



Charlotte Historic District Commission Application for a Certificate of Appropriateness

March 9, 2011

ADDRESS OF PROPERTY	1318 Dilworth Road, Dilworth Local Historic District	HDC 2011-021
SUMMARY OF REQUEST	Construction of New Garage, Painting of Brick House	
OWNERS	Steve & Shannon Coburn	
APPLICANT	Kraig Magus, Architect	

Details of Proposed Request

There are two requests in this application:

- The demolition of the existing garage and the construction of a new garage, as shown on the attached plans
- The painting of this currently unpainted brick home

Current Status and Context of Property

This house was constructed in 1926, and is listed as a contributing structure in the Dilworth National Register Historic District.

Relevant HDC Design Guidelines

- *Accessory Buildings – Garages*
- *Painting*

Relevant Secretary of Interior's Standards for Historic Rehabilitation

(As cited in the Charlotte Zoning Ordinance Section 10.210)

- (i) New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

- (j) New additions and adjacent or new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Outstanding Issues

The plans for the garage replacement are attached.

Photographic evidence provided by the applicant to support the painting of the house will be presented at the meeting on March 9th.

Current HDC policy on Painting states in part that:

2. Only traditionally painted materials, such as wood, should be painted.
4. The painting of unpainted brick or masonry will require a Certificate of Appropriateness. Painting brick or masonry is not considered a change of color, but a fundamental change in the character of a building. The painting of brick or other masonry will not be permitted except in such special circumstances as:
 - The repainting of buildings first painted prior to the establishment of the appropriate historic district.
 - Cases where a brick building has poorly matched additions or repair work, and where the painting is designed to unify the disparate parts of the building.

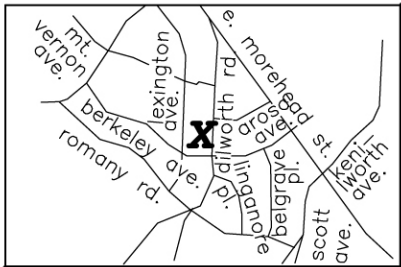
The Commission must determine if the evidence presented at the meeting in support of the painting of this house meets these criteria, or if in the opinion of the HDC an exception to policy is warranted.



1318



Coburn Residence, 1318 Dilworth Road
[Vicinity Map; Adjacent Neighbors w/ Garage exterior veneer matching main house]



- LEGEND**
- a/c air conditioner
 - ch. chord
 - conc. concrete
 - I.PIN iron survey stake
 - L,R curve length & radius
 - MB, DB record map and deed references
 - s.f. square feet (by coordinates)
 - R/W right of way
 - U/B utility building
 - LP, PP light pole, power pole
 - FFE finished floor elevation

THIS SURVEY IS CERTIFIED TO ONLY THE PERSONS OR ENTITIES SHOWN IN THE TITLE BLOCK BELOW:
THIS IS TO CERTIFY THAT THIS SURVEY IS BASED UPON MY BEST KNOWLEDGE, INFORMATION AND BELIEF.
THIS SURVEY DOES NOT REFLECT A COMPLETE TITLE EXAMINATION. PRECISION IS GREATER THAN 1:10,000.

- Notes:**
1. Source of title of this property is recorded in Deed Book 20356 Page 907. This property is known as Lot 2 Block 28 of Dilworth as shown on Map Book 3 Page 10 of the Mecklenburg County Registry. Tax. I.D. number is 123-091-10.
 2. This property is zoned R-4 as per Mecklenburg County GIS. This survey does not reflect a zoning analysis. Any development of this property is subject to the approval of the City of Charlotte.
 3. This property is located within a Historic District.
 4. This survey is based on Investors Title Insurance Commitment No. 200604116C dated April 5, 2006.

Any development may be subject to the restrictive covenants set forth in Deed Book 526 Page 8. See specifically the 50' building setback line, and the easement of unspecified width along the rear line. 5. This survey does not reflect complete utility locations. Contractors should contact the NC One-Call Locating Center at 1-800-632-4949 before any digging or excavation is begun.

6. See general easement to Southern Public Utilities recorded in Deed Book 722 Page 292.

LOTS 18 & 19
BLOCK 28
MB 3-10

LOT 1
BLOCK 28
MB 3-10

Tie to I.P.I.P.E. found at the
northerly margin of Berkeley Ave.
S 00°47'55" E - 100.02'

LOT 2
BLOCK 28
MB 3-10
20,750 s.f.

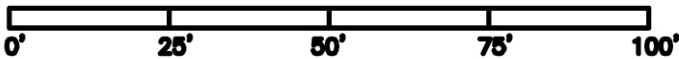
Ch=S01°18'51"W-100.06'

80' R/W
(per GIS)

DILWORTH ROAD
public R/W

Copyright 2006
**PHYSICAL SURVEY OF
1318 DILWORTH ROAD**
CHARLOTTE, MECKLENBURG COUNTY, N.C.
for STEVEN A. & SHANNON N. COBURN
June 28, 2006

Scale 1"=30'



WILLIAM M. IVEY
&
JANICE K. IVEY
DB 16188-962

Proposed 'New'
1.5 Story Brick
Garage

Remove 'Existing'
Tree to accomodate
new driveway/apron

DB 16188-962 (2003)

Demolish 'Existing'
1 Story Brick
Garage

LOT 3
BLOCK 28
MB 3-10

Proposed 'New'
Asphalt Driveway
(Approx. 25% Asphalt Reduction)

VERTICAL DATUM NOTE
All elevations shown hereon were based
on an assumed datum of 100.00'

Tie
N 03°25'38" E - 100.04'

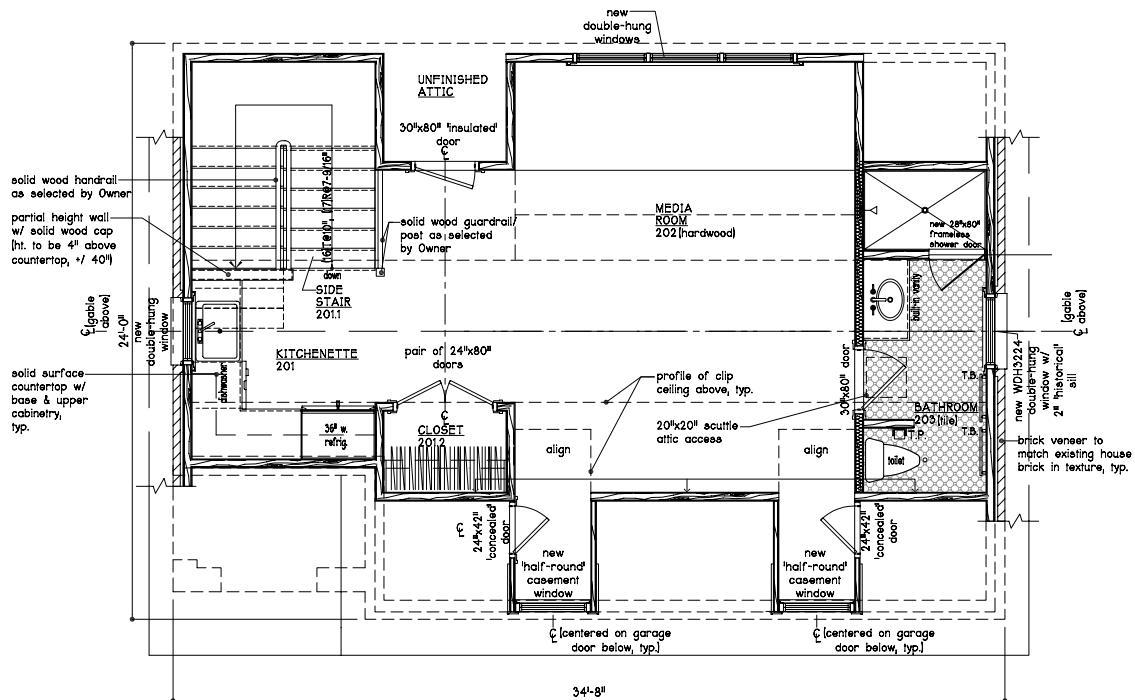
DonDuffy
Architecture

301 Providence Road
Charlotte, NC 28207
704-358-1878
(f) 704-358-1721
www.donduffyarchitecture.com

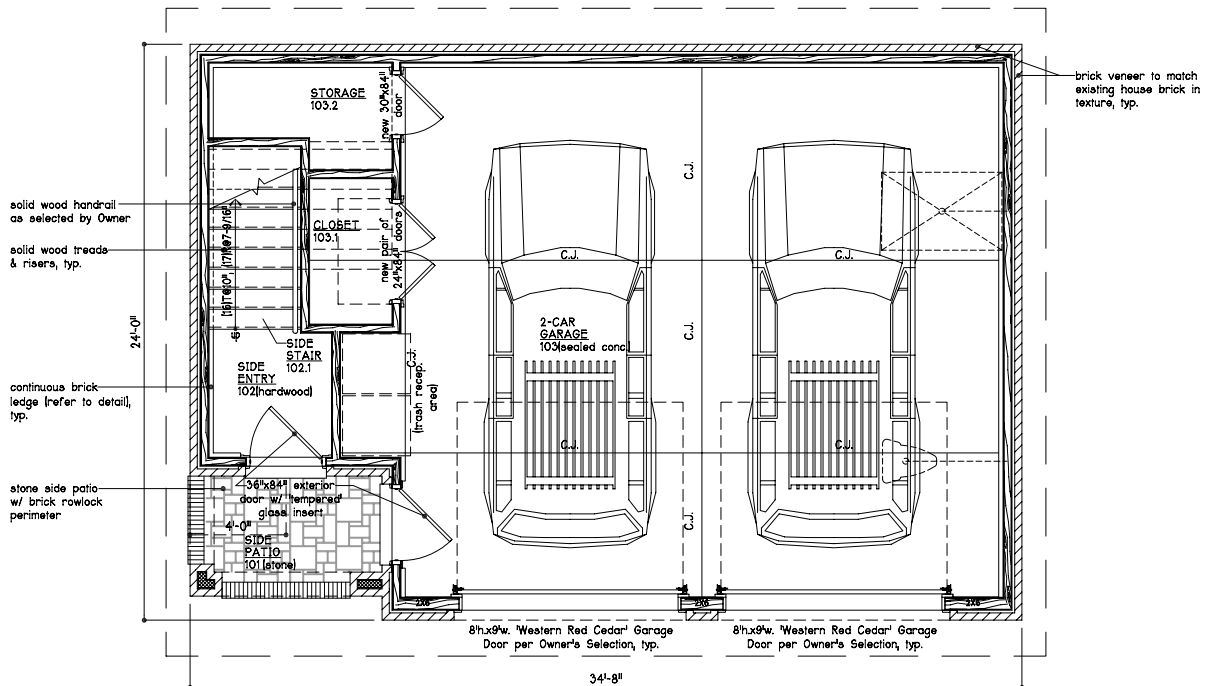
**A.G. ZOUTEWELLE
SURVEYORS**

1418 East Fifth St. Charlotte, NC 28204
Ph: 704-372-9444 Fax: 704-372-9555

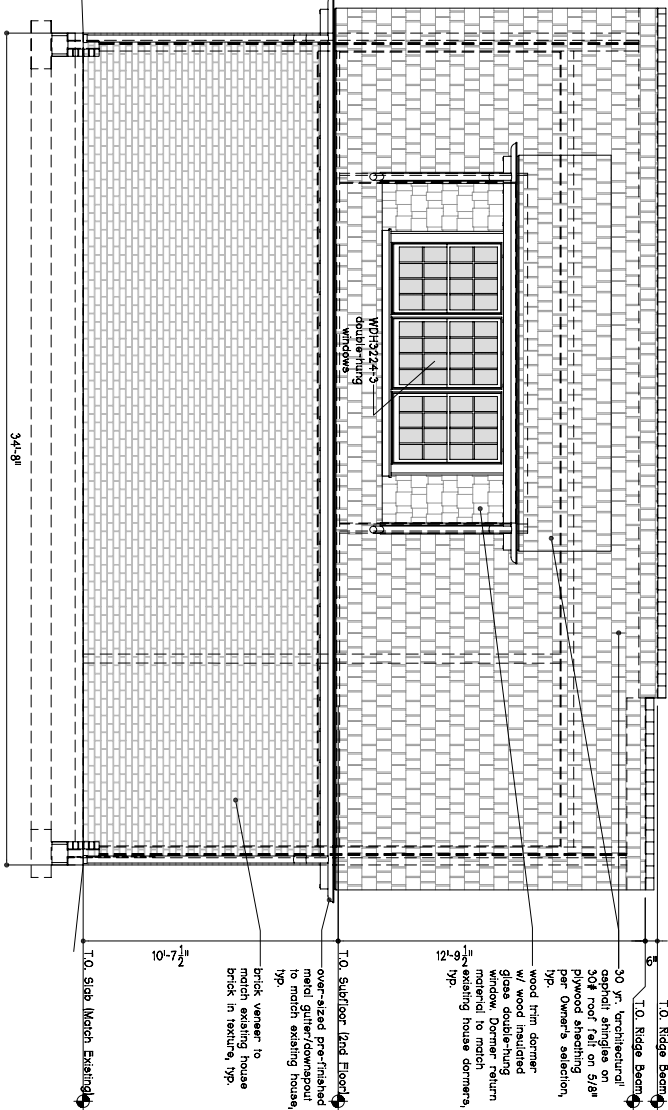
DILWORTHROAD318-2S



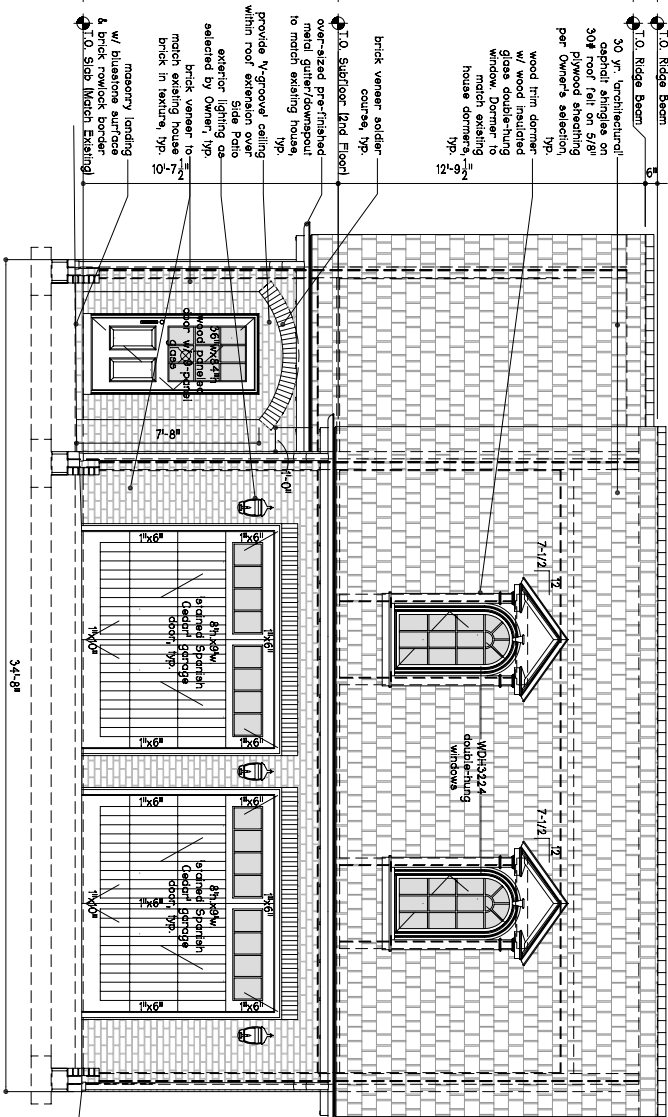
Coburn Residence (1318 Dilworth Rd.)
 'Detached Garage'
 Second Floor Plan [Proposed]
 Scale: 1/8"=1'-0"
 DDA, 02.15.11



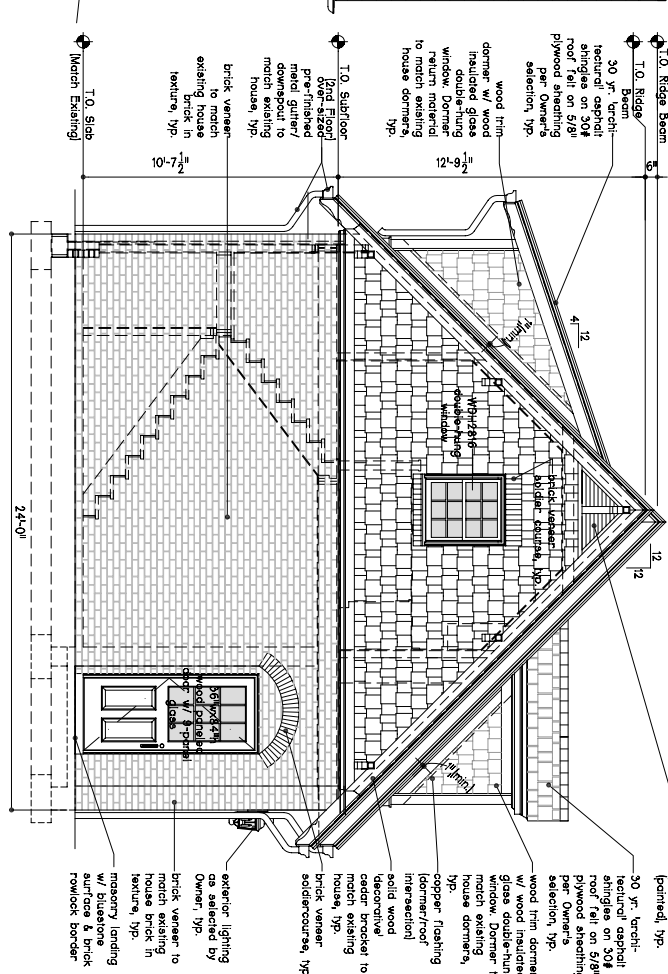
Coburn Residence (1318 Dilworth Rd.)
 'Detached Garage'
 First Floor Plan [Proposed]
 Scale: 1/8"=1'-0"
 DDA, 02.15.11



Coburn Residence [1318 Dilworth Rd]
'Detached Garage'
Rear Elevation [Proposed]
Scale: 1/8\"/>



Coburn Residence [1318 Dilworth Rd]
'Detached Garage'
Front Elevation [Proposed]
Scale: 1/8\"/>



Coburn Residence [1318 Dilworth Rd]
'Detached Garage'
Left Side Elevation [Proposed]
Scale: 1/8\"/>

Shannon Coburn

From: Charles Yandle [charles@stoneandbrick.com]
Sent: Tuesday, September 07, 2010 12:12 PM
To: scoburn2@carolina.rr.com
Subject: Brick Match Dilworth Rd.

Mrs. Coburn

In compliance with your request we attempted to match the brick on your home.
The sample we delivered to you reflects the best match available.
The texture of the sample we delivered is good. However the color is similar not perfect.
Please call when we can be of further assistance.
Sincerely Yours.

Charles Yandle

*Brick Yard Ltd.
1812 W. Morehead Street
Charlotte, NC 28208
PH: 704-379-7900/ FX: 704-379-7568
Email: charles@stoneandbrick.com*



BRICK YARD

Stone & Brick Specialist

GENERAL SHALE BRICK



BUILDING THE AMERICAN DREAM®

August 30, 2010

Ms. Coburn,

I appreciate the opportunity to find a brick to match your house located on 1318 Dilworth Road in Charlotte, NC. Unfortunately, we do not manufacture or distribute a brick to match the texture and color of your brick.

Sincerely,

Todd Wilkinson
Sales Representative



August 30, 2010

Mrs. Shannon Coburn
1318 Dilworth Road
Charlotte, NC 28203

Dear Mrs. Coburn,

After examining the brick on your home, I was unfortunately unable to determine the original manufacturer for it. Additionally, I was unable to find a brick that would match both the color and texture of your home. I have also researched other area manufacturers and distributors and again, I came up empty handed.

If there is a possibility that you only need to match the texture of the brick, I believe our Red Vertex or Red Rugtex would match the "Vertex" style texture of the brick on your home. I will be happy to put together a sample for you in the near future if you think that could be an option.

Please let me know if you have any questions.

Regards,

Matthew Harrison
Hanson Brick – Sales Rep.



4812 Hwy 74 West, Monroe, NC 28110
704.289.9599-O 704.283.8199-F

September 10, 2010

Mrs. Shannon Coburn
1318 Dilworth Road
Charlotte, NC

Thank you for the opportunity to visit your home, per your request, to identify the existing brick. After visiting your home and realizing that the brick is one, of a non common texture and second, a rare color. The texture of the brick is referred to as "scratch" or "vertex". The texture was very common many years ago, and only a few brick manufacturers still manufacture brick with this texture. With this being said the only colors available during this time are red or shades of red.

We at Palmetto Brick still manufacture red brick with this texture and we also have manufactured the current sample that I have proposed to you at this time as the "Palmetto Buffstone Scratch". You may find the texture of the brick more readily available, but the color will remain a challenge. I feel that the proposed brick is the closest that you will find at this time.

Please feel free to contact me with any questions or comments. Thank you again for the opportunity to submit a brick for your project and let me know if I or anyone with Palmetto Brick Company can help further.

Palmetto Brick Company,

A handwritten signature in black ink, appearing to read 'Chad Redwine', with a stylized flourish at the end.

Chad Redwine
District Sales Manager
704.309.6544
credwine@palmettobrick.com

G

GREBNER

BUILDERS

Shannon,

Per your request, I evaluated the brick veneer on your home, and took into consideration the stains of the front beneath the windows, the repairs on the right elevation around the door, and the point tuck repairs performed on the rear elevation. The veneer has many additional areas in need of repair which would require removal of broken brick and replacement of damaged grout. Your particular brick is no longer manufactured and a match will be impossible, therefore I would strongly suggest that you paint your brick veneer after the repairs are performed. This option will allow you to repair the damaged/aged veneer to the level in which it needs, and will minimize the amount of water the brick and mortar/grout joints can absorb when subjected to rain and power washing. Understanding that the house, when it was originally constructed, was not wrapped with a water-resistant house wrap such as Tyvek Paper, the brick and grout left untreated can allow water to make its way to the untreated wood structure behind. The untreated veneer will also allow tree sap and air born dust to stain the brick, which is currently evident on the front elevation. The original brick was installed with a grout joint referred to as "raked;" this particular joint leaves flat exposed surfaces on the top, outer edges of the brick that leave it susceptible to absorbing more water than grout joints that are tooled to the edge of the brick, such as concave or grapevine. I feel painting offers a better solution over sealing the brick because the thicker properties of high-quality masonry paint fills the voids and leaves a much more smooth finish, which will allow for easier cleaning in the future. The elasticity in the paint will offer a little more flexibility over the sealing, and will provide added protection as the brick veneer moves and shifts through normal seasonal changes. Painted brick houses can be cleaned with pressure washers set at lower pressures and do not require muriatic acid. Muriatic acid breaks down the adhesive properties of the Portland cement used in the grout, and will cause further erosion within the grout.

Thank you,

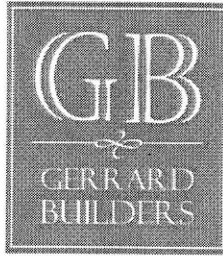


Richard A. Grebner
President, Grebner Builders, LLC

G
GREBNER
BUILDERS

10220 Woodview Circle
Charlotte, NC 28277

PHONE	(704) 622-2853
FAX	(704) 846-5144
EMAIL	agrebner@grebnerbuilders.com



Shannon Cobern,

As you requested, I visited your home and looked at the cracks in your brick wall. What I found is several areas that clearly show settling of the home. Based on the age of the home, I believe this to be very normal and expected. However, many of these areas are larger than "hairline" cracks and need to be sealed to prevent water infiltration and further cracking. At the rear right hand corner of the home, the settling has even displaced some bricks which should be removed and reset.

I agree with your assessment that using mortar to point up the cracked areas would be very unsightly and diminish the value of your home. I also agree that painting the home would resolve this issue of the obvious unsightly point-up. If you do decide to paint your home, I would recommend that Pecora Dynatrol be used to seal the brick cracks in lieu of mortar point-up. This product dries white, so must be painted if used. Because of this product's elastic nature, it will allow for further minor settling and will continue to maintain the bond of the brick much longer than mortar point up will.

In addition to the inspection of the home, I also inspected the garage. The garage is in a very decrepit state. Significant amount of brick has fallen off of the sides and most of the brick is missing from the rear of the garage. Much of the exposed wood structure is rotten. I would recommend demolishing this garage and reconstructing from start as the overall cost will be similar, but the structural and aesthetic outcome will be far superior. The brick surface profile should be an easy match, but I don't believe you will be able to find a suitable match for the brick color. In this case, the easiest solution would a painted surface.

If you have any questions regarding this assessment, please feel free to contact me at 704-241-8863, or by email at bgerrard@gerrardbuilders.com.

Thank you,

Bryan Gerrard, President

Gerrard Builders, LLC

NC Unlimited License #56843

H & H Enterprises of the Carolinas, Inc.

719 Brief Road West
Indian Trail, NC 28079

Cell: 704.634.3892 Fax: 704.275.4117 Office: 704.275.4117

Specializing in Turnkey Residential & Commercial: Footings - Poured In Place Concrete Walls - Brick, Block, & Stone Masonry - Concrete Flatwork

Brandon Hartsell

H & H Enterprises of the Carolinas, Inc.

719 Brief Road West
Indian Trail, NC 28079
January 28, 2011

Shannon Coburn

1318 Dilworth Rd
Charlotte, NC 28203

Re: Coburn Residence – Masonry Stain vs. Masonry Paint

Dear Mrs. Shannon Coburn,

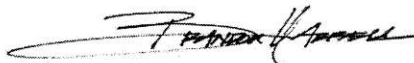
Thank you for the opportunity to consult with you in regard to the property located at 1318 Dilworth Road; Charlotte, NC 28203. The purpose of this document is to help you maintain the current structure as well as the historical integrity of the neighborhood.

First we will discuss Masonry Stain. When we stain a structure we are simply leaving everything in an as is state and placing a color pigment over it with a water repellent admixture. Staining will have to be redone every 10-20 years based on the exact exposure to the sun in order to keep all areas within the original color range applied. On our structure we have a raked joint in which the mortar has been completely struck out of the joint up to 3/8" into the brick. This is a breeding ground for water infiltration. Staining will not allow for a smooth surface to be placed within this area and water will continue to penetrate over time. Staining is a great way to match new projects with existing structures, but we usually only see this process used in the commercial field due to the strict project specifications.

Next, we will discuss Masonry Painting. When we paint a structure, we have the opportunity to cover up many imperfections in which may or may not be structurally taxing on our project. For instance we can saw out any masonry joints which may not be in passing structural condition prior to final caulking and paint application. During our site visit we noticed many structural movements noted by cracked or missing mortar joints and loose brick. These issues can be fixed by using a non-shrink mortar/grout and caulking the final 3/8" inch of our mortar joint prior to painting. Another issue with our structure is the water damage on the Front Elevation due to years of water penetration behind the brick which has leached the materials within the brick to the face of the brick and eventually down the façade of the Front Elevation. My suggestion is simply to find and replace all loose mortar, caulk as necessary, and apply up to four coats of Exterior Grade paint and every issue stated above will cease.

In conclusion, it is my professional recommendation based upon years of experience and collaboration with professionals from both venues in regard to this project, we move forward with a professional paint process, completed by a licensed residential builder, with a vast prior knowledge of paint applications to masonry surfaces.

Sincerely,



Brandon J. Hartsell
H&H Enterprises of the Carolinas, Inc.

NAWKAW OF THE CAROLINAS

A Division of Masonry Restoration, Incorporated
975 Sloan Road, Mt. Ulla, NC, 28125 * 704-642-0732 * fax 704-642-0733

January 25, 2011

Shannon Coburn
1318 Dilworth Road
Charlotte, NC

RE: Masonry Staining

Dear Shannon,

After meeting with you on January 24th to discuss the color of your brick, I have the following observations. Nawkaw of the Carolina's can stain the new brick on the new addition, however the final result will not be a complete match to the existing brick on your house. Nawkaw of the Carolina's feels more comfortable to stain the existing brick on the house to match any brick chosen for the addition. Nawkaw of the Carolina's will be able to provide an estimate at your request for the staining work at your house.

Please feel free to contact me at (704) 642-0732 (office) or (704) 400-2851 (mobile).
Sincerely,

Justin T. Raymer
Nawkaw of The Carolinas

Home Page

Using raked mortar joints

Source: MASONRY CONSTRUCTION MAGAZINE

Publication date: March 1, 2004

Many references strongly recommend using tooled mortar joints rather than raked joints. On many projects, however, raked joints are needed to match the historic fabric of the area. If this mortar has worked effectively in the past, what is the problem with using raked mortar joints in new buildings?

Tooled joints have a compacted surface. During proper tooling, the mortar is forced against the bond surfaces of the brick above and below the joint in the case of bed joints, and on either side of the joint in the case of head joints.

In raked joints, the mortar is not compact against the surfaces of the joint. Instead, the front portion of the mortar joint is scraped out. Raking the mortar out can open up voids in the head and bed joints that increase water penetration. Also, a ledge is formed on the top surface of the brick unit at the base of the bed joints. When raining, water flowing down the face of the wall collects on this ledge and readily penetrates the masonry at any separations or voids that occur on the bottom edge of the joint.

A commonly overlooked problem with masonry walls using raked joints is that these walls are often aggressively cleaned. When mortar is raked out of the joints, it is smeared on the edges of the brick at the recesses. To remove the mortar, contractors often clean the walls multiple times with acid solutions or moderate-to-high pressure water. These aggressive cleaning techniques can open up additional voids and separations, which increases the likelihood of water penetration.

Whenever possible, I recommend using tooled joints to provide a hard compact surface that is more durable and resistant to water penetration.

Sponsor Spotlight

ENGINEERING REPORT



447 South Sharon Amity Road, Suite 201
Charlotte, N.C. 28211
Office (704) 333-2221, Fax (704) 334-3366
mhleonardengineering.com

PROJECT #:	11E8786-I	Engineer: Michael H. Leonard, PE
DATE OF INSPECTION:	January 24, 2011	Eng. Tech: Michael R. Konen, LHI
DATE OF REPORT:	February 3, 2011	

(STFORM)

PAGE 1 of 2 MK/e

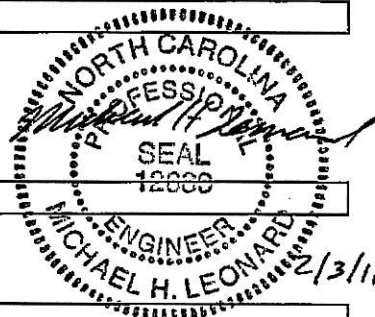
MAILING ADDRESS

Shannon Coburn
1318 Dilworth Road
Charlotte, NC 28203

M) 704-661-7378

STRUCTURE / DWELLING ADDRESS:

1318 Dilworth Road
Charlotte, NC



BASIS OF INSPECTION:

Specific: To determine the structural significance of exterior brick veneer stress cracks. To recommend corrections if needed.

This is a specific inspection for noted items only. It should not be considered an evaluation of the overall structure.

WEATHER AT TIME OF INSPECTION:

4:00pm: Partly Cloudy, Temp mid 40s, last measurable rain – January 18, 2011

FINDINGS:

General:

Two-story, single-family residence, approximately 80 to 85 years old. Asphalt/fiberglass roof shingles, conventional framing, brick veneer, 8-inch CMU and pier and curtain foundation. Lot slopes from back to front.

Note: In 2006, M.H. Leonard Consulting Engineers completed a structural inspection for the same party. Those findings are noted in MHLCE report #06E4449-I dated March 22, 2006.

Brick Veneer Stress Cracks:

There are brick veneer stress cracks at various locations as follows:

- Rear left – 3/8 inch wide, stair-step, propagating from the top of the foundation to grade.
- Left rear –
 - 1/4 inch wide, vertical, propagating from the windowsill rowlock to grade at 2 locations.
 - 1/8 inch wide, horizontal, propagating from the corner to the foundation vent opening, aligned with the top of the foundation. There is a 3/8 inch offset at this location.
- Right front (corner of the sunroom) – 1/16 inch wide, stair-step, propagating from the top of the foundation to grade.
- Right front (corner of the two story section) –
 - 1/4 inch wide, stair-step, propagating from the upper level windowsill rowlock to the top of the main level window.
 - 1/8 inch wide stair-step, propagating from the main level windowsill rowlock to grade.
- Right front (corner of the porch) – 1/16 inch wide, stair-step, propagating from the top of the porch surface to grade.

Brick veneer cracks of this magnitude are typically the result of differential settlement during the lifetime of the structure. That type of movement is usually caused by one or more of these factors:

- Variations in foundation bearing soil conditions.
- Expansive soils, common in this region (expand when damp, shrink when dry).
- Soil saturation (caused by poor/inadequate drainage).
- Unidentified conditions below grade (springs, voids, rock formations, etc.).

They can also be caused by thermal expansion/contraction or deflection in the frame.

These cracks appear to be the result of differential settlement caused by soil consolidation. This is probably caused by grade saturation and inadequate drainage. The walls were also subject to movement caused by tree root uplift.

Drainage improvements have been made and trees have been removed since our 2006 inspection and recommendations.

You indicated that 2 large trees were removed:

- At the rear left, 3-foot diameter tree located 4 feet from the foundation.
- At the front left, 5-foot diameter tree located 8 feet from the foundation.

Gutter downspout drains at the left rear were extended away from the structure.

CONCLUSIONS AND RECOMMENDATIONS:

The brick veneer stress cracks do not appear wider or longer than our findings during our 2006 inspection. Based on that, it appears that brick veneer movement has stabilized. However, long-term weather patterns can cause substantial changes in soil properties – allowing moisture content to change. Expansive soils are subject to shrink when dried or expand when damp – causing minor settlement cracking.

We recommend that the brick veneer cracks and exposed broken bricks be repaired to reduce the risks of water intrusion and further damage due to freeze-thaw cycles. In general, the following guidelines should be used regarding crack repairs in exterior veneers of this type:

- **Hairline cracks:**
Can be left without repair, but should be monitored
- **Stress cracks 1/8-inch wide or less without lateral offsets:**
Caulk with specific compounds with pliable properties (Dynatrol, or equal). Monitor and maintain to prevent water seepage and freeze-thaw damage.
- **Stress cracks more than 1/8-inch wide without lateral offsets:**
Point up mortar joints, replacing cracked bricks. This requires grinding affected joints to at least 3/4-inch depth, applying rich-mix color-matched mortar in 3 successive passes of 1/4-inch gauge, tooling outer layer to match wall. Wall components within field of work should be wetted before work to reduce risks of mortar shrinkage (cracking) during curing.
- **Stress cracks 1/8-inch wide or more with lateral offsets of 3/16-inch or more:**
Point up mortar joints, replacing cracked bricks, realigning masonry where possible.

Based on the age of the home, brick and mortar matching is difficult. The coloring and wear of the original veneer has weathered and the new brickwork will appear as patches. Painting/staining of masonry elements is a common cosmetic repair option to blend old and new veneer walls and we recommend its consideration.

Terms and Conditions of Inspection and Report:

- *Directions in this report* are based on standing on the street, facing the dwelling.
- This inspection is visual in nature from the perspective of an engineer or technician trained in structural design and construction.
- This report is the property of the client only. It is not transferable without written permission by M.H. Leonard, PE.
- **Limitations of Inspection and Report:**
 - *There are no warranties expressed or implied with this report.*
 - This offers an opinion based on visual inspection only, unless noted otherwise. No destructive testing or dismantling was done, unless noted.

Please read the entire report. If there are any questions or unclear items, please contact our office at 704 -333-2221.

Michael H. Leonard, PE

N.C. Licensed Engineer # 12680

End of Report

Charlotte Historic District Commission - Case 2011-021

