AGENDA

HISTORIC PRESERVATION COMMISSION
CITY OF CRYSTAL LAKE

REGULAR MEETING
April 7, 2016
Municipal Complex, 100 W. Woodstock Street
7:30 PM

1) **Call to Order**

2) **Roll Call**

3) **Public Comment**

4) **Approval of Minutes of the March 3, 2016 Regular Meeting**

5) **H2015-09 Certificate of Appropriateness and Grant Approval for 36 N. Virginia - The Alano Club**
Review of the Certificate of Appropriateness for building restoration work.
Approve a $500 grant pending completion of the work.

6) **2016 Trolley Tour**
General discussion regarding the tour route, the proposed properties on the tour, the current workload progress and other trolley tour discussion.

7) **Member Inquiries and Reports**

8) **Adjournment**

MINUTES
Historic Preservation Commission
March 3, 2016
City Hall, 100 W. Woodstock Street, Crystal Lake, IL

1) **Call to Order**
L. Atwood called the meeting to order at 7:30 p.m.

2) **Roll Call/Attendance**
The following Commission members were present: LeeAnn Atwood, Diana Kenney, Lisa Solak, Linda Spencer, Bob Wyman and Jim Wyman. Sarah Jackowiak was absent. Brice Alt was in the audience. Staff member Elizabeth Maxwell was present.

3) **Public Comment**
No public comment.

4) **Approval of Minutes of the February 4, 2016 Regular Meeting**
B. Alt had some changes to the minutes regarding the weeping mortar house. The changes were discussed and staff will correct the minutes. D. Kenney made a motion to approve the minutes of the February 4, 2016 regular meeting with the noted changes. L. Solak seconded the motion. On voice vote all members voted aye. Motion passed.

5) **2016 Trolley Tour**
D. Kenney asked if B. Wyman was able to research the cost increase for the trolleys. He replied that he found that they paid $1200 in 2011, $1400 in 2012, $1600 in 2013, 2014, and 2015 and now the cost is $1700 for 2016. This is a 42% increase since they started the tours. This would equate to a $14 ticket price. No one wanted to raise the price this much. There was a suggestion that they go to $12 for pre-sales and $15 day of, this would eliminate the need to have so many singles in the cash box on the day of the tour. D. Kenney made a motion to approve the increase in ticket sales to $12 for pre-sale and $15 for the day of the event. L. Atwood seconded the motion. On voice vote, all members voted aye.

L. Atwood stated that all stories are due to S. Jackowiak by April 15th. D. Kenney said her stories would be ready. L. Solak had some questions about which properties she was researching and the commission clarified those. B. Alt said that he would be out of town. D. Kenney will need someone to be her wingman to help navigate the trolley and keep time. L. Spencer and L. Solak could rotate with being a wingman and selling tickets.

D. Kenney asked if information about the tour would be put into the newsletter. Ms. Maxwell stated that a "save the date" article would be in the April newsletter. Then in the May newsletter more information would be listed about the times, price, ticket sale location, etc.

6) **Changes to the Historic Preservation Ordinance and Chapter 295 of the City Code**
D. Kenney stated that this is on the agenda due to some recently discussed Open Meetings Act questions. The Commission's current quorum is 3, which would stop a majority of a quorum or 2 people from discussing business. Although the commission did not feel they were violating any Open Meetings Act requirements, they were concerned when 2 members get together to discuss research on a property. They wanted the quorum changed to the majority of appointed members. So at this time it would be 4, but if they filled their two vacancies it would be 5. D. Kenney made a

motion to change the ordinance language for a quorum. L. Spencer seconded the motion. On voice vote, all members voted aye.

B. Alt asked about the tour wrap up meeting afterwards. Ms. Maxwell said that the trolley tour itself acted like an event and didn't need to be notified for. The meeting after was not an issue since the tour was done. If they wanted to start discussing next year's tour this could be an issue. Staff will research further. L. Atwood asked if they wanted to change anything else about their ordinance. No one wanted to change the other sections. She said we should advertise for new members.

7) **Member Inquiries and Reports**

D. Kenney stated that the Crystal Lake Historical Society was formed from the Dole Mansion restoration group. That group received money from the First Congregational Church for the restoration and preservation of the Dole Mansion. Over the years this money was used to pay for architectural fees and window restoration. Lakeside has a project to reinforce the house with a steel beam between the front and back parlors. They also reconstructed the two walls. This has made the house more structurally sound. The historical society provided them with the remaining $15,000 in funds for the project. D. Kenney noted that if they had any exterior projects they were considering they needed to apply for the Certificate of Appropriateness and could obtain $500 in grant funds. The north porch needs new wood and paint, so that might be coming forward.

B. Alt stated that he attended the Joint Council of Historic Groups meeting. The next meeting on March 23rd will discuss a new McHenry County records facility. He will send the meeting information out. These are great meetings to find out what other groups in the area are doing. D. Kenney stated that Bill Kenney is in charge of the Northern Illinois Historic League and there is a lot of information on their website.

B. Alt stated that he met Ders Anderson. Ders has a barn on his property that has 3 houses in it. The houses were old historic houses that were going to be demolished so he had them dismantled and they are in his barn. He is looking for a historic group that would like the houses to possibly rebuild them or store them.

L. Atwood said the Original Chicago Facebook page has great information and pictures of historic places. They are very active. D. Kenney said that Living History of Chicago is also a great site.

8) **Adjournment**

There being no further business L. Atwood made a motion to adjourn the meeting at 8:35 p.m. D. Kenney seconded the motion. On voice vote, all members voted aye.

City of Crystal Lake
HISTORIC PRESERVATION COMMISSION
Certificate of Appropriateness

Project Name: #H2015-09 Columbus Wallace House **Address:** 36 Virginia Street

Owner/Applicant: Alano Club

Plan Type: Mortar repair, windows and sills repair, remove excessive lime-wash and repaint

Plans and Date: Marion Restoration, dated July 9, 2015

Ordinance Requirements: For landmarked buildings, the City's Historic Preservation Ordinance requires a Certificate of Appropriateness, to be issued by the Historic Preservation Commission, if the building is to be altered, extended or repaired in such a manner as to produce a major change in the exterior appearance. A major change would be an addition, alteration, maintenance, reconstruction, rehabilitation, renovation or repair. The proposed exterior project would necessitate a Certificate of Appropriateness.

Background Information: Crystal Lake's oldest standing home was constructed by stonemason Andrew Simons (1829-1892) for Columbus Wallace (1812-1907) and his wife Hannah Beardsley (1818-1894). It is one of two surviving cobble stone houses attributed to Mr. Simons. The smooth stones came all the way from the shores of Lake Michigan. Grain was shipped to Waukegan by ox cart, and the stones were brought back on the return trip. It was a three-day journey round-trip.

The foot-thick masonry walls of the Wallace house help keep the interior cool in the summer and warm in the winter. The stones were carefully set in lime mortar (ingredients: 8 or 9 bushels coarse sand to one bushel lime) so that all stones show approximately the same profile. Originally, the house was heated by stoves rather than a fireplace. Also noteworthy are the floor joists exposed in the basement, which were hand-hewn rather than saw-cut and are fastened with wrought iron spikes rather than cut steel or wire nails.

Project Description: The property owners would make repairs in several phases.

- The first phase is a maintenance issue to replace/repair the severely deteriorated mortar around the foundation, fill voids in the stone work, and repair window sill deterioration to stop leaks and further damage to the structure.
- The second phase would remove excess lime-wash, complete the repairs on the window sills, replace the mortar with the proper mortar and re-putty the exterior.
- Phase three would be the final step including the completion of the window sill repairs, removal of the excessive lime-wash and repainting.

PROJECT NUMBER: 1162014

CITY OF CRYSTAL LAKE
CERTIFICATE OF APPROPRIATENESS APPLICATION

Please type or print legibly

PROJECT TITLE: ACCL BUILDING REPAIRS

ADDRESS: 36 N VIRGINIA AVE
CRYSTAL LAKE IL 60014

OWNER(S):

NAME: ALANO CLUB OF CRYSTAL LAKE

ADDRESS: 36 N VIRGINIA AVE
CRYSTAL LAKE IL 60014

PROPERTY INDEX NUMBERS (attach legal description): 14-31-451-033

BRIEFLY DESCRIBE THE CURRENT IMPROVEMENTS ON THE PROPERTY:
HISTORIC BUILDING, STONE WITH ATTACHED WOOD FRAME ADDITION SURROUNDED BY PARKING LOT.

PLEASE PROVIDE A DETAILED DESCRIPTION OF THE CONSTRUCTION, ALTERATION, DEMOLITION OR USE PROPOSED:

NO ALTERATIONS ARE BEING PROPOSED. SCOPE IS BEING LIMITED TO THE MOST URGENT FOUNDATION AND BASMENT LEAKING. REPAIRS ARE PRIMARLY NEEDED TO THE OUTSIDE BACK AND SIDES OF THE STONE BUILDING AS OUTLINED IN THE ATTACHED PROPOSAL.

ADDITIONAL DOCUMENTATION REQUIRED:

PLEASE PROVIDE ARCHITECTURAL DRAWINGS OR SKETCHES FOR THE PROPOSED CONSTRUCTION OR ALTERATION. IN ADDITION, PLEASE PROVIDE PHOTOGRAPHS OF THE EXISTING IMPROVEMENTS AND A LIST OF MATERIALS TO BE USED IN THE PROJECT.

CONTRACTOR NAME: MARION RESTORATION

ADDRESS: 3504 NORTH KOSTNER ST

CHICAGO IL 60641

PHONE: 773-286-4100

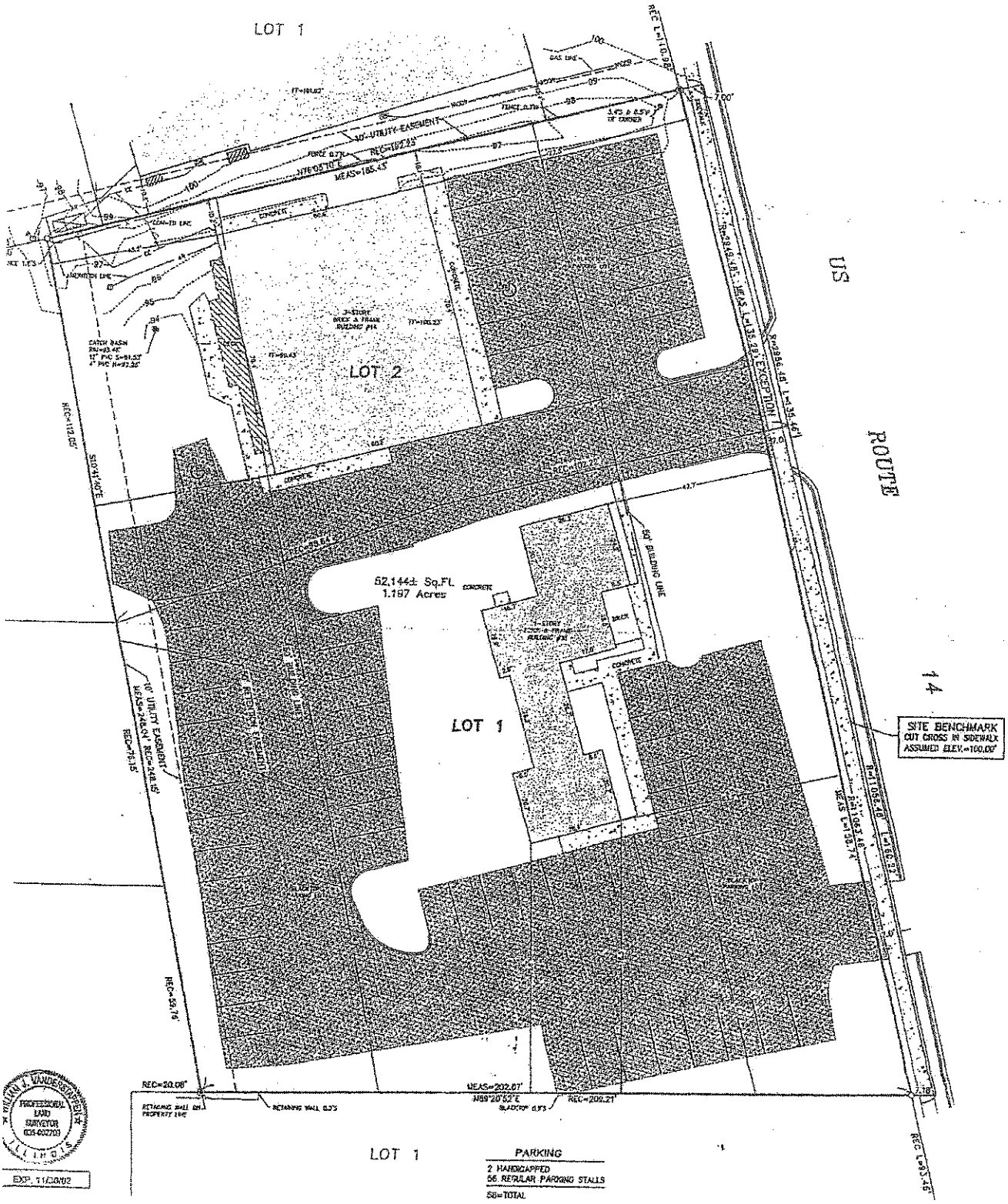
ARCHITECT NAME: N/A

ADDRESS:

PHONE:

INDEKSTAPPEN SURVEYING INC. EST. 1994 WOODSTOCK, IL 60098

Lots 1 and 2 in Wolf's Subdivision, (Excepting the Easily 7.0 feet thereof as taken for public road purposes per Circuit Court Case No. 86ED 45), being a Subdivision of part of the Southwest Quarter of the Southeast Quarter of Section 13, Township 44 North, Range 8 East of the Third Principal Meridian, according to the Plat thereof recorded May 10, 1984 as Document No. 881071, in McHenry County, Illinois.



WILLIAM A. VANDERSTAPPEN PROFESSIONAL LAND SURVEYOR 035-002709 ILLINOIS

EXP. 11/30/02

LEGEND	
⊕ FOUND IRON BAR	⊕ SET IRON BAR
⊗ FOUND SPIKE	⊗ SET SPIKE
○ FOUND IRON PIPE	

NOTE: Only those Building Line Restrictions or Easements shown on a Recorded Subdivision Plat are shown hereon unless the description ordered to be surveyed contains a proper description of the required building lines or easements.
* No distance should be assumed by scaling.
* No underground improvements have been located unless shown and noted.

STATE OF ILLINOIS)
) S.S.
COUNTY OF McHENRY)

I hereby certify that we have surveyed the premises above described, and that the plat hereon is a true representation of the said survey.

Marion Restoration was approached on behalf of the Alano Club to get a quotation concerning the condition of the exterior of the building. Marion has experience in the stabilization and restoration of masonry buildings built prior to 1930. In the case of the Columbus-Wallace house circa is approx. 1851. The quote is based on standards set by the US Dept. of the Interior, and the National Park Service.

This quotation is broken into three phases, Priority #1, (2015) Priority #2, (2016), and Priority #3, (2017). Each Priority is set with a sense of urgency, and bunched to allow for the budgeting of both Marion Restoration and the Alano Club.

Priority 1- this deals with the severely deteriorated mortar at ground level (foundation) also, voids in stone work, window sill deterioration (see page 9 of 17) total cost $15,610.00

Priority 2 -this phase gets into Lime-wash removal, finishing phase 1 and starting/replacement of proper mortar and the re-putty of exterior. Cost of priority 2 which finishes up priority 1. $31,040.00

Priority 3- this is the final beautification process, completion of the windows and sills, remove excessive lime-wash, and repaint . $24,800.00

I had been working with Marion Restoration, City planning, Park District, and Building Dept. to get to this stage. I was only able to give Karrie a copy of the document the Friday before your last Board meeting. I suggested to Karrie, that a copy of the full report be given to each board member for review prior to the membership meeting in Sept. I believe along with an educated board, only a full presentation to the owners of the club (members) can a decision be made as to what to do and how to proceed. The Alano Club is where I first set foot on my journey with AA, and is a very special place for me. I am sure there are others that share that position. I also served on the board for over 5 years and am well versed in the finances of the club for the past 7 years. I would propose to you to think hard.....

1. Stay, and make no repairs, the building will continue to deteriorate at an increased rate.

2. Stay and make repairs based on availability of funding. 28 yrs left on the paper or spend $564,000 in members money plus $71,000 in repairs.

3. Plan to move within a three year period, make only necessary repairs to insure the safety of the members. Move....

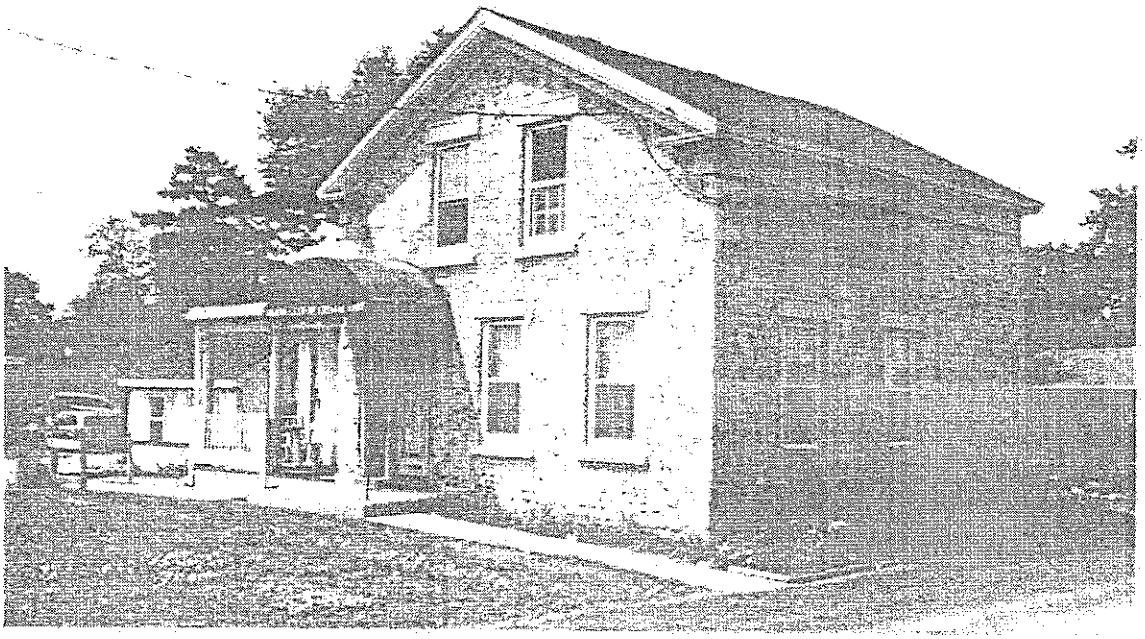
RESTORATION BY MARION

CLIENT DRAFT FOR REVIEW

COLUMBUS WALLACE HOUSE

36 NORTH VIRGINIA AVENUE
CRYSTAL LAKE, IL

2015 MASONRY RESTORATION PROPOSAL



JULY 9, 2015

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RESTORATION BY
MARION

July 9, 2015

Jack Glynn
315 Rebecca Street
Crystal Lake, IL 60014
t: (+1) 815 354 5812
e-mail: jjgsales1@aol.com

RE: 2015 MASONRY RESTORATION PROPOSAL

Dear Mr. Glynn,

Marion, Inc. appreciates the opportunity to assist you in the stabilization and restoration of your historic property constructed in 1851. The repair treatments outlined in this proposal represent long-term solutions that will stand the test of time. We have separated the proposed scope of work into nine prioritized items:

PRIORITY I (2015)
Item No. 1: Back Pointing at Grade
Item No. 2: Spot Repointing
Item No. 3: Fascia and Flashing
Item No. 4: Concrete Window Sill Repair
Item No. 5: Wood Window Sill and Header Replacement

PRIORITY II (2016)
Item No. 6: West Elevation Limewash Removal
Item No. 7: West Elevation Stone Repair
Item No. 8: 100% Mortar Repointing

PRIORITY III (2017 or Later)
Item No. 9: Window Restoration

Masonry buildings constructed prior to 1930 contain brick and/or stone set with predominately lime putty mortar. To obtain the best long-term repair, new mortar should match the composition, color, aggregate (sand), and aggregate gradation of the original mortar as per ASTM E2260-03 Standard Guide for Repointing (Tuckpointing) Historic Masonry and ASTM C1713 Standards for Historic Masonry Restoration.

All restoration executed by Marion, Inc. will be in accordance with the standards set out by the U.S. Department of the Interior, National Park Service. The execution of the masonry restoration work will follow the guidelines in the Preservation Brief #2, *Repointing Mortar Joints in Historic Masonry Buildings* (revised 1998). Cleaning of masonry will follow the guidelines in Preservation Brief #1, *Cleaning and Water-Repellent Treatments for Historic Masonry Buildings*. These documents provide the standard by which our customers can judge the performance of our work. For more information, please visit www.nps.gov to review the Secretary of the Interior's Standards and to download the Preservation Briefs.

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MORTAR REPOINTING STANDARDS:

1. Cut mortar back 2½ times the height of the joint or further back to sound material.
2. Utilize the *Center Cut Approach* using specialized power routing tools with cutting blades that are one-half the width of the existing mortar joints, once the center-cut is executed, the mortar will be hand removed with chisels to the brick edge to avoid over cutting of the brick surface.
3. Flush out joints with water to remove all loose mortar and sandy residue left post-removal.
4. Monitor moisture levels – joints will be ready for repointing once an acceptable moisture reading is recorded (16% WME or below).
5. Finish mortar to match original tooling joint profile.

GENERAL NOTE: Building permits may be obtained through Marion at an additional cost.

General Note: Additional mobilization and trip charges may result form projects carried over multiple season or scope too small to have trip charges absorbed by other items.

PRIORITY I – 2015 SEASON

ITEM NO. 1: BACK POINTING AT GRADE

Mortar at grade is severely deteriorated with deep pockets of missing and decomposed mortar. These voids allow excess water to penetrate the wall and accelerate bedding mortar and stone deterioration.

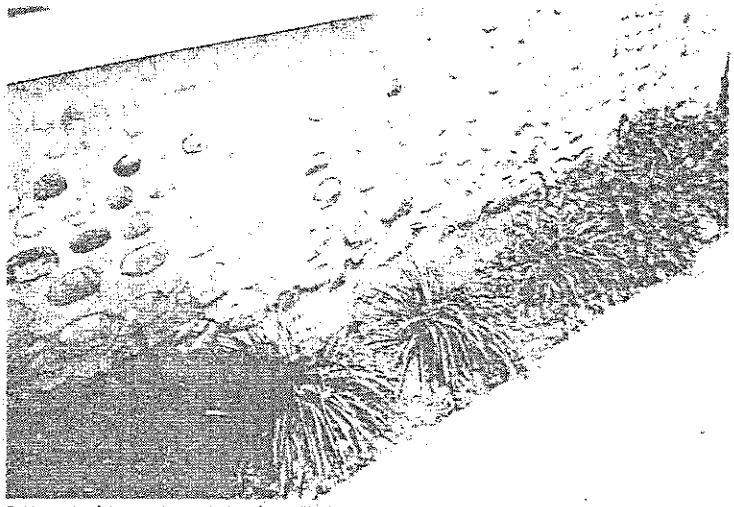


FIGURE A: Voids along the water table on the east elevation.

Proposed Item No. 1 Back Pointing at Grade (all elevations):

1. Remove all landscaping 24" from wall face *(by others)*.
2. Back point deep voids in the mortar along the water table line at grade.
    a. Remove mortar back to sound material at pockets of mortar deterioration.
    b. Fill pockets with mortar, terminating new mortar back from the face ¼" so it can cure properly.
3. Final application of mortar to be completed as part of Priority II work (see Item No. 8).

TOTAL COST OF ITEM NO. 1: $3,200.00

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ITEM NO. 2: SPOT REPOINTING

Several masonry issues require urgent attention. Many visible cracks have been "repaired" or filled with sealant or mortar that is incompatible with the historic materials. Inappropriate sealants and mortars may hasten deterioration of surrounding mortar and stone. Standard modern mortar uses an aggregate that is too fine for this large surface area application, leading to additional cracking. Mortar has completely fallen out along some cracks, leaving large voids. Vines also cause premature mortar deterioration and trap moisture against the wall. Perimeter sealants at doors and windows are cracking or completely deteriorated, permitting pest infiltration as well as excess moisture.

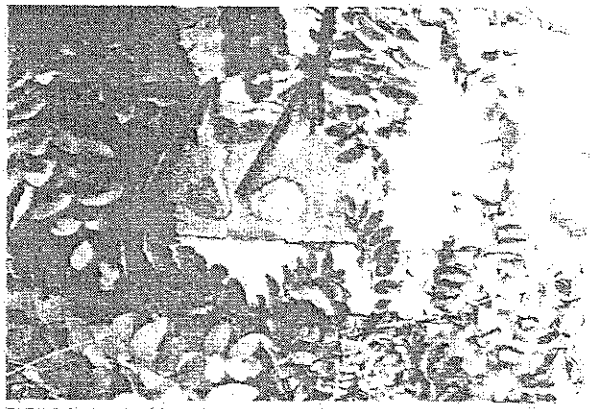
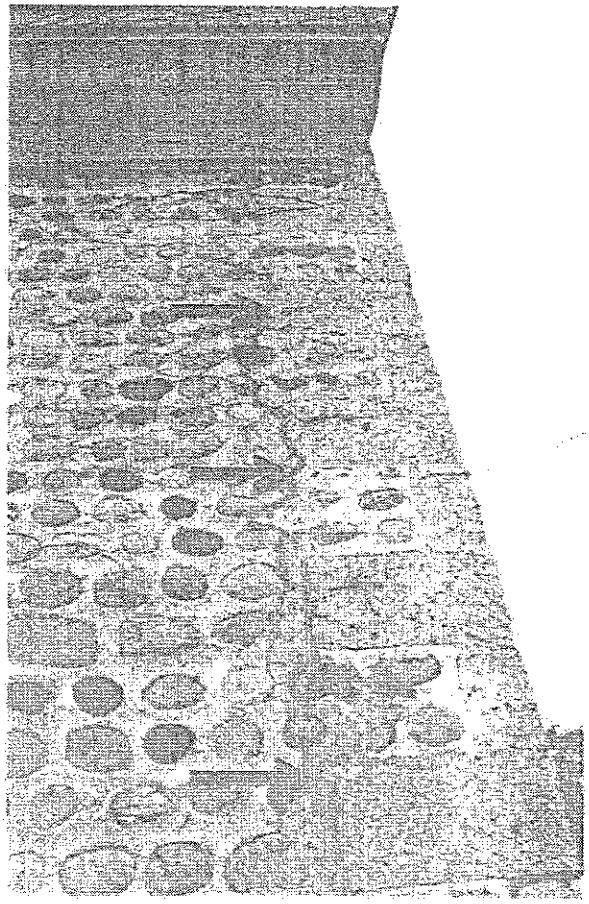


FIGURE B: Voids along a crack on the north elevation. Removing plantings within 2 feet of the wall face will permit access for repairs and prevent future deterioration.



FIGURE C: Cracks, voids, and inappropriate repair materials on the south elevation where the addition joins the historic structure.



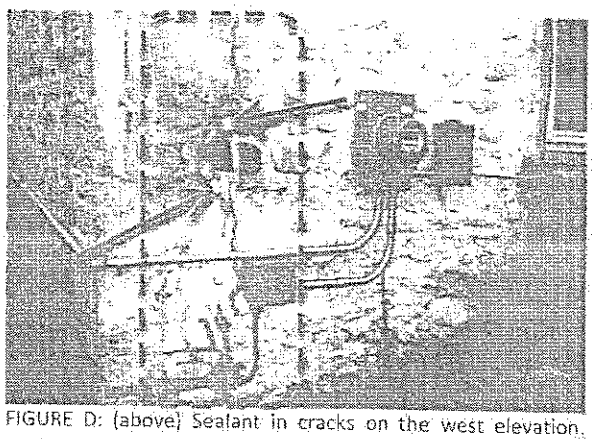


FIGURE D: (above) Sealant in cracks on the west elevation. Sealant is causing additional mortar deterioration. Voids are evident along the repaired crack (red arrows).

FIGURE E: (left) A crack up the entire northwest corner, north elevation, that has been repaired with sealant.

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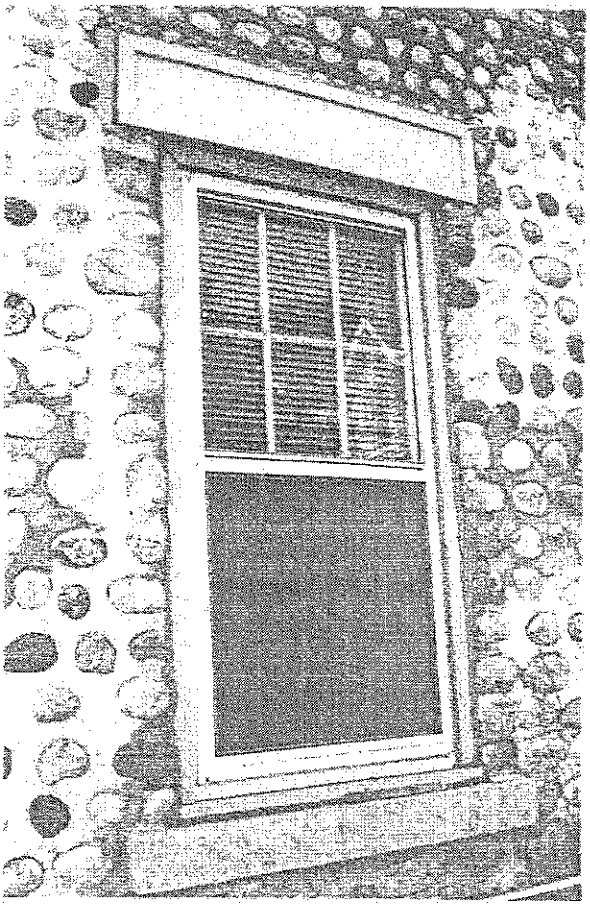


FIGURE G: North elevation window. Some perimeter window voids have been filled with sealant that was installed without removing prior sealant applications.

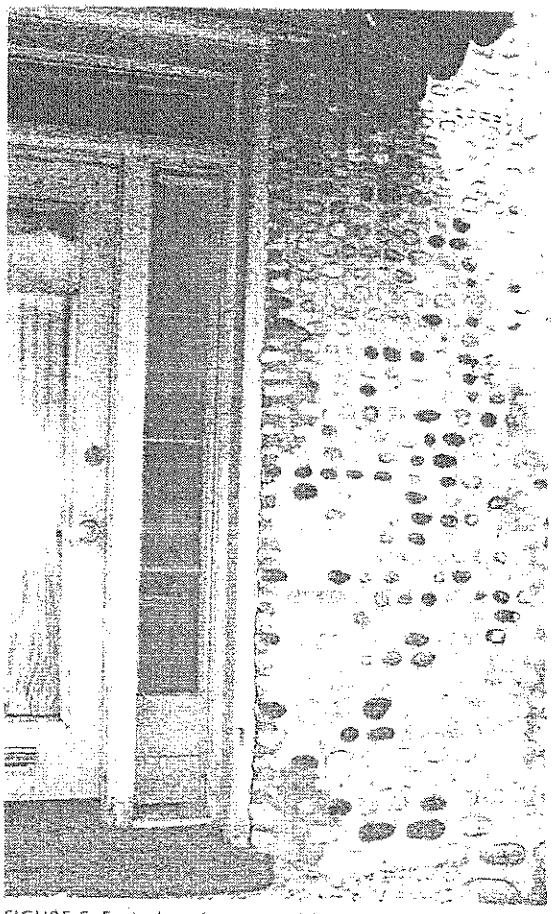


FIGURE F: East elevation entry. There is no visible perimeter sealant around the door. This open void permits excess water and pest infiltration.

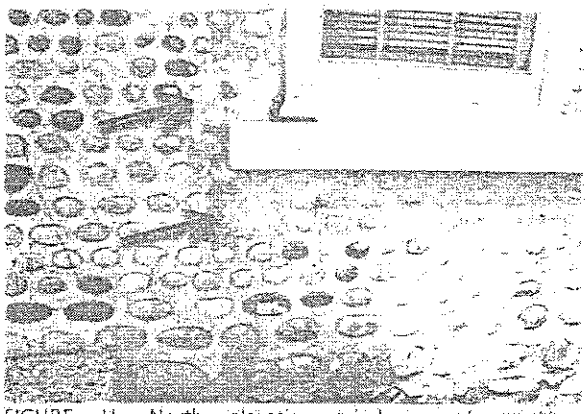


FIGURE H: North elevation window and cracking. Inappropriate crack repair is visible, as is improperly installed window sealant.

Proposed Item No. 2 Spot Repointing:

1. Remove all vines from the wall face by others.
2. Remove all inappropriate sealant at:
    a. Cracks in wall face.
    b. Window and door surrounds.

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3. Install new perimeter sealants at all windows and doors using BASF MasterSeal® NP-1™ elastomeric polyurethane sealant.
4. Spot repoint at cracks and voids at wall face using project mortar.
    a. Cut out mortar around the cracks until sound material is reached.
    b. Estimated spot repointing: 25 s.f.
5. Repointing of mismatched/inappropriate mortar that is not currently failing to be completed as part of Priority II work (see Item No. 8).

TOTAL COST OF ITEM NO. 2: $4,400.00

ITEM NO. 3: FASCIA AND FLASHING

Marion observed a few roofing issues, some of which are likely contributing to mortar deterioration. Flashing at areas where lower roofs meet the historic structure is improperly installed. Flashing is applied over shingles and the transition at the masonry wall is ineffective. Flashing is too short do effectively deter accumulated snow from saturating the masonry.

Metal has been fitted over roof fascia. Masonry adjacent to the fascia shows significant failure and decomposing mortar with large voids. Removal of the metal (by others) and further investigation will help determine the cause of mortar decomposition in this area.

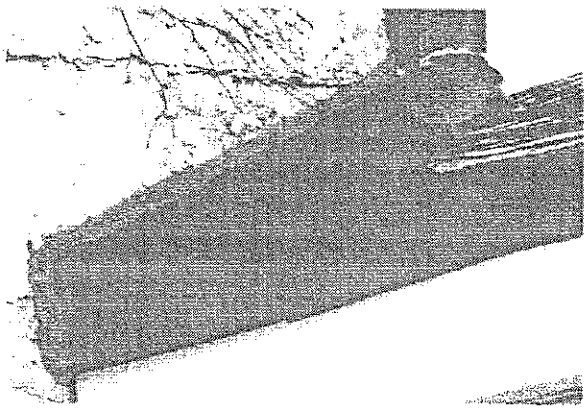


FIGURE I: Flashing terminates with caulk at the southwest corner. This is not a best practice and often prematurely fails, leading to roof leaks. The flashing is also incorrectly installed over the shingles. Flashing should begin under the shingles and terminate into a reglet cut into the masonry wall with counter flashing.

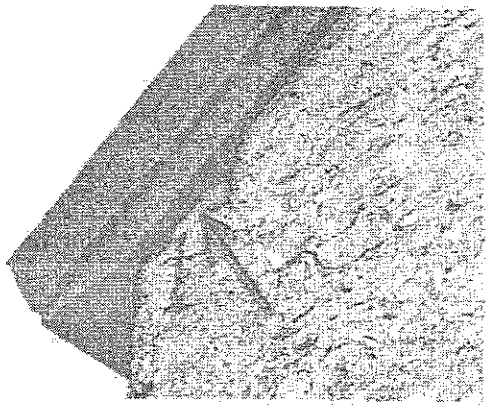


FIGURE J: Masonry failure at the point where the fascia meets the masonry wall, west elevation. Significant voids are evident, as is decomposed mortar along this joint. Removing the metal (by others) will help determine the cause of more severe deterioration.

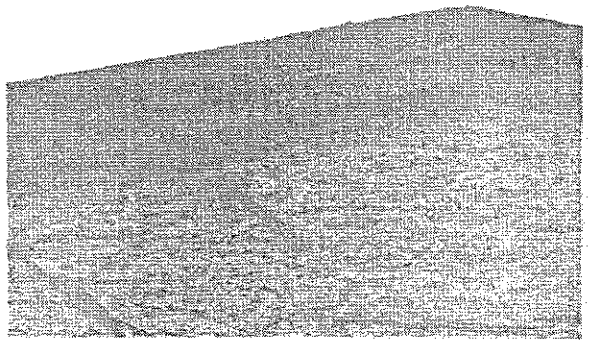


FIGURE K: Another location of masonry deterioration along the west elevation fascia.

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Proposed Item No. 3 Fascia and Flashing:

1. All roofing by others.
    a. By roofer in advance of Marion work: Remove inappropriately installed roof flashing at south elevations and junction with addition.
    b. By roofer after Marion work: Install flashing under the roofing shingles and up the masonry wall set into a reglet. Height of the flashing to be above the snow line of the roof.
2. Marion recommends removing metal fascia molding *(by others)* to ascertain the cause of masonry deterioration and to allow full access to masonry voids.
3. Install flashing termination joint by cutting a slot parallel to the roof into masonry wall for roofer installed reglet and counter-flashing. Coordinate this work with the roofer.
4. Repoint mortar behind roof flashing at the south roof.
5. Fill voids and repair deteriorating mortar/loose stone at deep pockets currently visible at the fascia.
6. Mortar repointing allowance based upon exposed, known conditions is 10 s.f. Mario to reevaluate scope once fascia and flashing are removed. Conditions of deteriorating masonry may be uncovered.

TOTAL COST OF ITEM NO. 3: $1,500.00

ITEM NO. 4: CONCRETE WINDOW SILL REPAIR

One of the concrete replacement sills has a hairline crack that should be repaired. As water infiltrates the crack, freeze-thaw cycling may cause spalling and puts excess pressure on surrounding masonry and the window.



FIGURE L: The crack in concrete sill can be repaired in place to prevent excess water infiltration and further damage.

Proposed Item No. 4 Concrete Window Sill Repair:

1. Repair cracked sill in place.
    a. Product: US Heritage Group IG10 Injection Repair Mortar.
    b. Finish and color to match surrounding concrete.

TOTAL COST OF ITEM NO. 4: $180.00

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Item No. 5: Wood Window Sill and Header Replacement

Several wood windowsills and headers are in need of replacement. Wood is completely rotted in some locations. If unaddressed, window damage could result. Rotting wood also hastens deterioration of surrounding mortar.

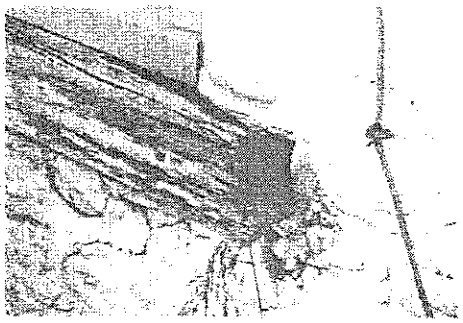


FIGURE M: Completely rotted sill on the west elevation. This sill is no longer structurally sound.



FIGURE N: Wood header. This lintel and wood basement headers should be replaced.

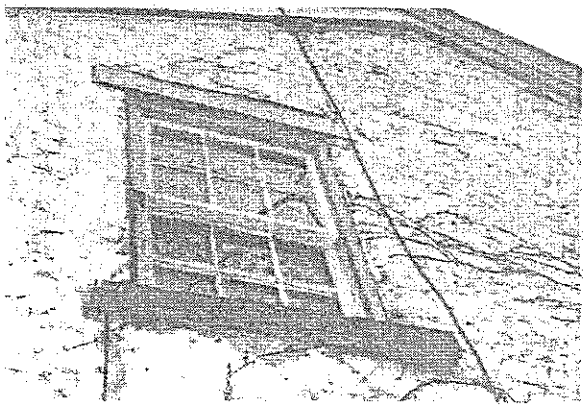


FIGURE O: Wood sill at the west elevation, second floor. The face of the sill is starting to dislodge from the wall, likely due to rotting behind the face.

The header at this location is clad in aluminum. Other headers are also covered in cladding obscuring them for inspection. This cladding should be removed for header inspection.

Proposed Item No. 5 Wood Window Sill and Header Replacement:

1. Remove cladding from select headers in order to inspect conditions behind the cladding. An allowance of one crewmember for one day is provided for this investigation.
2. Replace wood sills and lintels with reclaimed heavy timber cut to replicate size. Marion will investigate hearty wood alternatives for this application.
    a. West Elevation
        i. 4 Sills @ 3'-4"
        ii. 2 Headers @ 3'-4"
    b. North Elevation
        i. 1 First Floor Sill @ 3'-4"

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c. South Elevation
    i. 1 Basement Header @ 3'-4"
d. All sills tops sloping to encourage positive slope away from the windows.

3. Paint new sills and headers, color to be selected by owner.
    a. Prime with oil-based exterior grade paint.
    b. Finish with two coats of exterior grade latex paint.

TOTAL COST OF ITEM NO. 5: $6,330.00

TOTAL COST OF PRIORITY I, ITEMS 1 TROUGH 5: $15,610.00

COST SYNOPSIS:
ITEM NO. 1: BACK POINTING AT GRADE: $3,200.00
ITEM NO. 2: SPOT REPOINTING, VOID FILLING, AND CRACK REPAIR: $4,400.00
ITEM NO. 3: FASCIA/ROOFING TERMINATION: $1,500.00
ITEM NO. 4: CONCRETE WINDOW SILL REPAIR: $180.00
ITEM NO. 5: WOOD WINDOW SILL AND LINTEL REPLACEMENT: $6,330.00

PRIORITY II – 2016 SEASON

ITEM NO. 6: WEST ELEVATION LIMEWASH REMOVAL

Multiple coats of limewash have been applied to the west elevation. Limewash is typically breathable and non-damaging to historic masonry. Excessive coats, however, begin to act like non-breathable paint, causing mortar deterioration. Limewash should be removed to ensure the longevity of repointing and other repairs. Excessive limewash layers on the building are peeling and evidence supports that moisture is being trapped with the wall.

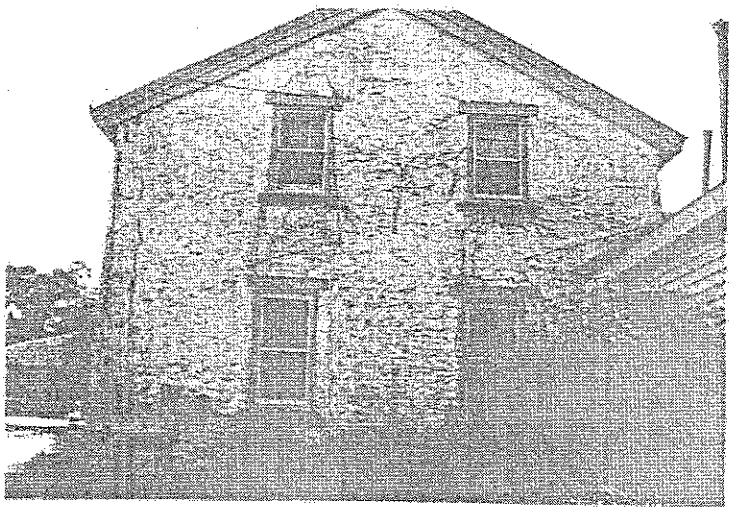


FIGURE P: West Elevation. Limewash is applied to the entire wall face in as many as six coats.

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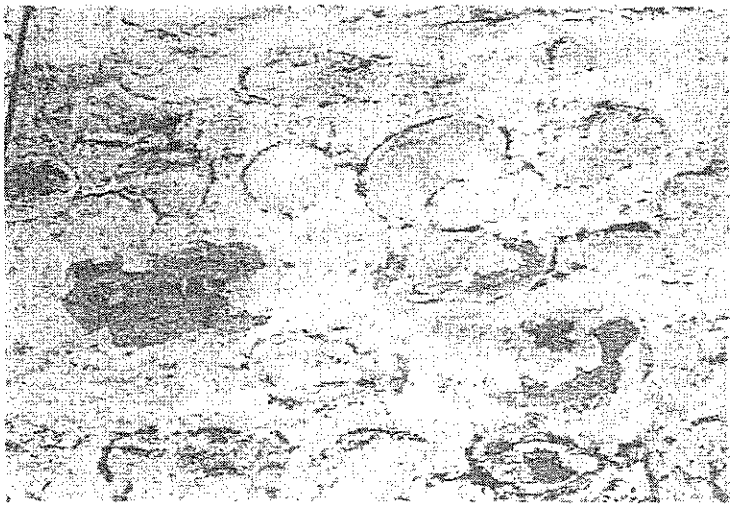


FIGURE Q: Detail view of limewash on west elevation. Limewash is peeling in some locations. Stone is spalling beneath the limewash indicating excessive

Proposed Item No. 6 West Elevation Limewash Removal:

1. Limewash Removal Testing:
    a. Perform two 2' x 2' test windows to determine limewash removal materials, applications, and dwell time.
    b. Baseline for testing is warm water at a low PSI followed by a stiff bristle brush.
    c. **Final pricing is contingent on test results.**
    d. Test sample to be approved by owner prior to proceeding with this work.
2. Utilize techniques determined to be effective during the testing process to remove limewash to the greatest extent possible without damaging the historic masonry.
3. Area of Work: West elevation limewash 414 s.f.
4. Pricing includes site protections and capture of all limewash removal materials and proper disposal at an EPA licensed disposal site. An allowance of **$500.00** is included for this expense. Actual billing will reflect invoice for disposal + 20% handling.

TOTAL COST OF ITEM NO. 6: **$5,800.00** ALLOWANCE TO BE CONFIRMED AFTER ON-SITE TESTING

ITEM NO. 7: MORTAR REPOINTING

Repairs outlined in Priority I items will delay the need for full repointing, but a combination of deteriorating and inappropriate mortar should be addressed with a repointing effort to provide a long-term restoration. Repointing with a uniform mortar type and color will also remove the current patchwork effect and restore the historic aesthetic of the structure.

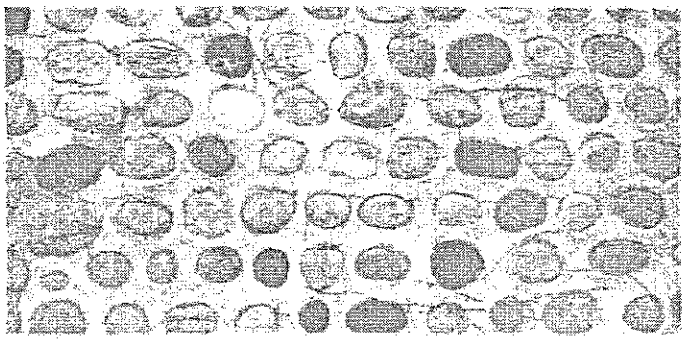


FIGURE R: Detail view of typical mortar joints. Wide joints require a larger aggregate than is typically available in standard mortar. Traditional aggregate cannot hold the joint long term, resulting in premature cracking and voids. Using a custom project mortar with appropriately sized aggregate will ensure longevity of the repair.

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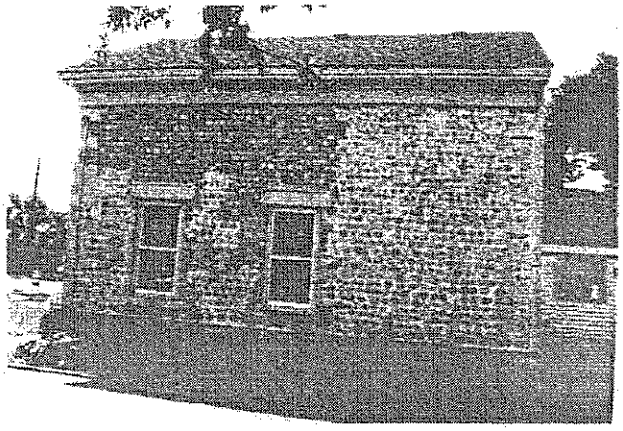


FIGURE S: Different mortars are highly visible from many yards away, detracting from the overall appearance of the building. Different mortars may also be different in consistency, aggregate, hardness, expansion/contraction, and other material properties, with different abilities to process or retain moisture. These differences put stress on the wall, causing cracking at mortar joints and stone deterioration.

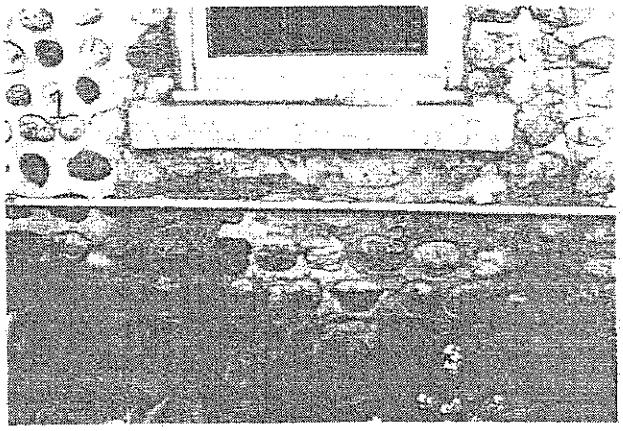


FIGURE T: At least three different types of mortar are visible in the small area on the north elevation shown here.

Proposed Item No. 7 Mortar Repointing:

1. Repoint 70% of mortar joints 1012 square feet (of the 1661 total square feet)
    a. Install new lime putty mortar with a large torpedo aggregate to accommodate joint size.
    b. Exclusion: Limewash mortar/wall faces on the east elevation porch are not included in the s.f. allowances above.

TOTAL COST OF ITEM NO. 7: $25,240.00

TOTAL COST OF PRIORITY II, ITEMS 6 THROUGH 7: $31,040.00

COST SYNOPSIS:
ITEM NO. 6: WEST ELEVATION LIMEWASH REMOVAL: $5,800.00
ITEM NO. 7: MORTAR REPOINTING: $25,240.00

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PRIORITY III – 2017 SEASON OR LATER

ITEM NO. 8: WEST ELEVATION STONE REPAIR

Excessive coats of limewash work to trap moisture in the wall. Over time, moisture causes the face of stone to delaminate (spalling). Spalling is significant on the west elevation and requires repair to prevent excess water infiltration and premature mortar decomposition. This deterioration is likely due to over-application of limewash. Limewash may be masking additional spalling and stone deterioration.

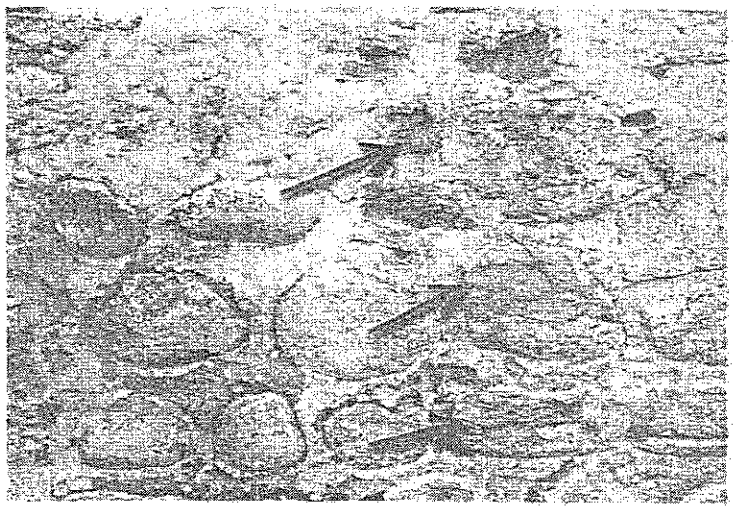


FIGURE U: Moisture that infiltrates the wall through cracks is trapped by inappropriate mortar and excessive limewash applications. As a result, moisture exits through the stone, eventually causing spalling (the delamination of the face of the stone). Spalling stone should be repaired to prevent further damage, water infiltration, and fracturing. Spalling is evident in some areas where limewash has worn away. Marion anticipates uncovering more stone deterioration once limewash is removed.

Proposed Item No. 8 West Elevation Stone Repair:

1. Execute stone restoration as necessary at west elevation stone spalling:
    a. Allowance: 2 crew members for 3 days.
    b. Final pricing is pending conditions revealed by limewash removal.
    c. Product: U.S. Heritage Group, Heritage Stone Repair Mortar, finished match surrounding stone texture.

TOTAL COST OF ITEM NO. 8: $4,400.00

ITEM NO. 9: WINDOW RESTORATION

Marion recommends restoring the remaining historic windows to improve energy efficiency and performance. Historic windows, when restored properly and used with a storm, can operate as efficiently as new windows and outlast newer windows. This longevity provides cost savings over the life of the structure. Weather stripping and glazing putty, repainting/staining, and refurbishing operable components will improve the functionality and long-term performance of the windows. Replacement of intact historic windows could result in loss of historic designation, making restoration the appropriate path forward. Replacement windows are disposal, cannot be fixed or repaired. Historic windows are repairable indefinitely providing an R or U-value similar to that of a new window.

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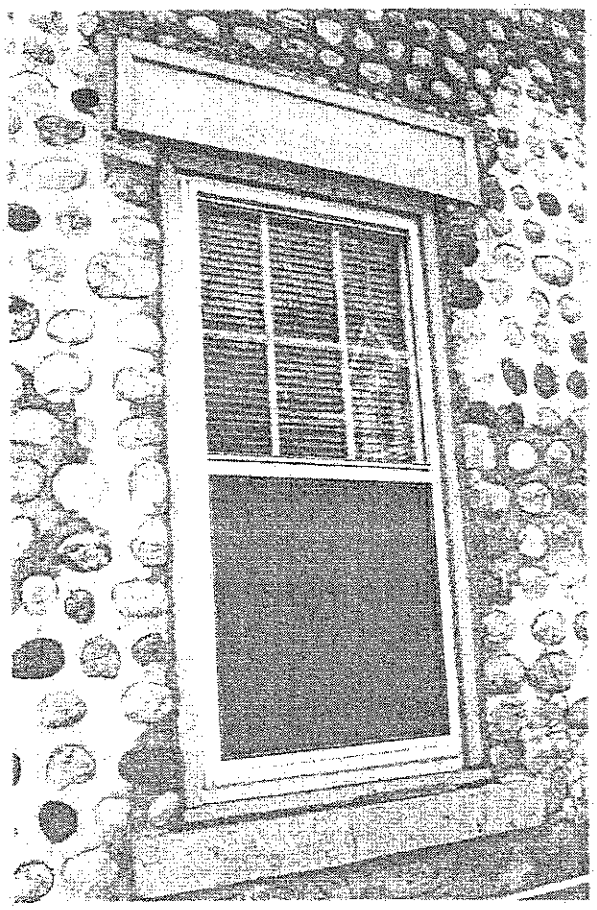


FIGURE V: One of the historic window units on the north elevation. Peeling paint makes the wood vulnerable to rot.

Proposed Item No. 9 Window Restoration:

1. Remove and retain existing storms for reinstallation.
2. Unit Locations
    a. West Elevation: Four units
    b. North Elevation: Two units
    c. East Elevation: Four units
    d. West Elevation:
        i. Two Basement units
        ii. Two first floor units
3. Restore fourteen historic wood units, including sashes, sash pockets, jambs, sills, hardware, and trim.
    a. Install zinc inlet weather stripping to enhance thermal performance.
    b. Replace missing components with similar, historically appropriate components.
        i. Includes new locks, pulls, sash cords, and pulleys for operability.
    c. Replace missing or broken glass with clear glass as required.
    d. Finishing:
        i. Remove excess or peeling paint.
        ii. Prime exterior surfaces with oil-based exterior grade paint.
        iii. Finish exterior surfaces with two coats of exterior grade latex paint.
        iv. Touch up interior finish as needed to match existing.

TOTAL COST OF ITEM NO. 9: $20,400.00

TOTAL COST OF PRIORITY III, ITEMS 8 THROUGH 9: $24,800.00

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ITEM NO. 8: WEST ELEVATION STONE REPAIR: $4,400.00
ITEM NO. 9: WINDOW RESTORATION: $20,400.00

TOTAL COST OF ENTIRE PROPOSED SCOPE OF WORK: $71,450.00

COST SYNOPSIS:
PRIORITY I (2015): $15,610.00
PRIORITY II (2016): $31,040.00
PRIORITY III (2017 OR LATER): $24,800.00
Inclusions:

1. Scaffold and Staging: Marion provides masons scaffold with metal plank decking conforming to OSHA and city of Crystal Lake standards. Pricing for all reasonable scaffold is included.
    a. Pricing for scaffold assumes coordination with other equipment and repointing efforts on site.
    b. Additional costs may result for work extending over multiple seasons/years.
2. Site Protection and Preparation: All work executed on site requires protection. Site protection involves protecting any surfaces, persons, vegetation, and/or items that may be harmed by the restoration process. Canopies, barricades, water soaking, scaffolding, chemical barriers, petroleum jelly, plastic sheeting, and tarps may be utilized. Work above public sidewalks and parking lots may require canopy scaffold to capture debris and protect pedestrians.
    a. Protect all exterior surfaces and landscaping prior to execution.
3. Trucking, mileage, and travel time.
4. Materials as described in Items 1 through 9 above.
    a. PROJECT MORTAR: Utilize matching mortar as determined from laboratory analysis by U.S. Heritage Group.
5. Waste disposal: Handled by hand, no dumpsters on site.

Exclusions:

1. Items stated above in writing.
2. Building permit.
3. Roofing material and installation by others.
4. Relocation of landscaping at least 2 feet from exterior wall face.
5. Removal of metal fascia at gable ends. Marion will provide spot removal for investigative purposes at this time.

MATERIALS APPROACH

FINDING AN APPRORIATE MORTAR MATCH
In creating a repointing mortar that is compatible with masonry units, the objective is to achieve one that matches the historic mortar as closely as possible, so that the new material can coexist with the old in a sympathetic, supportive, and if necessary, sacrificial capacity. The exact physical and chemical properties of the historic mortar are important and should be matched with the following four criteria:

- New mortar must match the historic mortar in color, texture, and tooling. (If a laboratory analysis is undertaken, it may be possible to match the binder components and their proportions with the historic mortar, if those materials are available.)
- Sand must match the sand in the historic mortar. (The color and texture of the new mortar will usually fall into place if the sand is matched successfully.)
- New mortar must have greater vapor permeability and be softer (measured in compressive strength) than the masonry units.
- New mortar must be as vapor permeable and as soft or softer (measured in compressive strength) than the historic mortar. (Softness or hardness is not necessarily an indication of permeability; old, hard lime mortars can still retain high permeability.)

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PROPERTIES OF MORTAR

Mortars for repointing should be softer or more permeable than the masonry units and no harder or more impermeable than the historic mortar to prevent damage to the masonry units. It is a common error to assume that hardness or high strength is a measure of appropriateness, particularly for lime-based historic mortars. Stresses within a wall caused by expansion, contraction, moisture migration, or settlement must be accommodated in some manner; in a masonry wall, these stresses should be relieved by the mortar rather than by the masonry units.

A mortar that is stronger in compressive strength than the masonry units will not "give", thus causing stress to be relieved through the masonry units. This results in permanent damage to the masonry, such as cracking and spalling that cannot be repaired easily. While stresses can also break the bond between the mortar and masonry units, permitting water to penetrate the resulting hairline cracks, this is easier to correct in the joint through repointing than if the break occurs in the masonry units.

Permeability, or rate of vapor transmission, is also critical. High lime mortars are more permeable than denser cement mortars. Historically, mortar acted as a bedding material—not unlike an expansion joint—rather than a "glue" for the masonry units, and moisture was able to migrate through the mortar joints rather than the masonry units.

When moisture evaporates from the masonry it deposits any soluble salts either on the surface as efflorescence or below the surface as sub-florescence. While salts deposited on the surface of masonry units are usually relatively harmless, salt crystallization within a masonry unit creates pressure that can cause parts of the outer surface to spall off or delaminate. If the mortar does not permit moisture or moisture vapor to migrate out of the wall and evaporate, it will result in damage to the masonry units.

INGREDIENTS OF MORTAR

Sand is the largest component of mortar and the material that gives mortar its distinctive color, texture, and cohesiveness. The gradation of the sand (particle size distribution) plays a very important role in the durability and cohesive properties of a mortar. Mortar must have a certain percentage of larger and smaller particle sizes in order to deliver the optimum performance.

Acceptable guidelines on particle size distribution may be found in ASTM C 144 (American Society for Testing Materials). However, in actuality, since neither historic nor modern sands are always in compliance with ASTM C 144, matching the same particle appearance and gradation usually requires sieving the sand.

Lime: Mortar formulations prior to the early-20th century used lime as the primary binding material.

Portland Cement: More recent, 20th-century mortar has used Portland cement as a primary binding material. A straight Portland cement and sand mortar is extremely hard, resists the movement of water, shrinks upon setting, and undergoes relatively large thermal movements. When mixed with water, Portland cement forms a harsh, stiff, quite unworkable paste that hardens very quickly. (Unlike lime, Portland cement will harden regardless of weather conditions and does not require wetting and drying cycles.)

Some Portland cement provides early strength to the mortar and speeds setting. Thus, it may be appropriate to add some Portland cement to an essentially lime-based mortar even when repointing relatively soft 18th or 19th century brick under some circumstances when a slightly harder mortar is required. The more Portland cement that is added to a mortar formulation the harder it becomes—and the faster the initial set.

QUALITY ASSURANCE

1. Performance of all restoration work will be by a craftsperson that is familiar with historic lime mortar formulations, curing conditions and performance characteristics. Work will be performed by Marion, Inc.,

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a company that has more than 5 years successful experience in comparable masonry restoration projects and employing personnel skilled in the restoration process and operations indicated.

2. Utilize only skilled journeymen masons who are familiar and experienced with the materials and methods specified and are familiar with the design requirements for this masonry restoration project.
3. Personal direction of the work by one skilled journeyman mason, trained and certified by the specified manufacturer, will be present at all times during masonry restoration.
4. Obtain materials for repointing from a single manufacture's source to ensure match quality, color, texture, and detailing.

DELIVERY, STORAGE, AND HANDLING

1. Deliver materials to site in manufacturer's original unopened containers and packaging, bearing labels as to type and names of products and manufacturers.
2. Deliver and store restoration material in manufacturer's original, unopened containers with the grade, batch, and production data shown on the container or packaging.
3. Protect restoration materials during storage and construction from wetting by rain, snow, or ground water, and from staining or intermixture with earth or other types of materials.
4. Protect mortar and other materials from deterioration by moisture and temperature. Store in a dry location or in waterproof containers. Keep containers tightly closed and away from open flames. Protect liquid components from freezing. Comply with manufacturer's recommendations for minimum and maximum temperature requirements for storage.
5. Comply with the manufacturers written specifications and recommendations for mixing, application, and curing of repointing mortars and patching materials.

PROTECTION/SITE CONDITIONS

1. Protect persons, motor vehicles, building site, and surrounding buildings from injury resulting from masonry restoration work.
2. Perform all masonry repointing only when air temperatures are between 40 degree Fahrenheit (10 deg. C) and 95 degrees Fahrenheit (32deg. C) and will remain so for at least 48 hours after completion of work.

SCHEDULING

We will work with you to determine the best schedule for the proposed work.

Marion, Inc. agrees to furnish all labor, supervision, materials, and scaffold equipment; to carry Workman's Compensation, Public Liability and Property Damage Insurance; and to use every reasonable precaution to protect the public and any adjacent property during the performance of the following work. In addition, Marion will:

- Remove all debris, excess material, and equipment from the site at job completion.
- Notify the Owner in advance of any extra work that may be required. Marion will submit a written change order for the cost of the extra work. Owner is to approve or decline any change order within 48 hours.

Owner agrees to supply Marion, Inc. with water, electricity, and clear access to the work areas.

TERMS

We typically require a 30% deposit and signed proposal prior to our scheduling or proceeding with any project.

Progress payments are due within seven days of receipt of invoice. Final payment is due upon completion of work. Marion, Inc. reserves the option to cease work if payments are not received within the time specified.

PERMIT

Marion, Inc. can expedite the permit for the scope-of-work established above. The charge for the permit fee expediting is by the hour and fluctuates based upon wait times.

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I hope that this proposal meets with your approval. Please call me or Donna Weiss directly with any clarifications or questions regarding the proposed work and subsequent scheduling at (+1) 773 286 4100. Donna can also be reached on her mobile at (+1) 262 617 1408.

Sincerely,

Mario Machnicki
President

I accept the above proposed scope-of -work and terms:

Client: _____

Title: _____

Date: _____

THESE PRICES MAY BE SUBJECT TO CHANGE AFTER THIRTY (30) DAYS.

cc: File
Donna Weiss

NAT 127593-1

U.S. Heritage Certified Contractor

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City of Crystal Lake Application for Façade Grant

Applicant Information

Name: ALANO CLUB

Address: 36 N. VIRGINIA

Phone: _____ Email: _____

Owner Information (if different than applicant)

Name: _____

Address: _____

Phone: _____ Email: _____

Property and Project Description

Site Address: 36 N. VIRGINIA

Project Description (attach photographs): repair and restoration of mortar and window sills

Estimate of Costs: $71,450 (attach the contractors estimates)

Requested Grant Amount: $500.00

_____ _____

Applicant's Signature Date

_____ _____

Property Owner's Signature Date