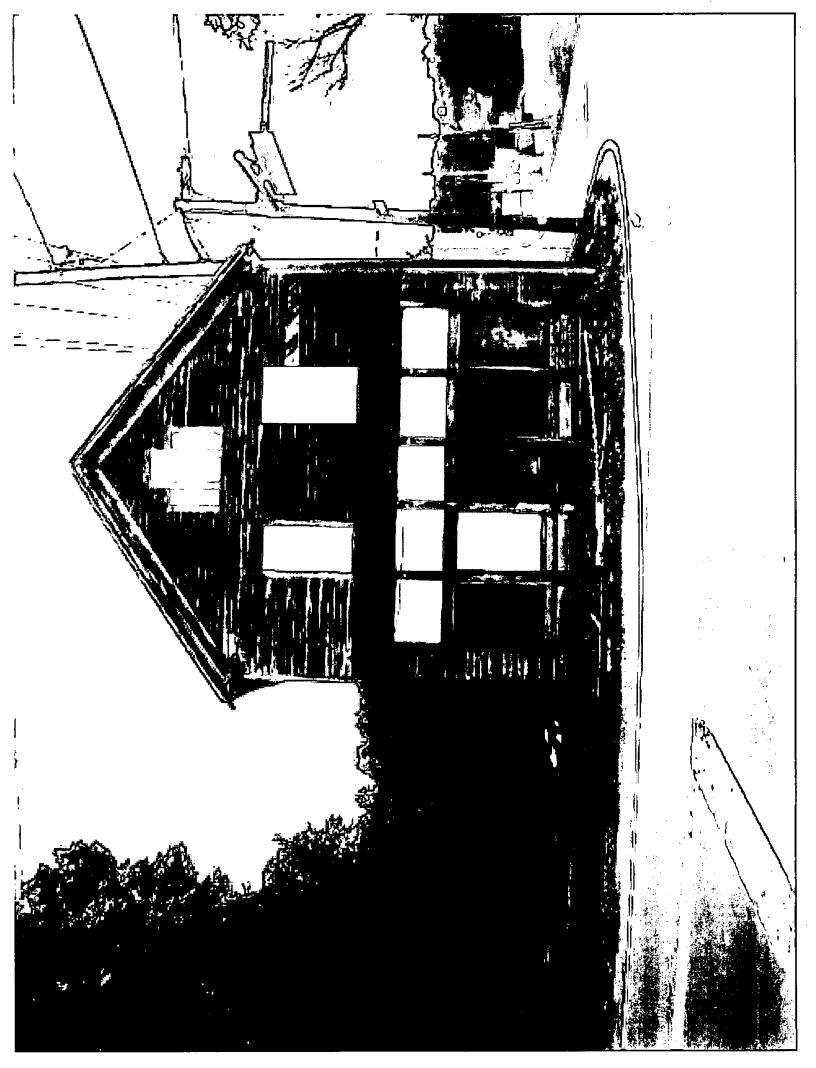














#### **COMMENTS ON HAWP DRAWINGS**

- Will the notes discuss what is stabilization necessary for move vs. what the building will look like after the move?
- It appears that some of the instructions are to mothball the building to keep it in good condition until it is occupied. Can these be so noted so that it is clear that elements such as the proposed vents are temporary and will be removed once the building no longer needs to be mothballed? Are all the mothballing methods reversible?
- Is there a proposed basement plan?
- Are there instructions for what to do with the old foundation?
- Do the full plans include a schedule of what is to be done prior to the move vs. after?
- Does there need to an instruction on how to remove the tarp and the structure holding it in place?
- Assuming that all painting is done after the move. Is this stated anywhere? Do we need to specify type and color of paint?
- What is the final state of the building's windows? Boarded up? Shuttered?

### Notes on Keynotes:

**D**: Are there instructions for how to reinforce the 2<sup>nd</sup> floor joists? We discussed different ways to do this. Will it be clear to the contractor?

E: Will the stabilization contractor be instructed to reinstall the cabinets, shelving, etc? Please include not just counters along exterior wall, but also counters set in the room

J: Do you mean "install" or are those existing supports?

**N**: Do you mean "install"? Is this an accepted preservation solution? Aren't we damaging an original door by doing this?

P: Do you mean "install" the vent? If so, before or after the move?

**Q**: Remove existing glazing? Or is this boarded up? Install vent into board or will vent take up the entire opening? Install before or after the move?

R: Do you mean "install" active solar powered ventilation? If so, before or after the move?

**S**: Why are we salvaging metal shingles? Are they being reused? If so, that is not stated. Who is **responsible for storing them?** 

**U**: What about the transom windows? How are they being protected? Please be sure to note protection of painted Darby name in transom.

Y: Does the material and dimension of the sill plate need to be provided?

**AA**: Do we need to provide material and/or dimensions? Does the replacement need to match the original?

AB: Is the contractor storing the salvaged material? Or are we?

AC: Is the doghouse not being moved? It states that it remains. If so, until when? This is confusing.

**AM**: If there is not enough salvaged brick to complete the chimney, what is being specified and where will it be laid?

**North and South Façade General Notes:** Do we need to provide a note on the type of wood or dimension for the replacement siding? Or a note specifying that it is to be milled to match? **Site Plan:** 

- The two oaks are actually basswoods.
- Do we need to show the location of the new porch?
- Please correct spelling of "traffic"

# South Façade Plan:

• Should keynote N be Q? There is no N on the plan, but Q is noted on it, but not in the keynotes. Concerned about how this is going to look. Or is this vent in wood that is boarding up the window opening? When is this installed? Is it to be removed or is it part of the mothballing until a tenant is found?





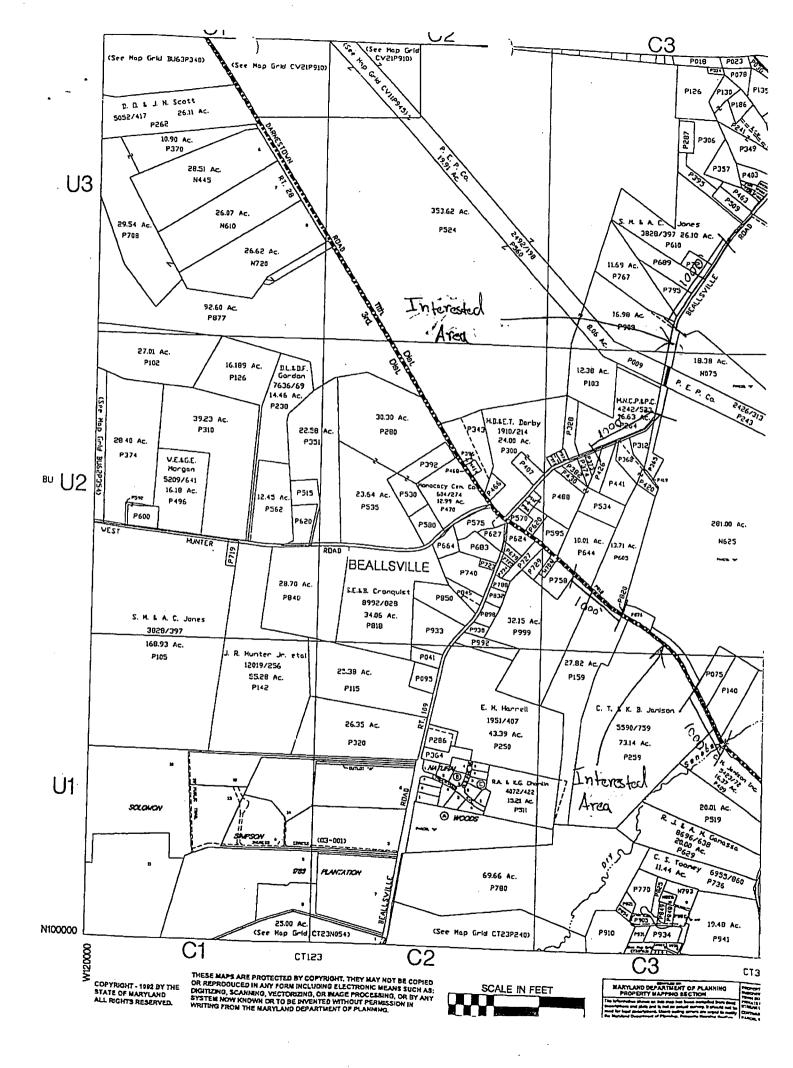
Robert L. Ehrlich, Jr., Governor | Michael S. Steele, Lz. Governor |

Robert L. Flanagan, Scoretory Nell J. Pedersen, Administrator

MARYLAND DEPARTMENT OF TRANSPORTATION

Renee T. Rymer, Chief	Date: 2/21/06
Records and Research Section – 2 <sup>nd</sup> Floor, M202 State Highway Administration	
211 East Madison Street Saltimore MD 21202	245114
Telephone No. (410) 545-2836 Fax (410) 209-5023	1345 14563
, PLEASE PR	UNT OR WRITE LEGIBLY
Re: MD Roo 28 & 109 Boals ville (Rd)	county Manteromory County
Limits: From: SEF TAX MAP (170 ) E	EAST & WEST ON SUBJECT PROPERTY
TO: ON RTE. 28) & (1007' N	ORTH & SOUTH OF SUBJECT PROPERTY
ON TITE. 109)	FMIS CHARGE #***
Dear Ms. Rymer:	
Please furnish the latest Right of Way information r	elative to the above area.
I have enclosed a vicinity map and I understand you	will forward this material as soon as possible.
Thank	You Sont all more
Print Name Brent Allyood	
Company Name: LAS Enginering	
Address: 108 WEST RIDGEVI	LLE BLVD.
City: MT. AIRY	State: MV Zip Code: 21771
Phone Number: (301) 607-8031 Fax N	lumber: (301) 607 - 8045
E Mail Address: brent@ casengineeri	ing.com
~	ONSTRUCTION PLANS, CROSS SECTION, ETC.,
HIGHWAY DESIGN DIVISION/FILE ROOM 10	
707 N. CALVERT ST.	
BALTIMORE MD 21201 (410) 545-8798 FAX (410) 209-5001	5-1
AS EACH OFFICE IS REGULATED BY SEPAR	ATE PROCEDURES. Rev.09/21/05
	of the state of th
My teisphone number/toll-free num Maryland Relay Service for Jennaired Hea	mber is

Street Address: 707 North Caivert Street . Baltimore, Maryland 21202 . Phone: 410.545,0300 . www.marylandroads.com



Brewer Estate | W. T. Griffith Brewer Estate r Estate

Scale 1'100'

WHEREAS the State Roads Commission of Maryland, acting for the State of Maryland, proposes to lay out and construct as a State Highway, the road shown on attached

plat in

WHEREAS the laying out of sald road will be a material

Brewer Estate

Now in consideration of the above premises and of One land for the purpose of or to be-used in connection with Commission, its members, officers, agents and employs from any and all claim or demand for damages or inju-

IN WITNESS WHEREOF we have herounto set our hands and seals, this  $\mathcal{H}^{TH}$  day of  $\mathcal{H}_{UGUS}$   $\mathcal{H}^{S}$ 

County, and

benefit to the undersigned.

Dollar and other good and valuable considerations, we for ourselves, our heirs, personal representatives and assigne do hereby deed, grant and convey unto the State of Mary matters or things arising out or caused by the laying oul and construction of the said State Highway. State Highway the right of way and land shown on accom or drainage, the oreation or extension of slopes, embank panying plat, which is hereby made a part hereof, and w do further release the State of Maryland, the State Road and for a public highway including any change of grad ments or excavations in connection therewith, or any othe

in the year 1924

State of Maryland, County of

day of On this

in the year

Brewer

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(2) (28136 (2) er Estate		46+38	To Dealsville	
125+26 125+49 Brewer		145+38	Or 4571 SA457	
16140		141+89 Brewer Estate		
Brower Estale	mosons	192400 133475 Brewer Estate	Les confrith	
10+21		111111111111111111111111111111111111111	* :	

27 January 2009

ne bite et na plantini, per sea sition en iplices ustannalife de segn Ms. Joey Lampl
Cultural Resources Manager
Park Planning & Stewardship Division
Montgomery County Department of Parks
1109 Spring Street, Suite 802
Silver Spring, MD 20910

Re: Darby Store

Dear Joey,

Attached for your review are two reports, the wood analysis by Ron Anthony and the structural analysis by Robert Silman Associates. This letter summarizes recommendations of the A/E team.

Currently the presence of significant moisture is allowing and encouraging decay and mold growth in the first floor framing. As we had discussed on the phone we recommend immediate removal of the water from the basement and provide for the drainage at the building's current location to begin the process of drying out the structure. Once the water has been pumped out a drain needs to be added that allows the basement to drain. It will help to dry out the building by actively ventilating the space with solar-powered fans, located at the south side wall windows. It is expected to take between 2-4 weeks to bring down the moisture to a more acceptable level.

In addition, it is recommended that debris be removed relatively soon. The debris and artifacts not only hide areas from inspection, but potentially holds in moisture leading to further decay. Once the debris is removed we would survey the building again to determine if additional areas of floor need to be replaced or repaired. It would also be helpful to remove the metal ceiling to provide for inspection of the concealed areas above. If that were to occur prior to the move, we would recommend numbering and storing the panels in a ventilated space. These would be retained for information and possible reinstallation and/or replacement in-kind.

For the load capacity of the structure the first floor should be acceptable for the proposed uses once the framing is repaired. The second floor framing capacity is comparable to a residential bedroom floor loading and would require restriction of use and occupancy and possibly a code waiver.

late ear 50

In the scope of work we currently have geotechnical testing for determining the soil bearing capacity for the new foundation. The structural engineer considers the cost of this testing may be better used for construction. Geotechnical testing may help to quantify the risk of bad soil, but does not eliminate it. There is always risk of unacceptable soils, which may cause additional work and construction delays. This would typically mean removal of unacceptable soil and replacement with suitable fills compacted to appropriate standards. The foundation design would be based on existing conditions and sound engineering practice. The earthwork specification would be written to address actions to be taken by the contractor to deal with bad soil to provide adequate bearing. Our suggestion is to delete this from our scope and use the money you save in fees (\$5000) for the actual construction budget.

If you wish to discuss these recommendations, please let me know. If you wish to accept them, we will proceed accordingly.

Sincerely,

T. David Beil, AIA NCARB LEEDap, Principal

**BELL Architects, PC** 

**Enclosures** 

cc. Julie Mueller

#### Cultural Resources Stewardship

## **Historic Curatorships**Darby House and Store, Red Door Store, Joseph White House



Montgomery County Department of Parks Montgomery County Planning Board Meeting

October 30, 2008



-A-16-4

CULTURAL RESOURCES SECTION

#### **Accomplishments to Date**

- Assumed full Responsibility for Cultural Resources Program September 2007.
- 157 Resources In Portfolio; Including 110 structures
- Developed Annual Work Program
- Hired Countywide Museum Manager April 2008
- Increased CIP from \$300,000 to \$900,000
- Proposed new positions in FY08 Operating Budget; positions not funded
- Stabilization work to date:

	Exterior	rixed	Exterior	Major	Interior	Interior	
	Painted	Roof	Carpentry	Stabilization	Painted	Restoration	ADA Ramps
Brainard Warner	X	Х					
Red Door	X	Х					
Darby House	Х	X	х				
Darby Store		(Tarp)		In Progress			
Woodlawn	Х						
Pooles House	Х		Х				In Progress
Pooles Store	Х		х		T		In Progress
Seneca Stone Barn				In Progress			
Ziegler Log House						х	
Ag. History Farm Buildings ( Corncrib, Tank House, Privy)	х		х				
Kingsley School	Х		In Progress		х	In Progress	



#### **Historic Curatorships**

#### Red Door Store, Darby House and Store, Joseph White House

#### **Zoning Issues**

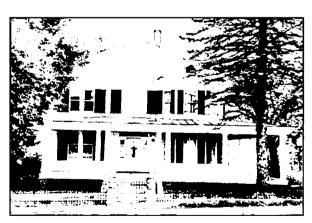
- 2 of 3 structures sit on parcels with more than one zoning category (i.e., C-1 and RDT for Darby parcel and C-1 and RC for Red Door Store parcel).
- Rezoning dates to 1950s and 60s. Intent was to preserve commercial uses on these properties, but set back commercial zones for wider, proposed right-of-ways.
- C-1 zone covers most of house only at Darby. C-1 zone floats behind store at Red Door Store.
- Possible "Change or Mistake" rationales to consider for corrective zoning amendment:
  - Proposed road rights-of-way from 1950s, 60s have been reduced; e.g., at Darby Store, roadway classifications were changed by the 1996 Rustic Roads Functional Master Plan.
  - 1989-90 Master Plan for Historic Preservation District Designation for Beallsville.
  - 2006 Strategic Plan From Artifact to Attraction. Lists 3 properties among the "Top 20 Priority Projects."



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#### **Darby House**





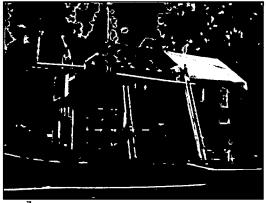




## **Darby Store**





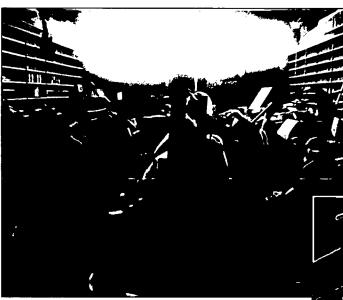




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CULTURAL RESOURCES SECTION

#### **Darby House and Store**

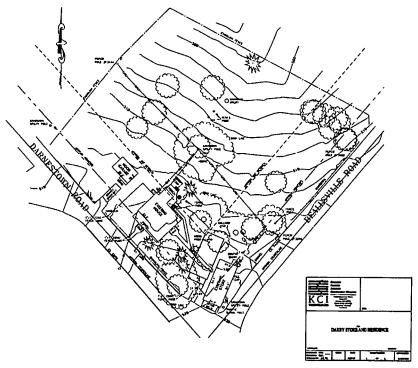


Darby Store Interior and Artifacts Saved



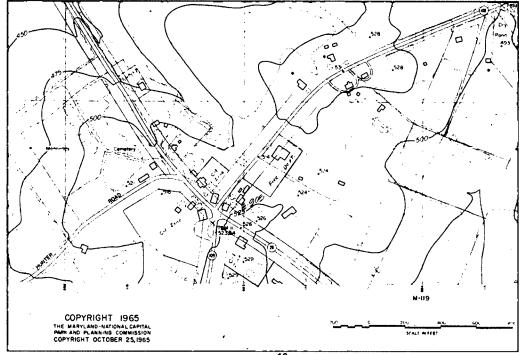


#### **Darby House and Store** Site Plan Showing Potential Relocation of Store

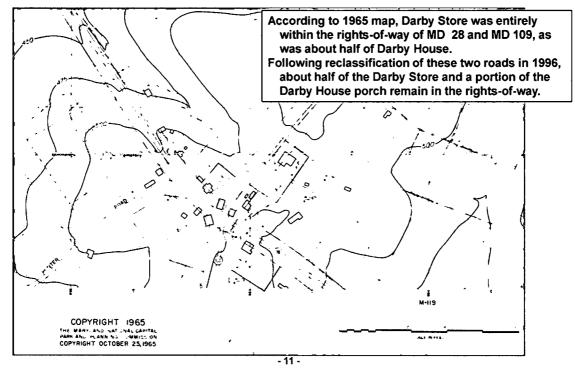


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#### **Darby House and Store** 1965 Proposed Rights of Way and Rezoning



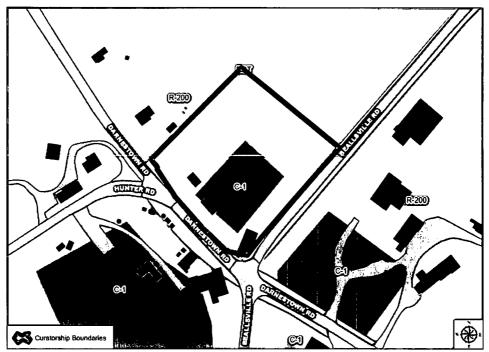
#### **Darby House and Store** 1965 Proposed Rights of Way and Rezoning



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CULTURAL RESOURCES SECTION

## **Darby House and Store Zoning and Suggested Curatorship Boundary**



## If zoned RDT, desirable uses for the Darby House may include, but are not limited to:

- Bed & Breakfast with one or two guestrooms (P)
- Bed & Breakfast with 3-5 guestrooms (SE)
- Dwelling (P)
- Charitable or Philanthropic Institution (SE limited to 2 acres)
- Antique Shop (SE)
- Private Educational Institution (SE with qualifications)
- Home Health Practitioner's Office (P with qualifications and SE with qualifications)
- Home Occupation (office) (P)
- Private Club or Service Organization (SE)





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- 13 -

#### CULTURAL RESOURCES SECTION

## If zoned C-1, desirable uses for the Darby Store may include, but are not limited to:

- Handicraft or Art Store (P)
- Book Store (P)
- Antiques Shop (P)
- Drug Store (P)
- Eating / Drinking Establishment without drive-through (P with qualifications regarding entertainment)
- Florist (P)
- Food/Beverage Store (P with qualifications)
- Furniture or Furnishings Store (P)
- Garden Supply (P)
- · Gift Shop (P)

- Grocery (P)
- Hardware (P)
- · Jewelry (P)
- Newsstand (P)
- Photographic/Art Supply Shop (P)
- Variety/Dry Goods Shop (P)
- Charitable/Philanthropic institution (SE)
- Office Space if related to Rural Cluster (P)

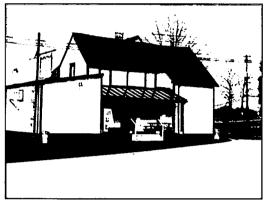




#### **Red Door Store**









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- 15 -

#### **Red Door Store Zoning**

"The majority of the Council believes that the zoning request should be granted for .73 acres of C-1 zoning. . . Granting of . . . the requested zoning with a 150 foot setback from the center lines of the intersecting roads should result in elimination of the present building which, by reason of its present location, constitutes a traffic hazard. Such setback will also provide ample right-of-way for future improvement of these roads."

# This is in conformity with a deed recorded in Liber 955 at Polio 300 among the Land Records of Montgomery County, Md. June 10, 1957 S. V. Shephard, Jv. Md. Rag. No. 2539 OO MANUAL STATE OF THE POLICE OF THE P

CULTURAL RESOURCES SECTION

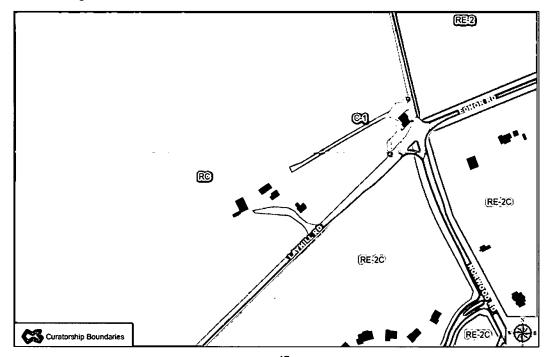
**June 1957 Zoning Resolution** 

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- 16 -

## Red Door Store Zoning and Suggested Curatorship Boundary



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**CULTURAL RESOURCES SECTION** 

#### If zoned RC, desirable uses for the Red Door Store may include, but are not limited to:

- Winery (SE/P)
- Country Market (SE)
- Farm Market (P)
- Landscape Contractor (SE)
- Bed and Breakfast with one or two guestrooms (P)
- Bed and Breakfast with 3-5 guestrooms (\$E)
- Dwelling, one family (P)
- Antique Shop (SE)
- Farm Machinery: sales, storage or service (SE)

- Farm Supply, sales, storage or service (SE)
- Charitable or Philanthropic institution (SE limited to 2 acres)





#### If zoned C-1, desirable uses for the Red Door Store may include, but are not limited to:

- Handicraft or Art Store (P)
- Book Store (P)
- Antiques Shop (P)
- Drug Store (P)
- Eating/Drinking Establishment without drive-through (P with qualifications regarding entertainment)
- Eating/Drinking Establishment with drive-through (SE)
- Florist (P)
- Food/Beverage Store (P)
- Furniture or Furnishings Store (P)
- Garden Supply (P)
- · Gift Shop (P)
- · Grocery (P)

- · Hardware (P)
- Jewelry (P)
- Newsstand (P)
- Pet Shop (SE)
- Photographic/Art Supply Shop (P)
- Variety/Dry Goods Shop (P)
- Apparel Store (P)
- · Barber/Beauty Shop (P)
- Charitable/Philanthropic institution (SE)
- Eating/Drinking Establishment with Office Space if related to Rural Cluster (P)



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- 19

#### CULTURAL RESOURCES SECTION

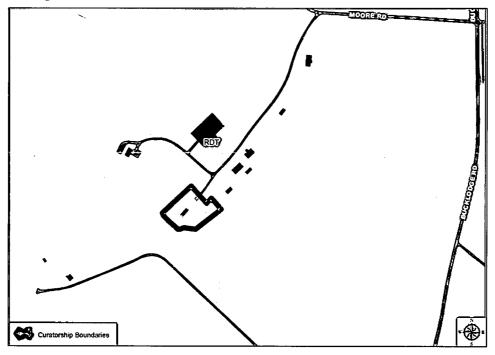
#### **Joseph White House**







## Joseph White House Zoning and Suggested Curatorship Boundary



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CULTURAL RESOURCES SECTION

# If zoned RDT, desirable uses for the Joseph White House may include, but are not limited to:

- Bed & Breakfast with 1 or 2 guestrooms (P)
- Bed & Breakfast with 3-5 guestrooms (SE)
- · Dwelling (P)
- · Winery (P/SE)
- Charitable or Philanthropic Institution (SE limited to 2 acres)
- Antique Shop (SE)





## **Objective of Briefing:**

- 1) Update Board on progress regarding Darby House and Store, Red Door Store, and Joseph White House
- 2) Solicit Board's advice on resolving the zoning issue for these properties





#### HISTORIC PRESERVATION COMMISSION

Isiah Leggett County Executive

Jef Fuller Chairperson

March 17, 2009

M-NCPPC 19801 Darnestown Road Beallsville, Maryland 20839

Re: Removal of 54" maple, 36" maple in Beallsville Historic District

Dear M-NCPPC,

I have received your arborist's report dated 3/17/2009 regarding the above-referenced tree(s), which documents the assessment that this tree(s) is dead/dying or a hazard and in severe decline.

Therefore, due to the health and hazard of the subject tree(s), the Historic Preservation Commission authorizes the removal of the tree.

This letter serves as your permission to remove the tree(s) without further review by the HPC. If you have any additional questions, please do not hesitate to contact me at 301-563-3400.

Sincerely,

Kevin Manarolla, Senior Administrative Specialist Historic Preservation Section, M-NCPPC





#### Memorandum

To:	Joey Lampl – M-NCPPC	Project No:	134-011
From:	T. David Bell	Date:	March 17, 2009
Re:	Rationale for moving Darby Store	Pages:	2
CC:	Scott Knight, Joshua Silver		
☐ Urg	ent	For Reply  Please	e Recycle

The Darby Store is located at 19801 Darnestown Road in Beallsville Maryland, on the corner of Darnestown Road and Beallsville Road. The store currently sits within three feet of the roadway, well within the 50' set back. The building is oriented with the front facing south-south-west. For protection of the historic resource and the safety of the future users of the building, it has been determined that the building should be moved.

The property lines have not been accurately determined, because of the accuracy of available information. What is depicted on the attached plans is an approximate location of the right-of-way, and set back lines. See the attached letter from the State Highway Authority regarding the absence of right-of-way information. The final location will be dimensioned based on accurate information is available or relative to existing improvements.

Based on this information, the proposed location moves the Darby Store approximately 30' from the right-of-way, but still within the 50' setback. The proposed new location maintains a reasonable distance from the right-of-way, similar to the porch of the Darby House.

Under normal circumstances, it is not desirable to move a historic building at all; however, jeopardizing people's safety is not acceptable. The Darby Store sits partially in the roadway. The Store's porch no longer stands because a truck ran it over. People currently cannot walk alongside the south or southwest face of the store without putting their lives at risk. The goal of the relocation of the store is to make a safer situation, while keeping as much of the historic setting as possible. The efforts to minimize any change to the store's original setting include:

- Minimize movement of the store in terms of distance
- Maintain current orientation of store.

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- Move the structure only once to its permanent location by building a new foundation directly adjacent to the existing.
- Minimize the change in distance between the Darby Store and the Darby House.
- Maintain the height relationship between the Darby Store and Route 28 and between the Darby Store and the Darby House with the store's new placement.

1228 9th Street, NW Washington, DC 20001



 Avoid disturbing existing, healthy, mature trees on the site in general. Any trees to be removed have been determined by a certified arborist to be in dead, dying, or hazardous condition.

1228 9th Street, NW Washington, DC 20001 www.bellarc.com

- 1 Case Number F at 6705 Westmoreland Avenue?
- 2 MR. JESTER: Mr. Chair, hearing none, I make a
- 3 motion that we approve the following cases based on the
- 4 staff reports, Case A, Number 31/06-09B at 3913 Washington
- 5 Street in Kensington, Case 37/303-09F at 112 Park Avenue in
- 6 Takoma Park, Case Number 31/07-09A at 10226 Capitol View
- 7 Avenue in Silver Spring, Case 35/38-09A at 8922 Spring
- 8 Valley Road in Chevy Chase, Case 14/63-09A at 7901 Warfield
- 9 Road in Gaithersburg with a note that we generally do not
- 10 like to review projects that have been, where work has been
- 11 completed without a Historic Work Area Permit, and Case
- 12 37/03-09G at 6705 Westmoreland Avenue in Takoma Park, also
- 13 with the same note about generally not liking to review
- 14 projects that are, where the work is completed without an
- 15 Historic Area Work Permit.
- MR. ROTENSTEIN: Thank you. Do I have a second?
- 17 MS. MILES: Second.
- 18 MR. ROTENSTEIN: Is there any discussion?
- MR. KIRWAN: Mr. Chairman, I recuse myself from
- 20 Case Number 35/38-09A since my firm is the architect for
- 21 that project.
- 22 MR. ROTENSTEIN: Thank you, Commissioner Kirwan.
- 23 Okay. We have a motion and it's been seconded. All in
- 24 favor?
- 25 VOTE.

1	MR. ROTENSTEIN: AIT Opposed:
2	VOTE.
. 3	MR. ROTENSTEIN: It's unanimous with Commissioner
4	Kirwan recusing himself from Case D, the Chevy Chase
5	Recreation Association. If those were your applications, I
6	thank you for putting together a successful Historic Area
7	Work Permit and you are free to go home for the evening.
8	The next item on the agenda is Case G at 19801
9	Darnestown Road in Beallsville. Do we have a staff report?
10	MR. SILVER: Yeah. I'll give a very brief staff
11	report. The proposal's relatively straightforward. The
12	applicant is proposing to stabilize and relocate the subject
13	building back from its current location because it's within
14	the right of way of Maryland Route 28 Darnestown Road. It's
15	intended to protect the building from future master plan
16	right of way road improvements and to provide a safe
17	buildable area for future reconstruction of an original
18	porch that is missing from the front of the building.
19	Staff has no concerns with proposal, fully
20	supports the relocation of the Darby Store, as it's known
21	historically. Staff feels it's a reasonable solution for
22	ensuring the long-term protection of the structure from
23	these master plan right of way improvements and it also
24	reduces the building's vulnerability to additional damage
25	because of its location within the existing right of way.

- 1 Overall, staff feels it will have a minimal impact on the
- 2 setting of the district and the property, and the
- 3 relocation, most importantly, maintains the building's
- 4 historic relationship with the main house, its historic
- 5 angular articulation as a corner store and promotes the
- 6 viability of building for a future use.
- 7 In summary, staff feels that the relocation would
- 8 enhance and aid in the protection of the building and remedy
- 9 what is currently an unsafe condition. I have a few slides
- 10 I can quickly go through. The applicant and their team are
- 11 here as well to answer any questions. What's likely most
- 12 important to you is the intended stabilization of the
- 13 building and the rehabilitation of it that will, is feasible
- 14 because of this, if the Commission does in fact approve its
- 15 relocation.
- MR. ROTENSTEIN: Thank you, Josh. Please go
- 17 through the slides.
- 18 MR. SILVER: That concludes the photos.
- 19 MR. ROTENSTEIN: What's the date of this last
- 20 photo?
- 21 MR. SILVER: 1974.
- 22 MR. ROTENSTEIN: Thank you. Are there any
- 23 questions for staff? Would the applicant like to come up?
- 24 MS. MUELLER: Good evening. I'm Julie Mueller.
- MR. ROTENSTEIN: Can you use the microphone,

- 1 please.
- 2 MR. SILVER: If you would have a seat and --
- 3 MS. MUELLER: I have to sit?
- 4 MR. SILVER: -- hit the button on there, too,
- 5 please. Thank you.
- 6 MS. MUELLER: My first time.
- 7 MR. SILVER: There you go. Just hit that.
- 8 MS. MUELLER: Okay.
- 9 MR. ROTENSTEIN: Thank you.
- 10 MS. MUELLER: Good evening. I'm Julie Mueller.
- 11 I'm a staff member with the Cultural Resources Historic
- 12 Section in the Parks Department, and this rather sad-looking
- 13 building, that once looked a lot nicer, is in our inventory
- 14 of historic sites located in our parks. The building was
- 15 built in 1910 by H.C. Darby and next to it, he built a house
- 16 in 1921 because the store was so successful. The goal --
- 17 when the Commission purchased the buildings in 2004, they
- 18 purchased 25.5 acres with it, and the idea was to
- 19 rehabilitate the store through a curatorship program whereby
- 20 we would offer the store free of rent or with very low rent
- 21 in exchange for having the curator or proprietor
- 22 rehabilitate the store for us.
- The Cultural Resources Stewardship Section was
- 24 established in 2007 and once it was established, we embarked
- 25 on this program of trying to get a curator for the building.

- 1 Initially, because the building is so unsafe inside, we
- 2 decided that what needs to be done first is to stabilize the
- 3 structure and to move it away from the right of way because
- 4 as you can see from the photograph, it's literally on the
- 5 road. I mean, it's really unsafe to even walk on two sides
- 6 of the building because there are trucks just zooming down
- 7 those roads in spite of the traffic light there. It's just
- 8 a really unsafe location. And it seemed to us that it would
- 9 be very difficult to find anybody who would be interested in
- 10 moving into this building if we didn't move it back from the
- 11 road and by moving it back from the road, we'd also, it
- 12 would allow us to reconstruct the front porch which was
- 13 taken off by a truck that turned the corner too quickly.
- So in 2007, we hired an AE firm that had a
- 15 historic preservation sub to develop some stabilization
- 16 plans for us. Unfortunately, those plans were really not up
- 17 to snuff and we had to release that AE from their contract
- 18 in 2008 when it became apparent that they would not be able
- 19 to do the work that we had hoped that they would be able to
- 20 do. Also in 2007, we boarded up the building. The windows
- 21 are all boarded up, the doors area all boarded up with the
- 22 exception of one so that we could move in and out. And then
- 23 in 2008, we put a new tarp on the roof because water was
- 24 pouring into the building and creating really a bad
- 25 condition inside.

- 1 The building is full of things from the store.
- 2 The store has been vacant for more than 30 years and when
- 3 the owner walked away, he left a lot of things in the store.
- 4 So there's muffin tins and salt box and cans of paint and
- 5 all kinds of hazardous things that you don't want to touch,
- 6 and calendars on the wall and receipts. I mean, it's really
- 7 a treasure trove but it's pretty dangerous inside.
- 8 So among the other things that we've done in 2008
- 9 is we hired a, we found a debris removal contractor, who's
- 10 actually going to start next week, to remove all the
- 11 hazardous materials as well as all the nonarchitectural
- 12 features from the building. And we also hired another
- 13 architectural firm, a preservation firm this time, David
- 14 Bell Architects, who completed 50 percent stabilization
- 15 drawings for us and we have, those have been reviewed,
- 16 commented upon and we hope to have 100 percent drawings
- 17 within the next couple of months. On David Bell's team is
- 18 Robert Sillman and Associates for structural engineering.
- 19 They've done a terrific job.
- And also in the past few months, so we've
- 21 completed a structural engineering study, we've completed
- 22 wood analysis to determine what kinds of plank loads we can
- 23 accommodate in the building as well as, you know, the
- 24 condition of the building itself, and we've also conducted a
- 25 hazardous materials study to determine what we're dealing

- 1 with as far as the debris. So we've come a long way in the
- 2 past year and we hope to move along very quickly. We'll be
- 3 before this Commission again shortly. Once the
- 4 stabilization plans are completed, we'll bring those
- 5 forward.
- 6 MR. ROTENSTEIN: Thank you.
- 7 MS. MUELLER: Any questions?
- 8 MR. ROTENSTEIN: Are there questions for the
- 9 applicant?
- MR. JESTER: I have a couple.
- 11 MR. ROTENSTEIN: Sure.
- 12 MR. JESTER: The application is simply for the
- 13 relocation of the structure. There aren't any details about
- 14 the new foundations or what the grade will be for the
- 15 building relative to the existing grade.
- 16 MS. MUELLER: It will be the same. We are going
- 17 to -- currently, the building has a crawl space in front of
- 18 it and then a partial basement in the back portion of it
- 19 where you can pretty much stand up if you're not too tall.
- 20 And the decision, and actually, this was made just yesterday
- 21 in a meeting so that wouldn't be in the application yet, is
- 22 to dig a full foundation, so a full basement in which we can
- 23 locate all the HVAC and other equipment. The building does
- 24 not have plumbing in it. It has electricity in it but it
- 25 never had plumbing so obviously, we need to get plumbing in

- 1 there, among other modern features, and so we have decided
- 2 to dig a full basement. And it will be at the same level
- 3 that the current building is so the building isn't going to
- 4 be higher.
- 5 MR. ROTENSTEIN: Are there any other questions for
- 6 the applicant? I have one. What's your timetable for
- 7 completing all of this work?
- 8 MS. MUELLER: Well, we hope to have the drawings
- 9 in the next few months and then we will be putting out an
- 10 RFP for the stabilization contractor as well as a contractor
- 11 to move the building. If that firm is one in the same, we
- 12 hope to have that person on board no later than September.
- 13 And then we're looking at probably three to four months. Do
- 14 you think, Scott? Three to four months, let's say six
- 15 months, to get it completed. A lot of this depends on
- 16 contracting issues. Contracts take longer to get put in the
- 17 system.
- MR. ROTENSTEIN: Okay.
- MS. ALDERSON: Will your stabilization design
- 20 include the design for the move or are you handling that as
- 21 an altogether different, separate contract that's --
- MS. MUELLER: It's all wrapped in one.
- MS. ALDERSON: Good. So this design will address
- 24 those issues now.
- MS. MUELLER: Yes.

- 1 MS. ALDERSON: And you couldn't be in better hands
- 2 than Bob Sillman.
- 3 Ms. MUELLER: Right.
- 4 MS. ALDERSON: He's helping us, GSA, with a big
- 5 one. I might suggest, if you, and you may have already
- 6 considered this, that you retain him to provide expert
- 7 review, review of the expertise of the bidding contractors
- 8 because that can be a big issue.
- 9 MS. MUELLER: That's part of the contract.
- 10 MS. ALDERSON: Terrific.
- 11 MS. MUELLER: The existing contract.
- MS. ALDERSON: Terrific.
- 13 MR. DUFFY: I have a question somewhat similar to
- 14 Commissioner Jester's. What we have in this HAWP is for
- 15 relocating the structure, stabilizing it and removing two
- 16 trees I think. You mentioned building a full basement.
- 17 What other work are you intending to perform in addition to
- 18 moving and stabilizing?
- MS. MUELLER: Well, this particular HAWP is just
- 20 for moving the building. The stabilization will come in a
- 21 separate HAWP.
- MR. DUFFY: Okay.
- MS. MUELLER: So this is really, this is just to
- 24 get permission to move the building.
- MR. DUFFY: Okay.

- 1 MS. MUELLER: But there's going to be quite a bit
- 2 of, there's significant structural work that needs to be
- 3 done because there are structural members in the store that
- 4 have deteriorated and so there's going to be work done to
- 5 reinforce the building. We have to take into account
- 6 insulation, plumbing, there's a whole host of issues that
- 7 we'll be addressing in the stabilization plans.
- 8 MR. DUFFY: Okay: What you just said clarified a
- 9 big fuzzy issue for me. The staff report says the applicant
- 10 is proposing to stabilize and relocate. For this HAWP,
- 11 you're simply requesting us to vote on the relocation.
- 12 MS. MUELLER: That's correct. Because if you deny
- 13 the application to relocate the building, then what actually
- 14 needs to be done by the architects and engineers is slightly
- 15 different than if we have to design to be able to pick up
- 16 the building and slide it over.
- 17 MR. DUFFY: Right. So then you would come back to
- 18 us with, you know, assuming we say relocation is fine --
- MS. MUELLER: Right.
- 20 MR. DUFFY: -- you'd come back to us with the
- 21 details of the stabilization and any other --
- 22 MS. MUELLER: Right. Well, we'll come back to you
- 23 whether you approve that or not as far as the stabilization
- 24 is concerned.
- MR. DUFFY: Okay.

- 1 MS. MUELLER: It's just that it might be a bit
- 2 different than if you approve the moving of the structure.
- 3 MR. DUFFY: Where is the right of way? Do you
- 4 know relatively precisely where the right of way is located
- 5 within the building?
- 6 MS. MUELLER: Well, right now, the building is in
- 7 the right of way. Scott, was that included in the drawings
- 8 in the HAWP?
- 9 MR. WHIPPLE: Yes.
- 10 MR. ROTENSTEIN: I believe that's at circle 12.
- MR. DUFFY: Okay. You're right. I'm sorry.
- MS. MUELLER: So what we're, what we're proposing
- 13 to do is to get the building out of the right of way and
- 14 move it slightly farther back in case there's ever a
- 15 movement to put in a sidewalk or something like that. This
- 16 is Scott Knight with Bell Architects, so would you like to
- 17 clarify?
- 18 MR. DUFFY: Well, you've answered my question.
- 19 Thank you.
- 20 MR. ROTENSTEIN: Are you aware of any plans by the
- 21 State to put in sidewalks --
- MS. MUELLER: No. The State --
- 23 MR. ROTENSTEIN: -- or change the landscaping?
- 24 MS. MUELLER: No. There are no current plans and
- 25 in fact, so little has been done at that intersection that

- 1 SHA does not have any plans, like historical drawings,
- 2 there's nothing on file for this intersection because it's
- 3 been so long since they've done anything there.
- 4 MR. KIRWAN: I've got a question. I'm a little
- 5 curious, how did the building end up violating the right of
- 6 way in the first place? Is that, did the State Highway at
- 7 some point widen the right of way and just ran it right
- 8 through the corner of the building or --
- 9 MS. MUELLER: You know, I don't --
- 10 MR. KIRWAN: I'm just curious about the history of
- 11 that.
- 12 MS. MUELLER: I don't --
- MR. KIRWAN: Because it seems unfortunate that the
- 14 building's been put in the situation where it has to be
- 15 moved.
- 16 MS. MUELLER: Well, as I mentioned, the road has
- 17 not been widened in a very, very long time. I mean, there
- 18 are no records at SHA on this intersection. The store has
- 19 been there since 1910. The road was probably half the width
- 20 that it is today and I don't know when it was widened, but
- 21 this isn't an unusual situation. I mean, there are other
- 22 buildings that are right up on the corner, you know, like
- 23 almost in the road in Montgomery County, but this is
- 24 probably the most egregious one that I've seen.
- 25 MR. WHIPPLE: Just to supplement that a little

- 1 bit, this isn't an unusual circumstance at all. The County
- 2 and the State have certain right of way standards for
- 3 different types of roads and the master plan right of way is
- 4 generally a prescribed width and sometimes, that goes into
- 5 or through existing buildings. So it's a right of way for a
- 6 planned expansion down the road. It's a right of way that
- 7 if a development plan came in, perhaps the County would
- 8 require that that land was dedicated for future road
- 9 expansion, so this isn't at all a unique situation.
- 10 MR. KIRWAN: Okay. Thank you.
- MR. RODRIGUEZ: Do you have any plans for
- 12 maintaining the trees apart from the two that you're
- 13 proposing to remove?
- 14 MS. MUELLER: Not at this point yet, but we will
- 15 be having that as one of the conditions in the HAWP and it
- 16 certainly is one that we, you know, we're looking into.
- 17 MR. ROTENSTEIN: Is there any discussion?
- 18 Commissioner Miles?
- 19 MS. MILES: I'd like to say briefly, we generally,
- 20 of course, disfavor the relocation of historic resources.
- 21 We don't want them to in any way lose their relation to
- 22 their sites but this is not only obviously necessary but
- 23 it's very desirable to have it be relocated out of harm's
- 24 way to be restored, have the porch put back, have the
- 25 building restored to a posture of stability, so I would

- 1 support this.
- 2 MR. ROTENSTEIN: I would agree. We generally
- 3 don't approve the relocation of buildings but in this case,
- 4 there are extenuating circumstances and I think the property
- 5 itself has a good steward with an eye towards not just
- 6 preservation but ensuring that the property has an active
- 7 role in the community. So at this point, do we have a
- 8 motion?
- 9 MR. DUFFY: Well, I'd like to make one other
- 10 comment which is that if we do vote to allow relocation, we
- 11 would be, I believe we would only be allowing, voting to
- 12 allow a new location, but we would need to review the
- 13 detailed plans for how the relocation would happen and how
- 14 the stabilization would happen at a later date.
- 15 MS. ALDERSON: Okay. I'll make a motion that we
- 16 approve the proposal for relocation with the condition that
- 17 the applicant will be submitting a tree plan and that we
- 18 will anticipate a later HAWP for rehabilitation.
- 19 MR. ROTENSTEIN: Is there a second?
- 20 MR. JESTER: I second.
- 21 MR. ROTENSTEIN: Any discussion? All those in
- 22 favor?
- VOTE.
- MR. ROTENSTEIN: It's unanimous. Did you have
- 25 your hand up, Warren?

- 1 MR. FLEMING: Yes.
- 2 MR. ROTENSTEIN: Oh, okay. All right. It's
- 3 unanimous. Thank you for putting this proposal together,
- 4 and I look forward to seeing your subsequent HAWP.
- 5 MS. MUELLER: Thank you very much for your
- 6 consideration and we certainly appreciate. It wasn't a
- 7 decision that was lightly made by our office. Thank you so
- 8 much.
- 9 MR. ROTENSTEIN: Don't throw away everything in
- 10 the store, those little time capsules are fascinating
- 11 opportunities.
- MS. MUELLER: No. We're not throwing things away.
- 13 If you'd like to come help sort, you're welcome to. Just
- 14 wear your mask and gloves.
- 15 MR. ROTENSTEIN: Thank you. The next item on the
- 16 agenda is a preliminary consultation for a contributing
- 17 resource at 7305 Takoma Avenue in the Takoma Park Historic
- 18 District. Do we have a staff report?
- 19 MS. FOTHERGILL: We do. I'm actually going to ask
- 20 if there's anything we can take out of turn because the
- 21 architect is not here yet and I would like him to be here
- 22 since it's important for a preliminary that the applicant be
- 23 here. So I was wondering if we could possibly talk about
- 24 minutes for a minute?
- MR. ROTENSTEIN: Sure.



# Darby House and Store, Maryland National Capital Park and Planning Commission Simplified Natural Resources Inventory

Prepared by Dom Quattrocchi, Qualified Professional, MD DNR(Maryland Forest Conservation Act; International Society of Arboriculture Certified Arborist MA4286A

This Simplified Natural Resources Inventory and Tree Save Plan is to relocate the historic Darby Store approximately 25' northwest from its existing problematic location directly adjacent to Maryland Routes 109 and 28. As part of this move, no forest or trees will be removed. Tree Save efforts will primarily involve the placement of tree protection fencing to protect landscape trees during the relocation of the Darby Store and prohibiting vehicular access to the area near the trees. The limit of disturbance is approximately 10,000 square feet, entirely within the vicinity of the existing location for the Darby Store and the immediately surrounding open field area.

The Darby House and Store is currently configured as a single-family residence and separate shop with plantings of trees and shrubs in portions of the property and along the perimeters. This pair of structures located in Beallsville represents the historic prominence of the local merchant in a rural turn-of-the-century farming community. Although stores such as the Darby Store were once found throughout Montgomery County, few remain today. M-NCPPC is developing stabilization plans for the store which is currently in poor repair. Stabilization will includes moving the building back from the intersection.

#### **ACREAGE** 25.5 acres

#### **ZONING RDT**

**HYDROLOGY** Little Monocacy River of the Potomac River, Use 1, Good Water Quality per **MCDEP**. The property contains a perennial stream originating from two on-site springheads and associated wetlands area. The beginning of an intermittent stream occurs near the northwest property boundary. No 100-Year Floodplain is mapped on the property. The Darby House and Store are not within a PMA or SPA

**SOILS/GEOLOGY** Predominantly phyllite geology with small area of quartz bodies. The predominant soil type is Brinklow soils (16B and 16C). These are relatively well drained and developed soils without development constraints. The perennial stream area is associated with Rowland (50A) soils-a hydric soil.

**SLOPES** No steep slopes or slopes on erodible soils occur on the property. The property generally slopes in a northwest direction at about 7% slope. Areas of steep slopes are generally confined to with forested stream valley area and comprise a small portion of the property.

**LEGACY OPEN SPACE ACQUISITION** The Darby House and Store was identified in the 2001 Legacy Open Space Functional Master Plan (LOS Plan) as an important historic, cultural and open space resource; meeting the Plan's criteria as "best of the best" open spaces within Montgomery County. Acquired by the Legacy Open Space program in 2004, the site is incorporated in the Park Managers' schedules for regular grounds maintenance.

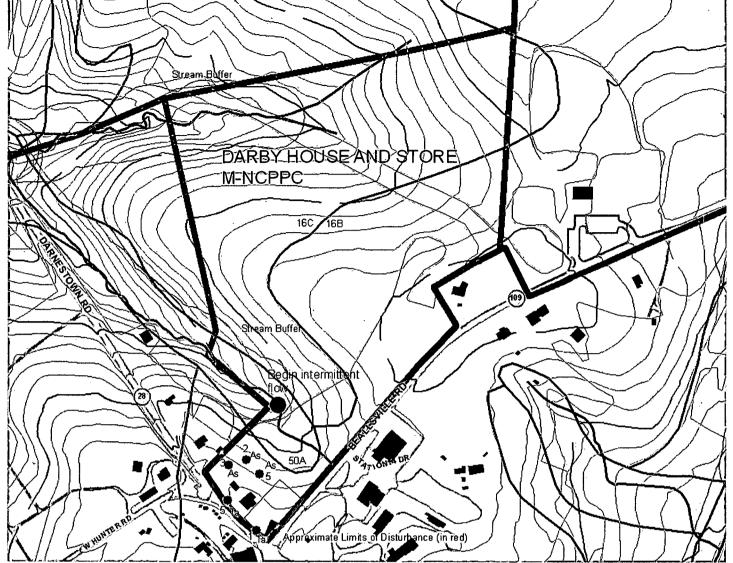
**HISTORIC DESIGNATION** The Darby House and Store, and the detached garage are contributing resources within the locally designated Beallsville Historic District, meaning the structures are protected on the *Montgomery County Master Plan for Historic Preservation*. The front portion of the park facing Route 28 is protected under the "environmental setting" of the Beallsville Historic District.

RARE, THREATENED, ENDANGERED AND WATCHLIST SPECIES (RTES) There were no observed RTES during site reconnaissance in June of 2009. RTES species are highly unlikely in the area of the Darby Store or the area directly adjacent that comprises the Limits of Disturbance.

**FOREST** The property contains 19 acres of forested area as defined in the Trees Technical Manual (M-NCPPC). The forest is a young developing forest dominated by tuliptree, red maple and black cherry. The dominant size class of overstory trees is 10-17" DBH. The understory is somewhat disturbed and contains a high percentage of nonnative species. Forest on the property rates Moderate Quality and Moderate Priority for retention. Areas of forest within environmental buffer (approximately two acres) rate High Priority for Retention. This area is located away from the project area.

**SPECIMEN and SIGNIFICANT TREES** Basswoods (*Tilia americana*) and Silver Maples (*Acer saccharinum*) comprise specimen sized trees within nonforested areas of the Darby House and Store property. Other trees within nonforested areas include black locust, white mulberry, American holly, Japanese maple, spruce, Southern Red Oak, white pine, and Ailanthus.

		Specimen Tree List and	TREE PROTECTION DETAILS
#	DBH "	Tree Species	Comments
1	36"	Basswood (Tilia americana)	Good Health, Tree Protection is necessary: bollards are necessary to eliminate potential at grade access from Darnestown Road.
2	26"	Silver Maple (Acer saccharinum)	Good Health
3	37"	Silver Maple (Acer saccharinum)	Good Health
4	40"	Silver Maple (Acer saccharinum)	Good Health
5	40"	Basswood (Tilia americana)	Good Health, excellent Specimen, boundary tree



Darby House and Store Location of Specimen trees, Streams, Soil types, forest, buildings and topography (5' contours), stream buffers, 1'' = approximately 300',  $N^{\wedge}$ .

#### **SEQUENCE OF OPERATION/DIRECTIVES**

An on-site meeting is required 1) prior to beginning the relocation effort, 2) after the limits of disturbance have been staked and flagged, and 3) before any grading or clearing or stockpiling of equipment begins. A Montgomery County Planning Department and Parks Inspector will verify the limits of disturbance and discuss whether any additional tree protection measures are required.

No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate measures may include but are not limited to:

- a. Root pruning
- b. Crown reduction and pruning
- c. Watering

- d. Fertilizer application
- e. Mulching
- f. Root aeration matting

<u>Tree Protection Fencing or Tree Save Fence</u> (TSF) is to be installed prior to the relocation of the Darby Store for the duration of the project and must not be altered or removed without prior approval of the Forest Conservation Inspector. Tree fencing is to be either orange blaze plastic fencing to a

height of four feet (4') or three-strand gauge wire. Tree protection fencing will be placed at the LOD where specified.

Silt fencing will be added wherever runoff may flow into preservation areas. Installation of traditional silt fencing will be directed by the Department of Permitting Services

Operation of heavy equipment or machinery of any kind in not permitted outside of LOD.

Periodic inspections by the forest conservation inspector will occur during the project. Corrections and repairs to all tree protection, as determined by the Forest Conservation Inspector, must be administered within the timeframe specified by the Inspector.

<u>Post Construction</u> After building stabilization and relocation are completed, an inspection shall be requested. Corrective measures may include:

- a. Removal and replacement of dead and dying trees.
- b. Pruning of dead or declining limbs
- c. Fertilization
- d. Watering

Measures not specified on the forest conservation plan may be required as determined by the Forest Conservation Inspector in coordination with the arborist.



#### **Structural Condition Assessment The Darby Store**

January 23, 2009



PREPARED FOR: Bell Architects, PC 1228 9<sup>th</sup> Street, NW Washington, DC 20001-4202

By:

Robert Silman Associates, PLLC 1053 31st Street NW Washington, DC 20007

With:

Anthony & Associates, Inc. - Wood Scientist

#### **TABLE OF CONTENTS**

<u>SECTION</u>	<u>PAGE</u>
INTRODUCTION	2
STRUCTURAL DESCRIPTION	
FIELD OBSERVATIONS	
STRUCTURAL ANALYSIS	9
RECOMMENDATIONS AND CONCLUSIONS	13
APPENDICES	
APPENDIX A: FLOOR FRAMING PLANS	15
APPENDIX B: CALCULATIONS FOR BEAM CAPACITY	20
APPENDIX C: STRUCTURAL DESIGN GUIDELINES	23

#### INTRODUCTION

Robert Silman Associates (RSA) has been retained by Bell Architects to perform a structural investigation of The Darby Store in Beallsville, MD. As part of this effort, RSA alongside Anthony & Associates assessed the condition of the existing wood structure and assisted in the development of preliminary recommendations for stabilization and relocation of the structure. The investigation included a thorough evaluation of structural conditions noting material deterioration, structural deficiencies, and identification of structural limitations for future modifications. This narrative provides a general description of the building structural system, investigation methods, summary of the findings from field investigation, and structural recommendations for proposed architectural modifications.

The structural assessment is based on visual observations made by RSA personnel during the site visits on December 18 and 19, 2008 and by visual examination, probing, moisture content measurements, resistance drilling, and samples taken by Anthony & Associates, also on the above dates. All field observations were documented with digital photography and hand sketches.

#### STRUCTURAL DESCRIPTION

#### General Description

Located in the heart of historic Beallsville, MD on the northwest corner of the intersection of Darnestown Road (Route 28) and Beallsville Road (Route 109), the Darby Store is a vernacular, two-story front gabled form common in Montgomery County general stores from the late 1800s to the early 1900s. H.C. Darby built the store in 1910 and by the 1920's the store served as the local post office. Throughout most of the 20th century, the Darby family continued to own and operate the store until H.D. Darby took over after his father retired in 1974. The building has been vacated for a number of years.

The Darby Store uses a Balloon Framing Method, shown in Figure 1, which was primarily used up until the mid-1950s. The balloon wall stude extend from the sill of the first floor all the way up to the top plate of the second story. Balloon framing was once popular when long lumber was plentiful but has now been banned by building codes in many areas because of the fire danger it poses.

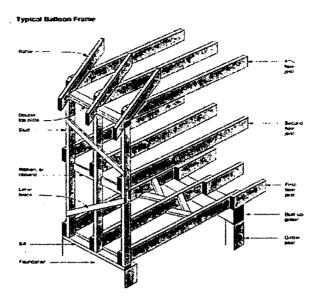


Figure 1: Typical balloon framing of this period.

#### **FIELD OBSERVATIONS**

Appendix A shows each floor framing plan which identifies areas of observed structural deficiencies. These areas will need to be addressed when stabilization occurs.

#### **Basement**

At the time of the site visit, the partial basement was flooded with about 2 feet of water. The first floor joists were accessible with the use of waders in half of the basement. The other half was inaccessible because of a crawlspace. Three out of the four "columns" are constructed using barrels for concrete forms set over a pit filled with rubble stone, as shown in Figure 2. The concrete walls are severely cracked at the step between the full depth basement and crawl space which appears to be the result of settlement, and the source of water getting into the basement which can be seen in Figure 3. The stairs from the first floor to the basement no longer exist but the opening in the floor remains. The basement is accessible by an exterior enclosed stair in the back, believed to be added after the original building was built. Because the building will be relocated, the condition of the concrete walls, foundations and columns were not assessed.



Figure 2: "Column" where barrel is used as concrete form.

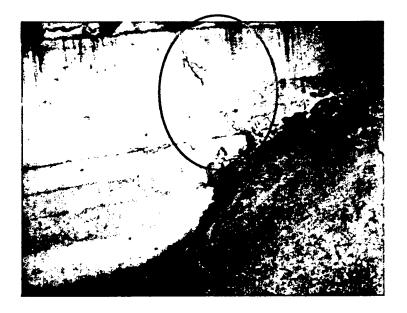


Figure 3: Severely cracked concrete wall at stepped foundation.

#### First Floor Framing

The first floor appears to have been the main location of the store. The first floor has a subfloor and wearing surface. The framing consists of 2-inch by 10-inch joists spanning east-west with various spacing. The joists were spaced no more than 16 inches on center, however some spacing was measured 14 and 15 inches. Double joists support a partition wall on the first floor. Three, 2-inch by 6-inch joists, act as a girder running north-south through the length of the building and the floor joists are not continuous but rather sit on the

girder. The girder is heavily deflected due to two missing supports. For the end bearing connection, the joists bear on the concrete wall without blocking and are braced at the top with the subfloor.

#### Second Floor Framing

The second floor framing consists of 2-inch by 12-inch joists spaced 16 inches on center. A portion of the second floor framing is covered with the existing original tin ceiling shown in Figure 4 therefore not all joists can be seen. The integrity of the end connection of the joists also cannot be seen because the original bead-board covers the interior wall. However, the connection detail was determined looking down from the second floor which is shown in Figure 5. The second floor only contains a wearing surface which was severely deteriorated in certain spots where leaks had occurred shown in Figure 6. In addition the joists at these locations are either completely deteriorated or the top 2-4 inches are rotting. The second floor joists span the entire floor from east to west with third point bridging.

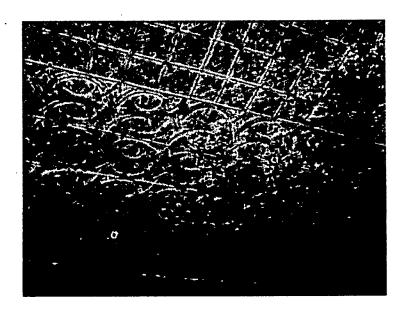


Figure 4: Existing tin ceiling that covers a quarter of the joists.

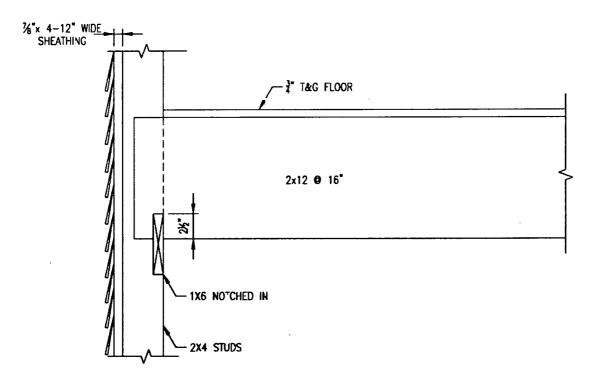


Figure 5: Connection detail for second floor framing

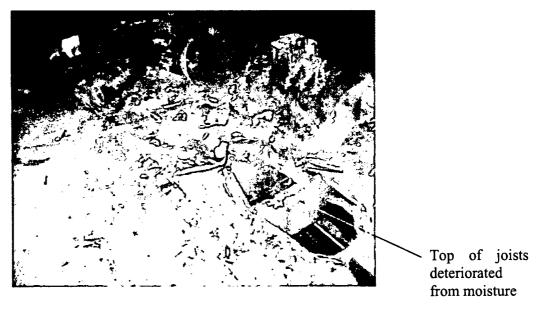


Figure 6: Deteriorated wearing surface from roof leaks

#### Wall Framing and Exterior Sheathing

The walls are framed with 2-inch by 4-inch studs spaced 16 inches on center. The studs are continuous from the first floor up to the roof rafters and are braced by the second floor framing. At the first floor the studs do not extend to the sill but rather are toenailed to the subfloor. The connection detail is shown in Figure 7. The studs are not visible from the first floor because the built-in finishes (shelves and bead board) are intact. Diagonal sheathing (4-12" wide x 7/8" thick) extends over the entire exterior surface of the building below the exterior cladding, and is extremely important in stabilizing the structure. This can be seen from inside the building on the second floor where studs have completely deteriorated.

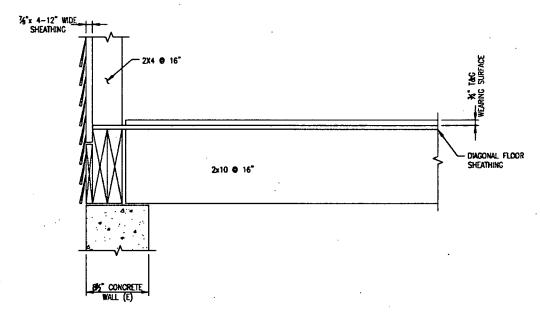


Figure 7: Connection detail for first floor framing

#### **Roof Framing**

The roof framing consists of 2-inch by 6-inch rafters spaced 24 inches on center. The rafters are covered with open board sheathing, tied together horizontally with 2-inch by 6-inch dimensioned-lumber and tied vertically with scrap wood varying in width. The rafters are toenailed into a single 1-inch by 8-inch member that forms the top plate over the studs shown in Figure 8. Parts of the sill are severely deteriorated shown in Figure 9 and will need to be replaced.

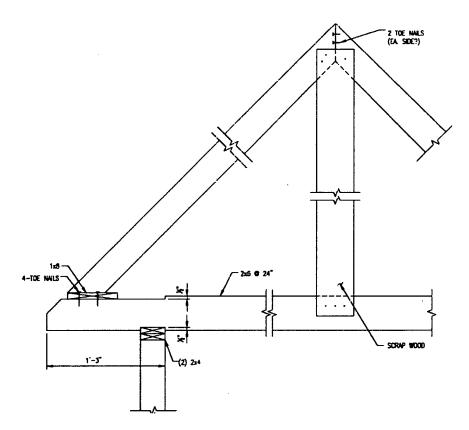


Figure 8: Connection detail at roof.



Figure 9: Top Plate completely deteriorated.

The roof sheathing has localized wood decay due to leaks in the roof. At the time of the site visit a plastic covering had been placed over the sheathing in place of the roofing. The deterioration caused from the roof leaks prior to the plastic covering extends down to the second and first floors causing further decay.

#### STRUCTURAL ANALYSIS

Table 1 presents the wood species and design values for bending used to determine the capacity of each floor. The information in Table 1 is taken from Anthony & Associates Wood Report.

**TABLE 1: Wood Species and Design Values** 

MEMBER	SPECIES	f' <sub>b</sub> (psi)
First Floor Joist	Chestnut	1200
Second Floor Joist	Chestnut	1200
Wall Stud	Southern yellow pine	1500
Horizontal Roof Tie	Southern yellow pine	1500
Roof Rafter	Chestnut	1200

Note that these values are based on a combination of species identification and visual grading standards. Some members (once exposed) should be assumed to require reinforcement due to the grading requirements even if there is not deterioration.

#### First Floor Framing

There are twenty-nine joists not visible because of the crawl space. Fifty-three joists are visible and one-third of the joists need reinforcement or to be completely replaced. The deterioration is caused by moisture, termites, and/or insects. The measured moisture content for the joists ranged from 22-33 percent as recorded by Anthony & Associates. The elevated level of moisture content will result in continued deterioration. The subfloor and wearing surface has failed in several spots and is warped due to the moisture. Figure 10 shows the deterioration from the underside of the subfloor and Figure 11 shows the decay of the wearing surface from above. The subfloor and wearing surface will need to be completely replaced.



Figure 10: Underside of subfloor and wearing surface deteriorated due to moisture.

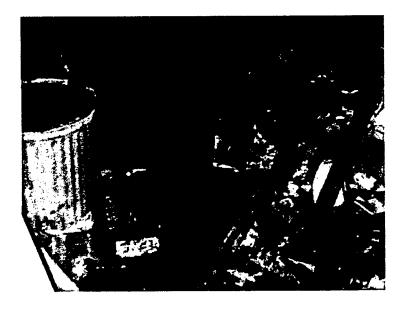


Figure 11: Top side of subfloor and wearing surface

The heavily deflected girder that runs north-south will need to be replaced. New posts will be added when the new slab and foundation is built for the move but prior to the move, temporary shoring will prevent the new girder from deflecting.

The sill, formed by two vertical sistered 2-inch by 10-inch lumber, will also need to be replaced. The report from Anthony & Associates indicates that 50 percent of the sill is deteriorated due to wood decay and termite damage shown in Figure 12.



Figure 12: Decayed wood sill from termite damage.

With the proper reinforcement to the existing joists, the total available load (additional Dead Load + Live Load) that can be applied to the first floor is 120 psf.

#### Second Floor Framing

Ten joists from the second floor framing are not visible because of the existing tin ceiling as mentioned before. Thirty-one joists are visible and half of the joists will need to be reinforced or completely replaced. The deterioration is mostly caused by moisture which typically corresponds to the areas of moisture penetration due to the roof leaks mentioned earlier. One severe area of deterioration can be seen in Figure 13. The wearing surface has also failed in these spots and will need to be completely replaced. Some areas shows signs of minor moisture staining shown in Figure 14 however the wood report says the moisture contents for the second floor joists are well below the threshold for active wood decay. The staining is from previous roof leaks and since the plastic cover went up, the rafters were able to dry out to below the threshold.

The bridging discussed earlier shown in Figure 13 is there to provide lateral support and to distribute any concentrated load on a particular joist. Ultimately the bridging will need to be assessed in more detail once the tin ceiling is removed and any deteriorated bridging will need to be replaced.

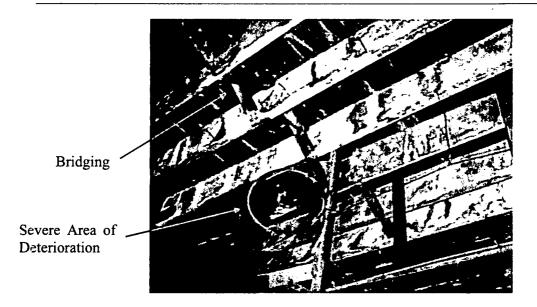


Figure 13: Second floor framing showing signs of severe deterioration.

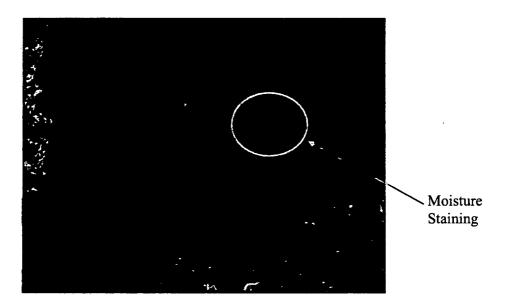


Figure 14: Signs of moisture staining in wearing surface and joists from previous roof leaks.

With the proper reinforcement to the existing joists to restore the original framing capacity, the total available load (additional Dead Load + Live Load) that can be applied to the second floor is 35 psf.

#### Wall Framing and Exterior Sheathing

The wall studs generally appear to be in good condition with only localized areas of deterioration and our calculations show that they have sufficient capacity to resist both the vertical and wind loads prescribed by

the current building code. The connection of the stud to the sill will need to be reinforced once the sill is replaced and the subfloor removed.

The exterior sheathing appears to be in generally good condition and will need to remain intact. It was noted that the existing nails have lost some cross sectional area. Additional nailing will be required to restore the original structural integrity prior to the move.

#### **Roof Framing**

The rafters, similar to the wall studs, appear to be in generally good condition with localized areas of deterioration. Figure 15 illustrates the end bearing connection on a few rafters that will also need to be reinforced. The roof sheathing and roofing will need to be replaced.

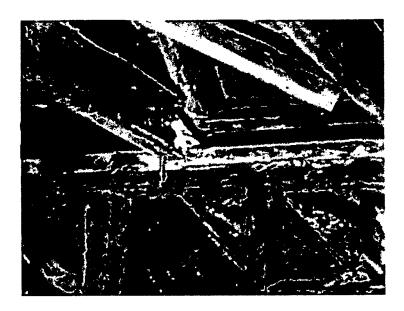


Figure 15: Signs of decay on rafter end bearing connection.

#### RECOMMENDATIONS AND CONCLUSIONS

The structure of the Darby Store has suffered severe but localized structural damage. With the exception of the sills above the foundation, all structural members should remain in place with reinforcement through additive means. It is significant that chestnut makes up more than 50 percent of the wood used in the Darby Store; this species is representative of the local resources and is historically noteworthy given that it is no longer used in standard wood construction today.

#### Recommendations

- 1. The basement needs to be drained as soon as possible to prevent further decay and a passive drain pipe to daylight can be installed to achieve this.
- 2. The basement needs to be actively ventilated (fans) for a minimum of 2-4 weeks to allow moisture levels to subside.
- 3. Temporary posts need to be added at (2) locations along north-south girder.

- 4. First floor available load is approximately 120 psf (added dead load + live load) based upon joist capacity and assuming the north-south girder is replaced which should be adequate for most uses. Once the second floor usage is determined, the second floor can be adequately reinforced to support the additional loading.
- 5. A thorough visual assessment of each joist is required prior to repairs once all the finishes/debris are removed from the building, the tin ceiling is taken down and all the subfloor and wearing surface is removed. The visual analysis will confirm the design values for bending as well as determine exactly which beams need replacement and/or reinforcement.
- 6. Given the limits of this investigation and the extent of inaccessible structure, allowance for some additional structural repairs should be made in any pricing exercises.

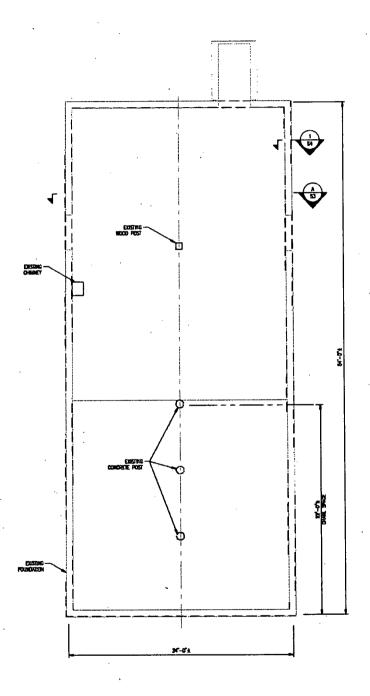
#### Considerations for Relocation

- Sill must be replaced in a fashion that facilitates lifting.
- Floor and roof diaphragms will require temporary reinforcement.
- Diagonal sheathing appears relatively robust and with moderate nailing reinforcement will assist in maintaining stability during the move.
- RSA is developing plans for relocation on a new foundation.

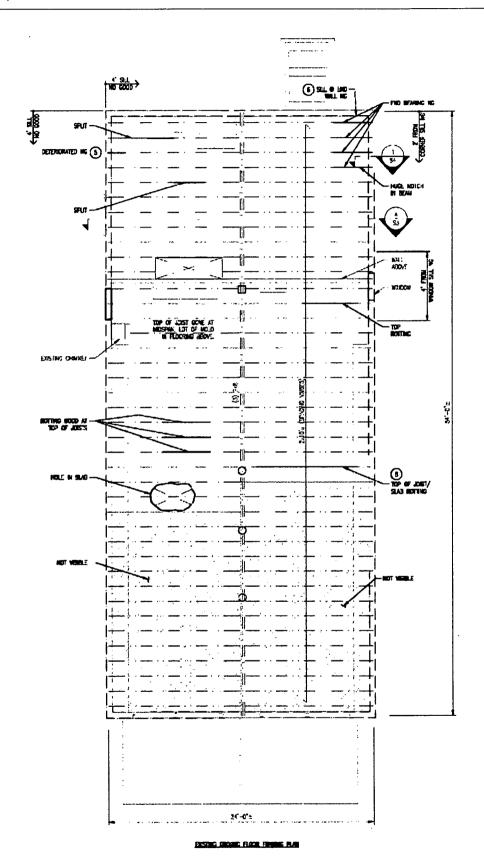
#### Other Considerations

• Mold considerations (future exterior envelope treatment).

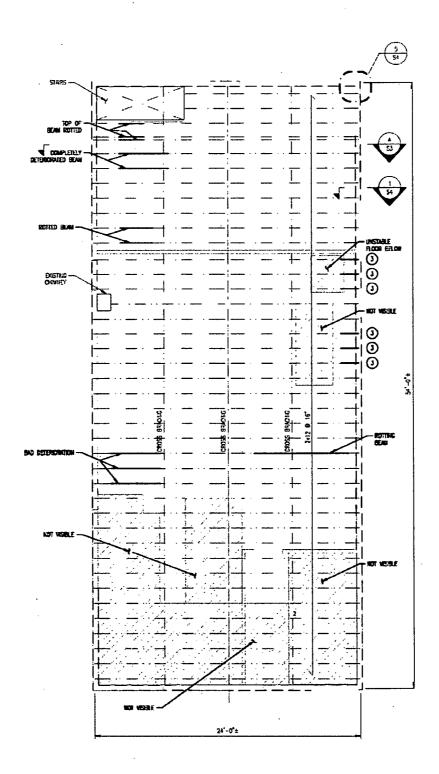
### **APPENDIX A: FLOOR FRAMING PLANS**



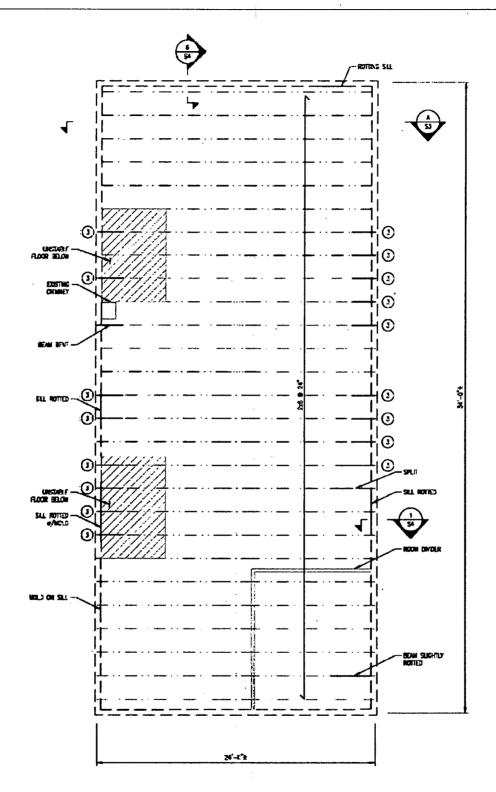
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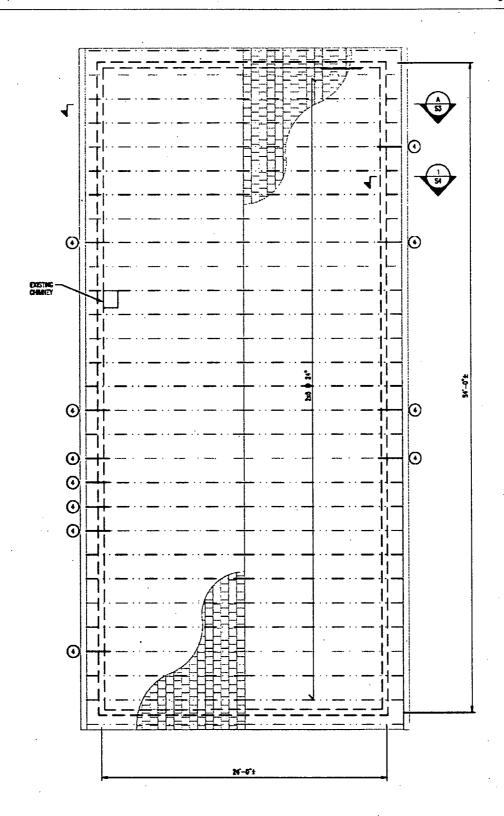
ROBERT SILMAN ASSOCIATES



DISTING SECOND FLOOR FRANCE PLAY



DESIGNATION ROOM PROPERTY.



PERSON MOR FRANKS FLAN

# APPENDIX B: CALCULATIONS FOR BEAM CAPACITY

#### Assumptions

#### First F'cor Framing

			•
F <sub>b</sub>	1200	psi	Ca
C <sub>F</sub>	1.1		L
= <sub>b</sub> '	1320	psi	F
size	2 x 10		
spacing	varies *		S
L	12	ft	
S	33.33	in <sup>3</sup>	F
M	3667	ft-lb	
w	204	lb/ft	M
	153	psf	171
I	167	in <sup>4</sup>	_
E	1000	ksi	I
Δ	C.428	in.	
1/240	0.600	in.	Δ

\* 16 inches will be used as the spacing because it was the max spacing measured

Due to the sizes, this factor can be used  $F'_{b} = F_{b} \times C_{F}$   $S = \frac{bh^{2}}{6}, in^{3}$   $F'_{b} = \frac{M}{S} \rightarrow M = F'_{5} \times S$   $M = \frac{wl^{2}}{8} \rightarrow w = \frac{M \times 8}{l^{2}}$   $I = \frac{bh^{3}}{12}$   $A = \frac{5wl^{4}}{l^{2}}$ 

4.3.6 Size Factor

#### Second Floor Framing

F <sub>b</sub>	1200	psi	4.3.9 Repetitive Member Factor Bracing is present therefore car
Ċ <sub>r</sub>	1.15		use this factor
F <sub>b</sub> '	1380	psi	
size	2 x 12		$F'_b = F_b \times C_F$
spacing	16	inches	$F'_{b} = F_{b} \times C_{F}$ $S = \frac{bh^{2}}{6}, in^{3}$
L	24	ft	$S = \frac{bn}{c}, in^3$
S	48.00		· · · · · · · · · · · · · · · · · · ·
M	5520	ft-lb	$F'_b = \frac{M}{S} \to M = F'_b \times S$
w	· 77	lb/ft	$I = \frac{1}{S} \rightarrow M = I = h \land S$
	58	psf	$wl^2 \qquad M \times 8$
W <sub>deflection</sub>	45	psf	$M = \frac{wl^2}{8} \to w = \frac{M \times 8}{l^2}$
1	288	in <sup>4</sup>	$I = \frac{bh^3}{12}$
E	1000	ksi	$I = \frac{\partial n}{\partial x}$
Δ	1.166	in.	
1/240	1.200	in.	$\Delta = \frac{5wl^4}{384 EI}$

#### Wall Framing and Exterior Sheathing

wind pressure = 15 psf  

$$w = 15 \text{ psf} \times 1.33 \text{ ft} = 19.95 \text{ lb/ft}$$

$$M = \frac{wL^2}{8} = \frac{20(12^2)}{8} = 359 \text{ ft} - \text{lb} \rightarrow 4309 \text{ in} - \text{lb}$$

$$S = \frac{bh^2}{6} = \frac{2 \times 4^2}{6} = 5.33 \text{ in}^3$$

$$f_b = \frac{M}{S} = \frac{4309 \text{ in} - \text{lb}}{5.33 \text{ in}^3} = 808 \text{ psi}$$

$$f_b = 950 \text{ psi}$$

$$F'_b = 950(1.1) = 1045 \text{ psi} > 808 \text{ psi}$$

Sheathing provides lateral support about the weak axis of the stud

#### Roof Framing

$$\theta = \tan^{-1} \left( \frac{10}{12} \right) = 39.8^{\circ} > 20^{\circ}$$

$$R_s = \frac{30 psf}{40} - \frac{1}{2} = .25 psf / degree slope over 20 degrees$$

#### Horizontal Plane Method

 $S = 30 \text{ psf} - .25(39.8 - 20) \approx 25 \text{ psf}$ 

TL = D + S 
$$\rightarrow 10 \left( \frac{15.5}{12} \right) + 25 = 38 \text{ psf}$$
  
 $w = 38 \text{ psf} \times 2 \text{ fr} = 76 \text{ lb/ft}$   
 $V = \frac{\text{wL}}{2} = \frac{.076 \times 12}{2} = .456 \text{ k}$   
 $M = \frac{\text{wL}^2}{8} = \frac{.076 \times 12^2}{8} = 1.368 \text{ ft} - \text{kip} \rightarrow 16416 \text{ in - lb}$   
 $S = \frac{\text{bh}^2}{6} = \frac{2 \times 6^2}{6} = 12 \text{ in}^3$   
 $f_b = \frac{M}{S} = \frac{16416 \text{ in - lb}}{12 \text{ in}^3} = 1368 \text{ psi}$   
 $f_b = 1200 \text{ psi}$   
 $F'_5 = 1200(1.3) = 1560 \text{ psi} > 1368 \text{ psi}$  OK

# APPENDIX C: STRUCTURAL DESIGN GUIDELINES

#### **Applicable Codes and Standards**

The following codes and standards are specified by the governing authority:

- A. International Existing Building Code (IEBC), 2006
- B. International Building Code (IBC), 2006

The following structural design codes will be followed as specified by the governing codes and standards:

A. American Society of Civil Engineers (ASCE), Minimum Design Loads for Buildings and Other Structures (2005)

#### Structural Loadings

#### **Snow Loads**

Ground Snow Load Pg:

Importance Factor:

1.00

Sloped roof snow loads, and snow drift will be calculated in accordance with Section 7 of ASCE 7-05

#### Wind Loads

Basic Wind Speed V:

90 mph

Importance Factor I:

1.00

Wind loads will be calculated in accordance with Section 6 of ASCE 7-05

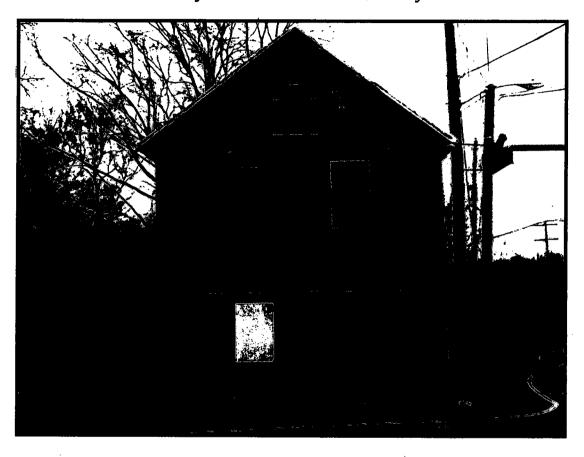
#### **Design Considerations**

#### Floor Deflections

- 1. The floor live load deflection shall not exceed 1/360.
- 2. The floor total load deflection shall not exceed 1/240.
- 3. Roof deflection under live, snow, or wind loads shall not exceed 1/240.

#### Report:

## Wood Investigation of the Darby Store, Beallsville, Maryland



Submitted to:

Bell Architects, PC 1228 9th Street, NW Washington, DC 20001-4202

Submitted by:

Anthony & Associates, Inc. P.O. Box 271400 Fort Collins, CO 80527-1400

January 19, 2009

### Wood Investigation of the Darby Store, Beallsville, Maryland

#### **BACKGROUND**

The Darby Store was constructed in 1910 by H.C. Darby on the northwest corner of the intersection of Darnestown Road (County Road 28) and Beallsville Road (County Road 109) in Montgomery County, Maryland. The two-story, front-gabled structure originally contained a post office and is representative of general stores built in Montgomery County during the late 1800s through the early 1900s. H.C. Darby operated the store until 1974, when he retired and his son, H.D. Darby, took over the business. The store has been closed for a number of years.

The Montgomery County Department of Parks is considering adaptive reuse of the store after moving it on the site to improve the setback from the highway. A key concern for both moving and reuse of the Darby Store (the Store) is the condition and capacity of the wood used in the construction of the Store. Anthony & Associates, Inc. provided a wood scientist and preservation specialist in December 2008 to conduct an investigation of wood species, structural grade, and condition of the wood components.

Through visual examination, probing, moisture content measurements and resistance drilling it was possible to assess the capacity and condition of much of the structural wood members in the Store. This information will enable decisions by the Montgomery County Department of Parks about the suitability of the wood members to remain in service.

#### **SCOPE OF WORK**

The proposed work had two components: (1) to determine the wood species and allowable structural grade of the lumber so that the engineers can base structural renovations on known allowable wood properties and (2) provide insight into the condition of the wood components. The components will enable the project team to develop remedial actions that will extend the service life of the wood and the structure while maintaining the maximum amount of historic fabric.

The specific tasks of the investigation included the following:

 Identifying wood species of structural lumber as needed by the architect or structural engineer.

- Determining, as needed, the allowable grade of key structural lumber groups (joists, rafters, and wall studs) in accordance with current grading rules.
- Assessing, in consultation with the structural engineer, locations that have potential decay activity or other damage using visual inspection, probing and selected resistance drilling.
- Using resistance drilling to quantify the loss of wood section in structural members due to decay or insect damage and provide the location and extent of damage.
- Measuring moisture content in selected wood components to determine the level of moisture and its potential impact on long-term performance.
- Consulting with the architect and structural engineer on repair and replacement options for structurally deficient lumber.

Initial discussions with Julie Mueller of Montgomery County Department of Parks focused on the condition and capacity of the wood. An on-site meeting with the structural engineer, Kirk Mettam of Robert Silman Associates, P. C. and the architect Scott Knight of Bell Architects P.C., was conducted prior to beginning the field work to establish priorities for the investigation. The condition and grade of the sill plates, floor joists, wall studs and roof trusses were determined to be the focus of the field work. The assessment incorporated species identification, wood grading, visual inspection, probing and resistance drilling. Each method is described below.

#### **Species Identification**

Identifying wood species makes it possible to determine material properties for conducting a structural analysis and to identify compatible material for repairs. Wood species were identified by removing small samples from various components, from which the species or species group was identified under microscopic examination.

#### Wood Grading

Lumber and structural timbers, such as beams, used in new construction are intended to comply with the relevant building code for that jurisdiction. For wood construction, structural engineers rely on design values referenced in the building code to determine an acceptable species, size and grade for a particular load condition. The design values given in the building code for solid wood products are established by the American Forest & Paper Association<sup>1</sup> and published as the *National Design Specification for Wood Construction*. The

<sup>&</sup>lt;sup>1</sup> American Forest & Paper Association and American Wood Council, 2005, National Design Specification for Wood Construction, Washington, D.C.

published design values are based on test data and procedures published by the American Society for Testing and Materials<sup>2</sup> (ASTM) that demonstrate the engineering performance of the material. Wood products are graded in accordance with procedures promulgated by one of several forest products industry associations, such as the Northeastern Lumber Manufacturers Association (NELMA)<sup>3</sup> or the Southern Pine Inspection Bureau (SPIB)<sup>4</sup>.

For existing buildings the engineer often relies on available species and current standards to determine adequacy of the wood members to remain in service. Since many older buildings were built before building codes or design values for wood products were established (and, thus, before grade stamps were used), engineers are often in a quandary when determining what design values are appropriate, particularly for species that are no longer commercially available. Frequently an assumed species and grade are assigned, only to show that the wood members are structurally deficient. The result is often an overly conservative estimate of design values and unnecessary replacement, repair and retrofit decisions with the associated unnecessary project costs. Anthony & Associates graded a representative sample of the structural members within the Darby Store in order to provide grading data so that the engineers could use appropriate design values.

#### Visual Inspection and Probing

Visual examination of the wood allows for identifying components that are missing, broken or in an advanced state of deterioration. Missing components are those which have been removed or have fallen away, frequently due to extensive deterioration. If missing components were intended to provide structural support or protection from the elements (e.g. prevent moisture intrusion), their replacement may be essential to prevent long-term damage to the structure. Visual inspection also allows for the detection of past or current moisture problems, as evidenced by moisture stains on the exposed surface of the wood. Further, visual inspection enables detection of external wood decay fungi or insect activity as determined by the presence of decay fruiting bodies, fungal growth, insect bore holes or wood substance removed by wood-

<sup>&</sup>lt;sup>2</sup>American Society for Testing and Materials, 2006, *Annual Book of Standards*, Vol. 04.10: D245, Standard Practice for Establishing Structural Grades and Related Allowable Properties for Visually Graded Lumber; D2555, Standard Test Methods for Establishing Clear Wood Strength Values. ASTM, West Conshohocken, PA.

<sup>&</sup>lt;sup>3</sup> Northeastern Lumber Manufacturers' Association, Standard Grading Rules for Northeastern Lumber, Cumberland Center, Maine.

<sup>&</sup>lt;sup>4</sup> Southern Pine Inspection Bureau, Standard Grading Rules for Southern Pine Lumber, Pensacola, Florida

destroying insects. Visual inspection provides a rapid means of identifying areas that may need further investigation.

Probing the wood with an awl enables rapid detection of voids in the wood that may not be visible on the surface or the depth of deterioration that is visible on the surface (Figure 1). Internal decay and insect damage is often difficult to detect due to the lack of evidence on the exposed surface of the wood. For advanced decay, where large internal voids are present near the surface, probing allows for detection of potentially serious deterioration. Even for the early stage of decay, termed incipient decay, probing is beneficial. Probing can often reveal areas of incipient decay or insect damage in timber, which has experienced sufficient deterioration to allow for easy penetration of an awl although no internal void is yet present. Wood without deterioration just below the surface tends to offer more resistance to probing due to the higher density and more intact internal wood structure.

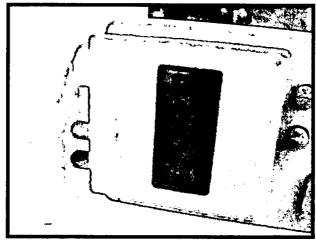


**Figure 1.** Example of probing with an awl to determine if the end of a joist has deteriorated.

#### **Moisture Content Determination**

Prolonged exposure to moisture can produce undesirable conditions and long-term maintenance issues for wood in a structure. Excessive shrinkage or swelling, checking, loose connections and decay are typical problems. Moisture content measurements were taken using a capacitance-type moisture meter at random locations to gain insight into the moisture levels throughout the Store (use of a moisture meter is shown in Figure 2).

Moisture content measurements identify wood with favorable moisture levels for the growth of wood-decay fungi. Generally, if the moisture content is less than 20 percent wood-decay fungi are unable to grow. While fungi may be present at lower moisture contents, they are unable to continue to deteriorate the wood without sufficient moisture. Moisture contents from 20 to 30 percent indicate areas of concern where sufficient moisture is present for fungi to grow but not sufficient to indicate advanced decay. Moisture contents above 30 percent are often an indication of advanced decay with internal voids and / or surface deterioration.



**Figure 2.** An example of a resistance-type moisture meter used to determine moisture content, in this case indicating the wood is saturated (photo not taken at the Darby Store).

#### Resistance Drilling

Resistance drilling is a quasi-nondestructive technique for determining the relative density of wood (Figure 3). It is best suited for determining internal problems in large timbers which do not show obvious signs of deterioration,



**Figure 3.** An example of resistance drilling of a sill plate from the exterior (photo not taken at the Darby Store).

such as surface decay. Any internal void or early stage of decay at the location drilled can be detected by determining the relative density of the wood. The relative density is recorded on a strip of paper as a small diameter needle penetrates the wood. At the Store, resistance drilling was conducted primarily on the roof rafters and the sills.

#### **FINDINGS**

#### **General Observations**

The Darby Store is a two-story, balloon frame building with diagonal wood sheathing and wood cladding constructed on a concrete foundation (Figure 4). There is a partial basement under the north end of the building and a crawlspace (inaccessible for investigation) under the south end. Based on the consistent construction methodology used throughout the Store, there do not appear to be any additions made to the original structure with the exception of the basement entrance located on the north elevation. Based on the wood samples that were taken from various structural and non-structural elements throughout the Store, the building was constructed of a variety of locally available milled lumber. In a somewhat unique manner of construction, the balloon-frame wall studs rest on the first floor subfloor and are toe-nailed into the sill through the subfloor. The diagonal exterior wall sheathing functions to resist wind and stabilize the building.



**Figure 4.** West elevation of the Darby Store viewed from the northwest.

#### **Species Identification**

Samples were removed from structural member types (joist, stud, rafter, etc.) of interest to the structural engineer and examined under the microscope to identify the species or species group. Vernacular buildings, such as the Darby Store,

typically use only a few species of wood for the construction and member types tend to be uniform, i.e. joists are of one species, rafters may be of a different species but, if so, all rafters tend to be all the same species. Table 1 gives the species for the samples removed from the Darby Store.

The findings show the wood used in construction represents a combination of locally available species. However, the predominant species used in the construction of the Store was chestnut. Some, if not the majority, of the roof rafters, joists, sill plates and exterior cladding were milled from chestnut. This is of historical significance because, other than barns, few buildings that have been preserved are known to make extensive use of chestnut. Chestnut became commercially extinct shortly after the discovery of chestnut blight in 1904 in New York City. Having a significant quantity of chestnut in the Store makes it rare among vernacular construction that has been preserved.

The lumber was likely milled locally judging from the circular saw marks on many pieces of wood. The full-size dimensions of the lumber would indicate that it is probably original fabric. There is little evidence of repairs using more recent lumber sizes or species. Without evidence of repairs, use of a combination of species, such as chestnut and maple for the joists, or maple and southern yellow pine for the studs, further suggests locally supplied wood where it was common to cut specific sizes for an order based on log species available at the time, rather than milling from a specific species.

**Table 1.** Wood species identified from the Darby Store.

Sample Number	Element	Species
DAR 01	exterior cladding	eastern spruce (Picea spp.)
DAR 02a	exterior sheathing	chestnut (Castanea dentata)
DAR 02b	exterior sheathing	chestnut
DAR 06	beadboard	southern yellow pine (Pinus spp.)
DAR 04	subfloor	white ash (Fraxinus americana)
DAR 07	floor wearing surface	maple (Acer spp.)
DAR 03	sill plate	chestnut
DAR 05	wall stud	southern yellow pine
DAR 12	wall stud, 2nd floor, front of building	chestnut
DAR 13	wall stud, 2nd floor, back of building	southern yellow pine
DAR 11	floor joist (1st)	chestnut
DAR 08	floor joist (2 <sup>nd</sup> )	maple
DAR 14	floor joist towards front (2nd floor)	chestnut
DAR 15	floor joists towards middle (2nd floor)	chestnut
DAR 10	roof rafter	chestnut
DAR 09	horizontal roof tie	southern yellow pine

#### Lumber Grade

Measurement of knots and slope-of-grain provides an indication of the approximate lumber grade for a given wood species. Knots tend to be the grade-limiting defect for lumber in older buildings, i.e. the size of the knots determines how the lumber can be classified. Some of the lumber in the Store was essentially free of knots and would be assigned a high structural grade (Figure 5). However, a statistically significant number of pieces were found to have large knots that require assigning a lower structural grade (Figure 6). To be assigned a particular grade, 95 percent of the pieces graded should fall within the grade. Since there are limited wood members of any type (less than 100), the percentage within a grade can fall below the 95 percent level if only a few members fail to meet the higher grade. In these cases, the structural engineer may elect to apply the higher grade if knowledge of the grade, wood condition and structural loads warrants it.



**Figure 5.** Example of a select structural joist. Note the deterioration of the subfloor above the joist from moisture through roof leaks.



**Figure 6.** Large diameter knot on the wide face of a floor joist. The size and location of the knots determine the grade that can be assigned.

Based on in-situ grading of the accessible portions of 60 wall studs, the studs can be assigned the grade of No. 2 southern yellow pine within the current *National Design Specification for Wood Construction* (NDS). With approximately 27 percent of the studs meeting this grade, it is not recommended that a higher grade be assigned. One chestnut stud was identified, indicating that a mix of species was used for the studs. Since No. 2 southern yellow pine has lower design values, even though other species are present, this grade provides representative design values for the studs.

The horizontal roof ties, which can be considered the bottom chord of the roof trusses, can be assigned No.1 southern yellow pine within the current NDS. Twenty-eight roof ties were examined for grade and 64 percent were No.1. It should be noted that the species was determined for only one roof tie and it is possible, like the studs, that other species may have been used for the roof ties.

The rafters and joists present a different situation. A single rafter was identified as chestnut and all rafters were assumed to be this species. Chestnut, as mentioned earlier, is commercially extinct so the current NDS does not publish design values for chestnut. However, earlier editions of the NDS did publish values for chestnut before it became commercially extinct. The earliest edition of the NDS that has design values for chestnut is the 1944 edition. It provides design values for two grades for chestnut members in bending. Based on in-situ grading of the accessible portions of 56 rafters, the size of the knots in the rafters make them comparable to No. 1 grade for hardwood lumber. Based on this modern grade of the rafters, the 1944 NDS values of 1200 psi for bending and 1,000,000 psi for modulus of elasticity for the 1200 f grade for Joists and Planks, are conservative. It should be noted that this design value for bending is roughly equivalent to the design value for No. 2 southern yellow pine in the current NDS. Over 90 percent of the rafters meet the knot requirements for the Select Structural grade. As such, with selective replacement of lower grade rafters, it may be possible to use the design values for the 1450 f Grade for chestnut in the 1944 NDS. This should be considered if the engineering analysis shows that the design values for the 1200 f Grade are insufficient to support the anticipated loads by the structural engineer.

Four samples from joists were taken to identify the wood species. Three were identified as chestnut and one as maple. A total of 63 joists were assessed on the first and second floors, seven of which have failed. For the 56 joists that were accessible for grading that had not failed, and using the current grading rules for hardwood lumber, the size of the knots in the joists make them comparable to No. 1 grade for hardwood lumber. However, 93 percent of the unfailed joists would qualify as Select Structural, based on current grading requirements. Therefore, the 1944 NDS values of 1200 psi for bending and 1,000,000 psi for modulus of elasticity for the 1200 f grade for Joists and Planks, are, again,

appropriate but conservative. As with the rafters, it may be possible to use the design values for the 1450 f Grade for chestnut in the 1944 NDS if the failed members are replaced with chestnut joists that meet the requirements of the Select Structural grade for hardwoods in the current NDS. This should be considered if the engineering analysis shows that the design values for the 1200 f Grade are insufficient to support the loads anticipated by the structural engineer.

The assignment of a structural grade is based on visual characteristics of the lumber. Lumber that has failed was excluded from the grading totals. Lumber that has deterioration limited to the ends or the top surface (below the decking) was included in the grading on the assumption that the ends could be repaired or reinforced. It should be noted that reclaimed chestnut is available and could be acquired for repairs to the Store. Further, connections are not considered during the grading process but often control the ability of a building to withstand applied loads. Finally, adjustments to the allowable design values, such as the adjustment for repetitive factor, need to be considered by the structural engineer.

#### **Wood Moisture Content**

Moisture content measurements of structural members were made throughout the Store in the basement, first floor, and second floor. Moisture contents, most of which are given in Table 3, ranged from 11 to 37 percent. Moisture contents between 20 and 30 percent indicate moisture levels high enough for wood decay fungi, while moisture contents above 30 percent are indicative of likely severe deterioration due to decay fungi. Measurements of moisture contents in the roof sheathing, rafters, top plate, and horizontal roof ties ranged from 11 to 18

**Table 3.** Moisture content summary for Darby Store structural wood members.

Member	Moisture Content Range (percent)
roof sheathing	13 to 18
rafters	13 to 14
horizontal ties	13 to 16
top plate	11
wall stud	11 to 13
floor joists, second floor, north room	none taken
floor joists, second floor, main room	12
floor joists, first floor	22 to 33
floor sheathing	22 to 37
wearing surface	16 to 24
sills	17 to 19

percent, indicating that the tarp roof is providing an adequate temporary moisture barrier.

There are numerous moisture stains present on the wood members of the roof, however, indicating that leaks were once very prevalent. Moisture contents of the wall studs accessed on the second floor range from 11 to 13 percent, indicating that the cladding and sheathing are functioning adequately to prevent moisture penetration into the wall cavity. Moisture contents of the first floor joists demonstrate that ongoing flooding of the basement has had a negative impact on these joists. The sill plates had moisture contents ranging from 17 to 19 percent, while the first floor joists had moisture contents that varied from 22 to 33 percent, levels high enough that active wood decay is a concern.

#### **Wood Condition**

The Darby Store has not been maintained for a number of years. Holes in the roof and floors, the collapse of the front porch, and weathered and deteriorated exterior cladding have contributed to the overall condition of the building. Further, the basement was flooded with approximately 12 to 24 inches of water during this investigation. The flooded basement provides a source of moisture for deterioration of the sills, floor joists and subfloor within the basement and crawlspace.

The primary cause of much of the interior deterioration appears to stem from a lack of adequate roof maintenance. The roof covering and sheathing is in poor condition, and has experienced a number of failures, particularly near the east and west walls (Figure 7). These failures are evident from considerable moisture staining, visibly decayed wood, and holes where the wood fibers have

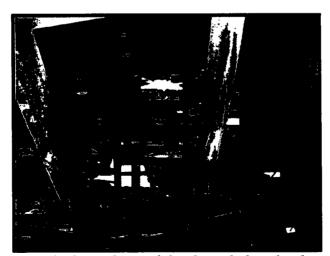
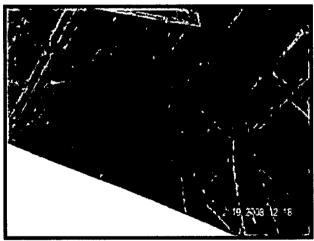


Figure 7. Numerous leaks in the roof that have led to the deterioration of the roof sheathing and wearing surface of the subfloor on the first and second floors below the openings.

completely deteriorated. Areas of decay throughout the Store generally correspond to the roof failures; the wearing surface and tops of some of the floor joists on the second floor are deteriorated directly under the areas of roof sheathing failure. The first floor has nearly identical areas of deterioration directly below the roof sheathing failures that run along the east and west sides of the building. Despite the extent of visible deterioration, much of the structural lumber remains in good, serviceable condition. However, the deterioration often is present where connections to other wood members occur and the quality of the connections is generally poor.

## Roof and Attic Framing

The roof framing in the Store consists of dimension-lumber rafters (2 inches by 6 inches, spaced 24 inches on center) covered with open board sheathing (the boards are not tight against one another), vertical ties composed of miscellaneous boards that vary in width, and dimension-lumber horizontal tie beams (2 inches by 6 inches) (Figure 8). No ridge board or beam is used at the peak of the roof, and a single 2-inch by 4-inch member on top of the studs forms the top plate over which the rafters are notched. The roof sheathing is in poor condition due to extensive wood decay (Figure 9).



**Figure 8.** Typical roof construction with open sheathing. Note the lack of a ridge beam and 1-inch thick vertical boards that tie the rafters to the horizontal ties.

The chestnut rafters are generally in good condition. Resistance drilling of a few rafters in areas of visible roof leaks indicates that the rafters are generally sound, despite surface fungi and moisture stains (Figure 10). The southern yellow pine horizontal ties are also in good condition except where they show signs of deterioration at the east and west walls where leaks have occurred at the roof eaves (Figure 11). Since the ends of the ties play a critical role in supporting the roof, these areas of deterioration will likely need to be repaired or reinforced.

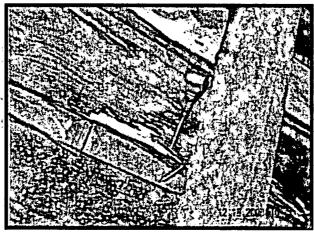


Figure 9. Decayed roof sheathing.

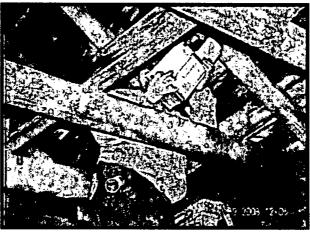


Figure 10. Resistance drilling of the west end of roof Rafter 25 in an area that has visible evidence of moisture penetration. The rafter has no deterioration at this location.

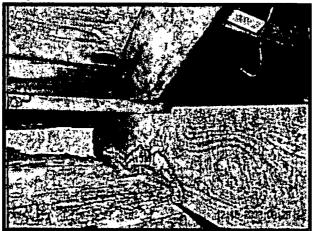


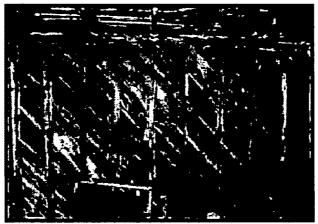
Figure 11. The west end of Rafter 27 resting on a 1-inch thick board on top of the cantilevered roof tie. Note the white fungus on surface of the roof tie.

#### Wall Framing

The 2-inch by 4-inch wall studs are 16 inches on center and extend from the main floor to the top plate of the second floor. They do not extend to the sill but are toenailed to the subfloor on the first floor (Figure 12). This is a poor connection that should be considered by the structural engineer for reinforcement prior to moving the building. The condition of the studs could only be determined on the second floor where they were exposed (Figure 13). Bead-board and shelving on the first floor prevented visual inspection of the lower section of the wall studs. The exposed wall studs appear to be in good condition and have little evidence of deterioration with the exception of two studs near the east wall window that had limited decay near the top due to moisture intrusion from the window. Moisture content readings for wall studs with no visible evidence of deterioration are well below the threshold needed for wood decay fungi growth.



Figure 12. Wall stud to enailed to the subfloor (first floor, west wall, north end of the Store).

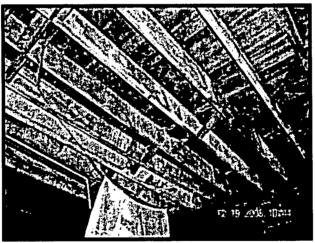


**Figure 13.** West elevation showing wall studs, diagonal sheathing and a two-piece top plate.

## Floor Joists and Flooring Systems

The floor joists for the second floor are dimension lumber (typically 2 inches by 9 ½ inches) and appeared to be, generally, in good condition. Access was limited due to the large portions of intact original stamped tin ceiling within the main room on the first floor; however, all the joists within the north room were accessible for visual inspection and limited probing with an awl. The ends of the joists were not accessible for inspection because of intact bead-board used as the interior wall covering. It should be noted that a few failures of the joists were identified, both on the first floor and the second floor. These members will need to be repaired or replaced.

The floor joists for the second floor have some minor moisture staining (Figure 14). One joist near the top of the stairs has extensive decay (Figure 15). Areas of deterioration along the tops of some of the joists were visible from the second floor and correspond to areas of moisture penetration due to roof leaks. Resistance drilling of a few joists beyond the perimeter of the area of the roof leaks confirmed that the joists were in good condition along the span. Moisture contents for the second floor joists are well below the threshold for active wood decay.



**Figure 14.** The second floor joists exhibit minor staining but otherwise appear to be in good condition along the span, except where noted above.



Figure 15. A deteriorated second floor joist near the top of the stairs at the north end of the building.

There is no subfloor on the second floor. Rather, the maple wearing surface was installed directly over the floor joists. The condition of the second floor wearing surface is poor in several areas due to roof leaks and the collection of debris and artifacts which have served to retain moisture and promote wood decay (Figure 16). Probing the tops of a few joists where the wearing surface was removed found the deterioration to be limited to the upper surface of the joist (Figure 17).



Figure 16. Second floor near the south window on the west elevation. In the areas where the wearing surface has deteriorated, the joists below have only minor deterioration at the top.



Figure 17. Top of a floor joist on the second floor with the decking removed showing minor deterioration to a depth of approximately 1/4 inch.

The first floor joists were accessible for visual inspection for the north half of the Store within the partial basement. It should be noted that at the time of the investigation, the basement was flooded with 12 to 24 inches of water (Figure 18). The frequency of such high-moisture conditions is unknown. However, based on the comparatively higher moisture content readings for the first floor joists than the second floor joists, it would appear that poor drainage has been a persistent problem.

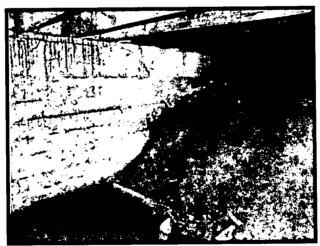


Figure 18. Transition from basement to crawl space along the east wall of the basement. At the time of the investigation, the water in the basement was approximately 12 to 24 inches deep.

The first floor joists are dimensional 2-inch by 9 ½-inch members milled from chestnut. Overall, the joists appear to be in good condition along their length but range from good to poor condition where they are in contact with the sill plates. Two joists have visible deterioration due to decay or termite damage at their east

ends, three have visible mud tubes, and five other joists have visible deterioration or are easily per-etrated with an awl. Additionally, three joists exhibit splits or areas of localized failure.

Moisture content readings of the first floor joists range from 22 to 33 percent, indicating sufficient levels of moisture for wood decay fungi and possible internal deterioration. In addition to visible deterioration caused by decay fungi, there are some areas of insect damage on the first floor joists, particularly near the ends of the members (Figure 19). Termites and wood-boring beetles have damaged some of the joists, but the damage does not appear to be systemic or have caused a significant reduction in the amount of cross section.

The first floor has both a subfloor and a wearing surface. The condition of the subfloor overall could not be determined throughout the crawlspace, however, it is likely that it is in poor condition based on the condition of the floor wearing surface above. Some of the subfloor has failed (Figure 20). In many areas, the first floor wearing surface has buckled and warped due to moisture intrusion, and in other areas both the wearing surface and subfloor have completely deteriorated. Moisture content readings for the subfloor and wearing surface indicate moisture levels high enough for active wood decay.

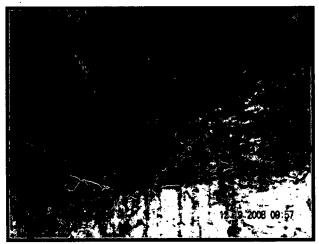


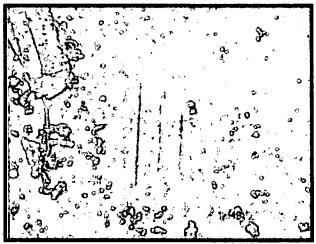
Figure 19. Termite damage on the end of a first floor joist on the east elevation.



**Figure 20.** Area of the subfloor near the east elevation that has failed. This is in the vicinity of a pipe that extends along the east wall in the basement.

Resistance drilling, conducted on the first floor in areas with no visible deterioration on the wearing surface, revealed no internal voids in the tested members (Figure 21). Where leaks from above or around the perimeter have occurred, the wood has deteriorated. Where not subjected to prolonged contact with moisture, the wood is in good condition.

Within the basement, a heavily deflected girder runs north-south through the length of the building. The first floor joists, therefore, are not continuous. It was assumed that the girder would be replaced and its condition was not assessed. Since the building is being moved, the unique construction details of the basement, such as the use of wooden barrels for concrete footing forms will be lost and should be documented prior to demolition (Figure 22).



**Figure 21.** First floor wearing surface at resistance drilling location D60. No voids were found at this location.



Figure 22. Wooden barrel that was used as the form for pouring the concrete footing for the center girder in the crawl space.

#### Sills

As previously mentioned, the Store rests on a concrete foundation. Two vertical sistered 2-inch by 10-inch pieces of lumber form the sill, which is predominantly in poor condition. Some of the cladding was removed to examine the sill (Figure 23). Termite and wood-boring beetle damage was found in the sill plate, particularly on the northeast corner of the building (Figure 24). However, the predominant form of deterioration found was wood decay.

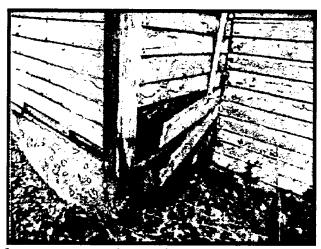


Figure 23. Northeast corner on the north elevation with termite damage in the sheathing and sill.



Figure 24. Termite damage on the exterior face of the sill, north elevation. Note the two 2x10s on left, which make up the sill for the east elevation.

Resistance drilling was conducted around the perimeter of the building approximately every 36 to 48 inches. Two drillings were conducted at each location; one near the base of the sill and one near the top of the sill. The results indicate that approximately 50 percent of the sill around the perimeter of the Store is deteriorated due to wood decay. The decay typically progressed from the bottom of the sill upward. This is likely due to moisture migration from the foundation into the lower face of the lumber. Some of the sill had been previously repaired (Figure 25).



Figure 25. Location of resistance drillings D1 through D4. Note the sill repair block under the trim board.

## **Miscellaneous Observations**

The exterior cladding and sheathing were not included in this investigation; however, samples were taken for species identification. The cladding is eastern

spruce, and the diagonal wall sheathing is chestnut. Overall, the cladding exhibits some weathering and is missing or damaged in isolated areas but appears to be in good condition where it is intact (Figure 26). The diagonal sheathing below the cladding appears to play a significant role in the stabilizing the structure (Figure 27).

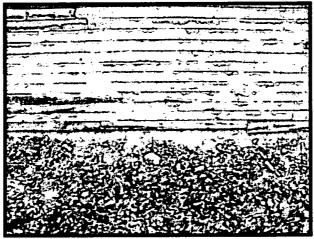


Figure 26. Cladding on the east elevation.

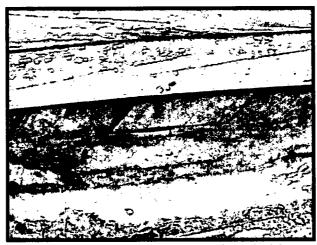


Figure 27. Diagonal sheathing visible after cladding removal.

The exterior condition of the windows could not be determined because they were boarded over; however, based on the interior conditions, the windows appear to be in good, repairable condition (Figure 28). The Store itself contains a number of cultural artifacts that may be significant to the Darby family and/or the history of Beallsville (Figure 29). While the materials are contributing to some of the deterioration problems within the building, if possible, the materials should be assessed by a historian or historical archaeologist before being removed or discarded.



**Figure 28.** Window on west elevation of the second floor. It is in good condition, as are all the windows, except for minor deterioration to the exterior trim.



Figure 29. A wealth of historical material culture can be found in the store.

## **SUMMARY**

Base on the investigation of the wood used in the Darby Store, the findings can the summarized as follows:

- Chestnut, maple and southern yellow pine were used for structural framing of the Darby Store.
- The extensive use of chestnut, a commercially extinct species for construction, increases the historical significance of the building.
- The limiting factors for considering moving the building and providing long-term service are wood deterioration and poor connections between framing members.

- The grade that can be assigned to the wall stude is No. 2 southern yellow pine, using the current National Design Specification for Wood Construction.
- The grade that can be assigned to the horizontal roof ties is No. 1 southern yellow pine, using the current National Design Specification for Wood Construction.
- The grade that can be assigned to the chestnut rafters and joists from the 1944 National Design Specification for Wood Construction is 1200 f Grade, which lists an allowable bending stress of 1200 psi and a modulus of elasticity of 1,000,000 psi. It may be possible to increase the allowable design values, if needed, through selective replacement.
- The roof covering and roof sheathing are either in poor condition, or have failed, and are in need of replacement.
- The roof rafters are, generally, in good condition but have long spans that limit their capacity.
- The vertical ties in the roof "trusses" are not structural lumber.
- The horizontal roof ties (bottom chord of the roof "trusses") are, generally, in good condition, except at some of the ends. The connections to the rest of the structural framing should be checked by the engineer for adequacy.
- The wall studs are in good condition. The connections between the structural framing should be checked by the engineer for adequacy.
- The exterior cladding is weathered but still serviceable.
- The exterior wall sheathing is in good condition.
- The sill plates are, generally, in poor condition, with approximately 50 percent needing replacement.
- The floor joists are, generally, in good condition along their span, except where moisture from roof leaks has led to deterioration.
- The ends of the floor joists were, typically, inaccessible but where they
  were accessible, ranged in condition from good to poor. The
  connections to the rest of the structural framing should be checked by
  the engineer for adequacy.
- There was too much debris in the Store to draw a conclusion about the overall condition of the wearing surface. Where it was uncovered, much of it has warped or decayed and is in need of replacement.
- Drainage should be provided for the basement.
- A moisture barrier would decrease available moisture to the wood in the crawlspace.
- Artifacts in the Store may be of historical significance and should not simply be discarded because they are contributing to deterioration of the wood.

Table A-1. Resistance Drilling Log for the Darby Store

Drilling Number	Location	Member ID	Location Description	Comments
D1	west elevation	sill	6" from SW corner, 2.5" above concrete foundation	total void
		sill		outer sill no void, 0.25" of deterioration on
D2	west elevation		6" from SW corner, 7" from concrete foundation	inner face of inner sill
D3	west elevation	sill	24" from SW corner, 3" above concrete foundation	total void
D4	west elevation	sill	23" from SW corner, 7" above concrete foundation	no voids found
D2	west elevation	sill	96" from SW corner, 2" above concrete foundation	thin shell of sill, then void
De	west elevation	llis	96" from SW corner, 8" above concrete foundation	interior sill is void, outer sill not impressive
D7	west elevation	llis	138" from SW corner, 2" above concrete foundation	no voids found
D8	west elevation	sill	138" from SW corner, 7.5" above concrete foundation	no voids found
D9	west elevation	sill	192" from SW corner, 2" above concrete foundation	total void
D10	west elevation	llis	192" from SW corner, 8" above concrete foundation	no voids found
D11	west elevation	sill	264" from SW corner, 2" above concrete foundation	no voids found
D12	west elevation	sill	264" from SW corner, 8" above concrete foundation	no voids found
D13	west elevation	sill	332" from SW corner, 2" above concrete foundation	no voids found
D14	west elevation	sill	332" from SW corner, 8" above concrete foundation	no voids found
D15	west elevation	sill	400" from SW corner, 2" above concrete foundation	both sill members deteriorated
D16	west elevation	sill	400" from SW corner, 8" above concrete foundation	no voids found
D17	west elevation	sill	132" from NW corner, 2" above concrete foundation	minor deterioration on inner sill
D18	west elevation	sill	132" from NW corner, 8" above concrete foundation	no voids found
D19	west elevation	sill	60" from NW corner, 2" above concrete foundation	no voids found
D20	west elevation	sill	60" from NW corner, 8" above concrete foundation	minor deterioration in sheathing only
D21	west elevation	sill	12" from NW corner, 2" above concrete foundation	minor deterioration on exterior of outer sill
D22	west elevation	sill	12" from NW corner, 8" above concrete foundation	no voids found
D23	north elevation	Sill	10" from NW corner, 2" above concrete foundation	0.5" of deterioration on inner face of inner sill

Drilling Number Location	Member		
LOCALIOII	1	Location Description	Comments
			0.5" of deterioration on inner face of inner
north elevation	llis	10" from NW corner, 8" above concrete foundation	sill
north elevation	llis	32" from NW corner, 2" above concrete foundation	interior sill is deteriorated
north elevation	llis	32" from NW corner, 8" above concrete foundation	interior sill is deteriorated
north elevation	sill	94" from NW corner, 2" above concrete foundation.	0.25" of deterioration on inner sill
north elevation	llis	94" from NW corner, 8" above concrete foundation	0.25" of deterioration on inner sill
north elevation	llis	144" from NW corner, 2" above concrete foundation	no voids found
north elevation	sill	144" from NW corner, 8" above concrete foundation	no voids found
north elevation	llis	184" from NW corner, 2" above concrete foundation	1.5" of deterioration between the two sill members
north elevation	llis	184" from NW corner. 8" above concrete foundation	1" of deterioration between the two sill members
north elevation	llis	inside doorway to basement, 2" from bottom of header	more than 50% deterioration
north elevation	lis	inside doorway to basement, 8" from bottom of header	more than 50% deterioration
east elevation	llis	6" from NE corner, 5" above concrete foundation	outer sill entirely gone, inner sill with superficial termite damage
east elevation	llis	15" from NE corner, 3" above concrete foundation	outer sill more than 50% deteriorated, inner sill has minor deterioration
east elevation	Sill	15" from NE corner, 8" above concrete foundation	minor surface deterioration
east elevation	Sill	36" from NE corner, 2" above concrete foundation	no voids found
east elevation	Sill	36" from NE corner, 8" above concrete foundation	no voids found
east elevation	Sill	61" from NE corner, 2" above concrete foundation	50% deterioration
east elevation	llis	61" from NE corner, 8" above concrete foundation	no voids found
east elevation	llis	128" from NE corner, 2" above concrete foundation	approx. 1" of deterioration
east elevation	llis	128" from NE corner, 8" above concrete foundation	approx. 1" of deterioration

Drilling Number	Location	Member ID	Location Description	Comments
D44	east elevation	llis	187" from NE corner, 2" above concrete foundation	total void - by pipe
D45	east elevation	llis	187" from NE corner, 8" above concrete foundation	total void - by pipe
D46	east elevation	sill	199" from NE corner, 2" above concrete foundation	50% deteriorated on outer element
D47	east elevation	llis	199" from NE corner, 8" above concrete foundation	75% of outer sill deteriorated
D48	east elevation	llis	239" from NE corner, 2" above concrete foundation	sill is total void
D49	east elevation	llis	239" from NE corner, 8" above concrete foundation	sill is total void
D20	east elevation	Sill	304" from NE corner, 2" above concrete foundation	minor deterioration
D51	east elevation	sill	304" from NE corner, 8" above concrete foundation	mostly void
DS2	second floor	rafter 25	near west end and roof failure, up from bottom	needle came out side - no voids found
D53	second floor	rafter 26	near west end and roof failure, up from bottom	no voids found
D54	second floor	rafter 25	repeat drilling of D52	needle came out - no voids found
D55	second floor	rafter 27	near west wall, up from bottom	no voids found
D56	second floor	rafter 5	near NE corner, east side, vertical from top	needle came out side
D57	second floor	floor joist	58" from west wall at top of stairwell, visible deterioration of adjacent members, vertical from top	gap between interface, no voids found, wearing surface 12% MC
D58	second floor	floor joist	64" from west wall, 16" away from visible deterioration on same member, vertical from top	no voids found, wearing surface 12% MC
D59	first floor	floor joist	32" from south wall partition (N. room) 59" to east wall, vertical from top	- no voids found
D60	first floor	floorioist	100" from east wall, 48" from north partition wall, vertical from top	no voids found
D61	east elevation	lis	374" from NE corner, 2" above concrete foundation	no voids found
D62	east elevation	sill	374" from NE corner, 8" above concrete foundation	no voids found
D63	east elevation	sill	165" from SE corner, 2" above concrete foundation	no voids found
D64	east elevation	sill	165" from SE corner, 8" above concrete foundation	no voids found
D65	east elevation	stud	164" from SE corner, 11" above concrete foundation	unknown

Drilling		Member		
Number	Location	ID	Location Description	Comments
D66	east elevation	stud	. 208" from NE corner, below window	no stud or missed stud
29Q	east elevation	pnys	248" from NE corner, 35" above concrete foundation	no voids found
D68	east elevation	stud	316" from NE corner, 21" above concrete foundation	no voids found
690	west elevation	pnts	Not labeled	
D70	west elevation	stud	56" from NW corner, 13" above concrete foundation	no stud or missed stud
D7.1	west elevation	stud	57" from NW corner, 20" above concrete foundation	no stud or missed stud
D72	west elevation	stud	70" from NW corner, 13" above concrete foundation	no voids found

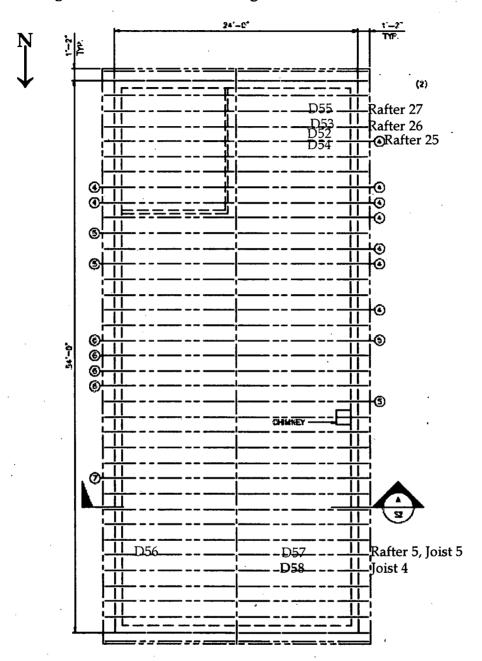
D1, D2 D3, D4 D5, D6 D7, D8 D65 D68, D64 b9, D10 D11, D12 D13, D14 D15, D16 D61, D62 D50, D51 D48, **539** D66, D67 D39 D37 D21, D22 D35 D31 D29 D27 D25 D23 D32 D80 D28 D26 D24 D34

Figure A-1. Resistance Drilling Locations, First Floor and Exterior

# EXISTING FIRST FLOOR FRAMING PLAN

Note: This drawing likely does not accurately represent the existing floor plan.

Figure A-2. Resistance Drilling Locations, Second Floor



## EXISTING ROOF FRAMING PLAN SCALE: 1/4"=1"-0"

Note: This drawing is not an accurate representation of the roof framing within the Darby Store. There are in total only 28 sets of rafters, which were numbered sequentially from the north end to the south. The chimney is located between rafters 11 and 12, and the room at the south end of the building ends at roof tie/rafter 22. Additionally, floor joists do not line up with rafters.