



CERTIFICATE OF APPROPRIATENESS PLACARD

for Raleigh Historic Resources

1024 DOROTHEA DRIVE

Address

BOYLAN HEIGHTS

Historic District

Historic Property

056-17-MW

Certificate Number

03-29-2017

Date of Issue

09-29-2017

Expiration Date

Project Description:

- Alter 13' of north side of foundation wall

This card must be kept pasted in a location within public view until all phases of the described project are complete. The work must conform with the code of the City of Raleigh and laws of the state of North Carolina. When your project is complete, you are required to ask for a final zoning inspection in a historic district area. Telephone the RHDC office at 832-7238 and commission staff will coordinate the inspection with the Inspections Department. If you do not call for this final inspection, your Certificate of Appropriateness is null and void.

Signature

Raleigh Historic Development Commission

Pending the resolution of appeals, commencement of work is at your own risk.

Raleigh Historic Development Commission – Certificate of Appropriateness (COA) Application



**DEVELOPMENT
SERVICES
DEPARTMENT**

Development Services
Customer Service Center
One Exchange Plaza
1 Exchange Plaza, Suite 400
Raleigh, North Carolina 27601
Phone 919-996-2495
eFax 919-996-1831



<input checked="" type="checkbox"/> Minor Work (staff review) – 1 copy <input type="checkbox"/> Major Work (COA Committee review) – 10 copies <input type="checkbox"/> Additions Greater than 25% of Building Square Footage <input type="checkbox"/> New Buildings <input type="checkbox"/> Demo of Contributing Historic Resource <input type="checkbox"/> All Other <input type="checkbox"/> Post Approval Re-review of Conditions of Approval	<p style="text-align: center;">For Office Use Only</p> Transaction # <u>505683</u> File # <u>056-17-MW</u> Fee <u>\$29</u> Amount Paid <u>\$29 via CC</u> Received Date <u>2/3/17</u> Received By <u>ACT</u>
--	--

Property Street Address **1024 Dorothea Drive, Raleigh, NC 27603**

Historic District **Boylan Heights**

Historic Property/Landmark name (if applicable)

Owner's Name **Travis J. Bailey and Melissa Bailey**

Lot size **.21 Acre** (width in feet) (depth in feet)

For applications that require review by the COA Committee (Major Work), provide addressed, stamped envelopes to owners of all properties within 100 feet (i.e. both sides, in front (across the street), and behind the property) not including the width of public streets or alleys (Label Creator).

Property Address	Property Address

I understand that all applications that require review by the commission's Certificate of Appropriateness Committee must be submitted by 4:00 p.m. on the application deadline; otherwise, consideration will be delayed until the following committee meeting. An incomplete application will not be accepted.

Type or print the following:

Applicant Travis J. Bailey

Mailing Address 1024 Dorothea Drive

City Raleigh

State NC

Zip Code 27603

Date 03/3/17

Daytime Phone (919)604-3613

Email Address tjbailey10@gmail.com

Applicant Signature

Will you be applying for rehabilitation tax credits for this project? Yes No

Did you consult with staff prior to filing the application? Yes No

Office Use Only

Type of Work

37

Design Guidelines - Please cite the applicable sections of the design guidelines (www.rhdc.org).

Section/Page	Topic	Brief Description of Work (attach additional sheets as needed)
3.2.7	Masonry	A tree recently removed (COA 205-16-MW) has caused structural damage to the home's foundation. A structural engineer inspected the home's foundation and provided a sealed report (attached). In addition to several pier's needing replacement a 13 foot section of the home's retaining wall will also need to be replaced. Contractor is unable to use existing brick pavers in replacement wall due to city building codes. This wall joins with a previously replaced section of the home's foundation wall. The new wall will match the existing repaired wall's materials (8x16 CMU block) and will be painted to match the current foundation wall's color. Photo's of the area attached. Color photos can be emailed at request.
3.2.10	Masonry	

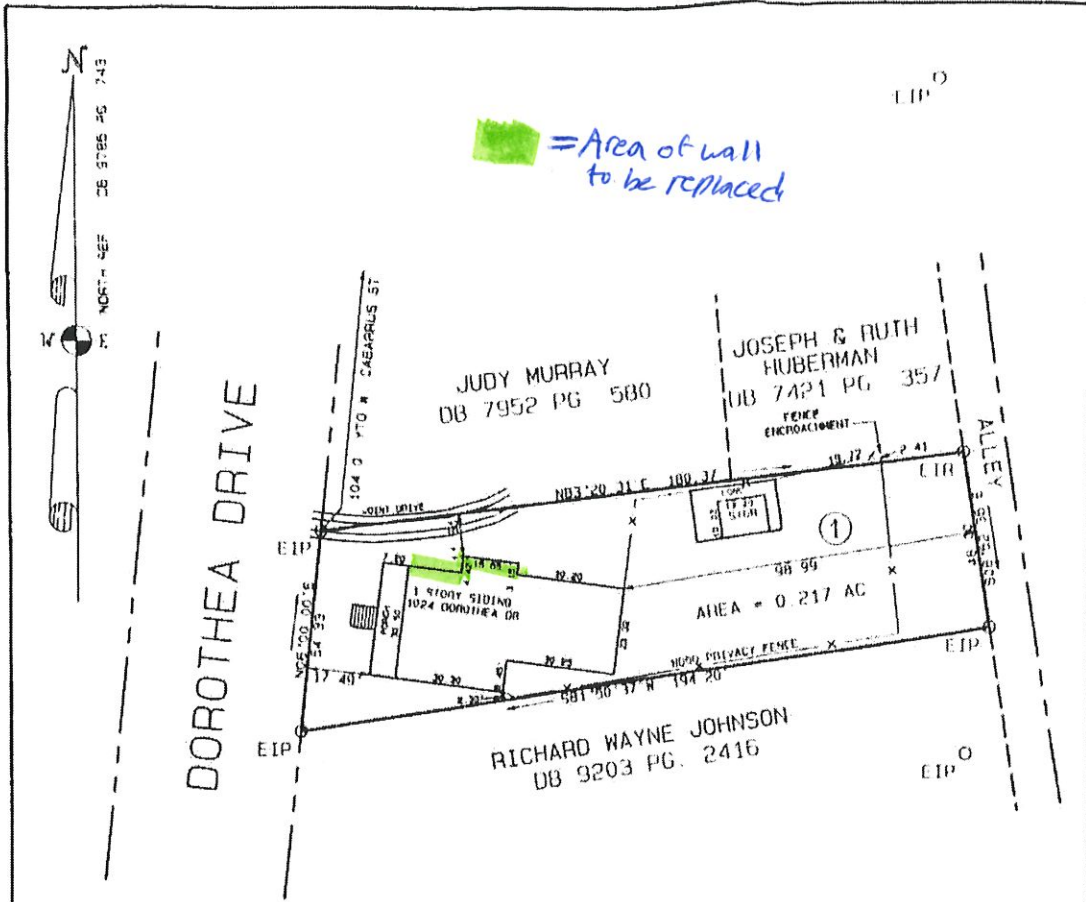
Minor Work Approval (office use only)

Upon being signed and dated below by the Planning Director or designee, this application becomes the Minor Work Certificate of Appropriateness. It is valid until 9/27/17. Please post the enclosed placard form of the certificate as indicated at the bottom of the card. Issuance of a Minor Work Certificate shall not relieve the applicant, contractor, tenant, or property owner from obtaining any other permit required by City Code or any law. Minor Works are subject to an appeals period of 30 days from the date of approval.

Signature (City of Raleigh) [Signature] Date 3/29/17

	TO BE COMPLETED BY APPLICANT		TO BE COMPLETED BY CITY STAFF		
	YES	N/A	YES	NO	N/A
Attach 8-1/2" x 11" or 11" x 17" sheets with written descriptions and drawings, photographs, and other graphic information necessary to completely describe the project. Use the checklist below to be sure your application is complete. <u>Minor Work (staff review) – 1 copy</u> <u>Major Work (COA Committee review) – 10 copies</u>			X		
1. Written description. Describe clearly and in detail the nature of your project. Include exact dimensions for materials to be used (e.g. width of siding, window trim, etc.)	<input checked="" type="checkbox"/>		X		
2. Description of materials (Provide samples, if appropriate)	<input checked="" type="checkbox"/>		X		
3. Photographs of existing conditions are required. Minimum image size 4" x 6" as printed. Maximum 2 images per page.	<input checked="" type="checkbox"/>		X		
4. Paint Schedule (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>			
5. Plot plan (if applicable). A plot plan showing relationship of buildings, additions, sidewalks, drives, trees, property lines, etc., must be provided if your project includes any addition, demolition, fences/walls, or other landscape work. Show accurate measurements. You may also use a copy of the survey you received when you bought your property. Revise the copy as needed to show existing conditions and your proposed work.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	X		
6. Drawings showing existing and proposed work <input type="checkbox"/> Plan drawings <input type="checkbox"/> Elevation drawings showing the façade(s) <input type="checkbox"/> Dimensions shown on drawings and/or graphic scale (required) <input type="checkbox"/> 11" x 17" or 8-1/2" x 11" reductions of full-size drawings. If reduced size is so small as to be illegible, make 11" x 17" or 8-1/2" x 11" snap shots of individual drawings from the big sheet.	<input type="checkbox"/>	<input type="checkbox"/>			X
7. Stamped envelopes addressed to all property owners within 100 feet of property not counting the width of public streets and alleys (required for Major Work). Use the <u>Label Creator</u> to determine the addresses.	<input type="checkbox"/>	<input type="checkbox"/>			X
8. Fee (See Development Fee Schedule)	<input type="checkbox"/>		X		

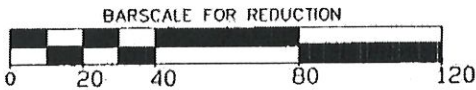
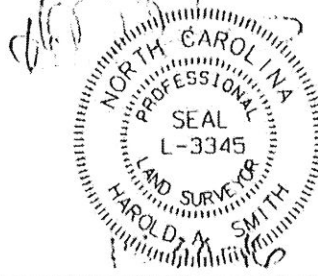
\$29



ZONING = R-10
 SETBACKS : FRONT = 10'
 SIDE = 5'
 REAR = 20'
 EXIST. IMPERVIOUS = 2289 SQ.FT. (24%)

WAKE COUNTY, NORTH CAROLINA
 I, HAROLD A. SMITH, PLS L-3345,
 CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY
 SUPERVISION FROM AN ACTUAL SURVEY MADE
 UNDER MY SUPERVISION FROM INFORMATION
 SHOWN IN DEED BOOK 13589 PAGE 2598,
 AND DEED BOOK ----- PAGE ----
 BOOK OF MAPS 1920 PAGE 75
 THAT THE RATIO OF PRECISION AS CALCULATED
 BY LATITUDES AND DEPARTURES WAS GREATER
 THAN 1/20,000, THAT THIS PLAT WAS PREPARED
 IN ACCORDANCE WITH G.S. 47-30 AS AMENDED
 WITNESS MY ORIGINAL SIGNATURE, REGISTRATION
 NUMBER, AND SEAL THIS THE 30TH DAY OF
 DECEMBER A.D., 2016

- GENERAL NOTES:
- 1) THIS IS A SURVEY OF AN EXISTING PARCEL.
 - 2) NO NCGS MONUMENT WITHIN 2000'
 - 3) THIS LOT IS NOT WITHIN A FLOOD PLAIN ACCORDING TO FEMA MAP COMMUNITY PANEL NO. 3720170300J.
 - 4) THIS MAP IS NOT FOR RECORDING.
 - 5) EIP=EXISTING IRON PIPE
 NIP=NEW IRON PIPE
 EIR=EXISTING IRON REBAR
 NIR=NEW IRON REBAR



LOT 1, BOYLAN HEIGHTS SUBD. AS RECORDED IN BOOK OF MAPS 1920 PAGE 75 OF WAKE COUNTY REGISTER OF DEEDS.

A SURVEY FOR

MELISSA WILLIAMS BAILEY & TRAVIS J. BAILEY
 RALEIGH, NORTH CAROLINA

HAROLD "TODD" SMITH
 LAND SURVEYING L-3345
 RALEIGH, N.C. (919) 605-6953

DATE 12-30-16 SCALE 1" = 40' FB 5-243/21 DWC NO. 216-519L PHO. NO. 216-519

VICINITY MAP

Advanced Structural Repair, LLC
 PO Box 3185
 NC US
 (919) 377-0796
 drewv@advancedsr.com

Estimate

ADDRESS
 Travis Baily
 1024 Dorothea Dr.
 Raleigh, NC 27603

SHIP TO
 Travis Baily
 1024 Dorothea Dr.
 Raleigh, NC 27603

ESTIMATE #	DATE
1688	02/17/2017

ACTIVITY	QTY	RATE	AMOUNT
05 Masonry Masonry - Remove and replace approximately thirteen linear feet of left side pier and curtain wall with a new 8x16 CMU block wall on 16" x 8" thick poured concrete footing.set at least twelve inches into suitable soils.	✓ 13	375.00	4,875.00
Floor Frame Floor Framing - Remove and replace the deteriorated rim girder according to engineering recommendations.	✓ 1	3,175.00	3,175.00
05 Masonry Masonry - Remove and replace the two deteriorated piers recommended in the report. Piers will be 16x16 CMU block piers on 24x24 footings set at least twelve inches into suitable soils.	✓ 2	650.00	1,300.00
05 Masonry Masonry - Add an additional 16x16 CMU block pier beneath the front end of the improperly supported girder.	✓ 1	650.00	650.00
05 Masonry Masonry - Add a new foundation vent at the left rear of the home at the addition.	1	375.00	375.00
05 Masonry Masonry - Point up cracks in the perimeter of the home and replace missing brick according to engineers requirements.	✓ 1	1,495.00	1,495.00
Permit Fee	1	475.00	475.00
TOTAL			\$12,345.00

Please note: Payment is due upon completion of the job.

Accepted By

Accepted Date

If you have any questions feel free to contact any of us at the following:

Drew Vallery at: Drewv@advancedsr.com
 Carlos Barahona at: Carlosb@advancedsr.com
 Irma Barahona at: Irmab@advancedsr.com

Charles LaVerdiere, PE
Stonewall Structural Engineering, PLLC
8358 Six Forks Rd, #201
Raleigh, NC 27615
(919)407-8663



Travis J Bailey
1024 Dorothea Dr.
Raleigh, NC 27603

Re: Structural Observation—1024 Dorothea Drive, Raleigh, NC 27603

Mr. Bailey,

At your request, on Friday, February 3rd, 2017, we performed a visual structural observation of a reported leaning foundation and concerns related to a recently removed tree at the Raleigh residence noted above. The structure is a conventionally framed, detached, one-story, single family residence with raised first floor framing over a pier/girder foundation system with partial perimeter masonry pier/curtain walls and partial perimeter masonry foundation walls (*see picture 1*).

Our observations included the following (indicators such as “left,” “right,” “front,” and “back” are oriented from a view of the front entryway to the home):

FOUNDATION

- An approximately 13’ section of the perimeter masonry pier/curtain wall near the front-left of the home was noted to be significantly leaning and in a state of disrepair (*see pictures 2-3, for examples*).
 - A large tree stump was noted adjacent to the leaning section of the perimeter masonry pier/curtain wall.
 - Humps in the floor and a racked interior door were noted within the home adjacent to the area of concern (*see pictures 4-5, for examples*).
 - Additionally, the perimeter rim beam above the damaged portion of perimeter wall was noted to be in disrepair (*see picture 6, for example*).
 - Joists were out-of-contact with the sheathing at various locations along the same area.

ADDITIONAL OBSERVATIONS

- The (2) front-most piers along the leftmost girder at the front-left of the crawlspace were noted to be haphazard and deteriorated (*see picture 7*).
 - Additionally, the girder was inadequately supported at its front end (*see picture 8*).
- Mortar joints were noted to be deteriorated at various locations throughout the crawlspace.

Upon completion of our analysis we have concluded the following:

- We believe the above-noted damaged portion of the foundation system and first floor framing system have been the result of the large tree near the front-left corner of the structure.

We recommend the following work be performed by a qualified general contractor:

- Remove the above-noted damaged section of the perimeter masonry pier/curtain wall and replace it with a vented, conventional perimeter masonry pier/curtain wall or foundation wall in accordance with applicable provisions of the *NC Residential Building Code*:

CURTAIN WALL OPTION

- Install new 8"x16" hollow CMU piers with 4" solid caps centered over 24"x24"x8" thick poured concrete footings set at least 12" into suitable bearing soils at 6' on center max spacing (use approximately equal spacing), and beneath rim beam splice locations.
- Install a 4" (minimum) conventional vented masonry curtain wall around the perimeter of the home over the center of a 12" wide x 6" thick poured concrete footing set at least 12" into suitable bearing soils (mono-pour curtain wall and pier footings).
- Piers and curtain wall elements should be constructed integral with each other.

FOUNDATION WALL OPTION

- Foundation wall should be full height CMU with at least 8" clearance between the top of the masonry wall and the top of the adjacent exterior grade.
- Perimeter footings should be at least 16" wide x 8" thick poured concrete set at least 12" into suitable bearing soils.
- CMU walls should have 8" solid grouted cap blocks. Treated 2x sill plates should be anchored to the top of the foundation wall using ½" diameter anchor bolts with 7" embedment into the cap block. Anchors should be spaced at 6' on center and 12" maximum / 5" minimum from plate ends and breaks.
 - Simpson "Universal Foundation Plates" may be used as a 1:1 replacement for ½" diameter bolts.
- Upon removal of the existing perimeter masonry pier/curtain wall, remove any remaining roots and the tree stump from the area below the location of foundation footings, and fill remaining depressions and voids with properly compacted fill material.
- Remove the above-noted damaged section of the perimeter rim beam, and replace it as follows:
 - If the wall is to be replaced with a pier/curtain wall system, remove the damaged section of the perimeter rim beam, and replace it with full depth built-up (3)2x (minimum) treated #2 Southern Yellow Pine (SYP) material. Reattach joists to the faces of the new members using Simpson face hangers. Additional 2x plies may be necessary to match the widths of the removed rims and girders should only be spliced over the centers of piers.
 - If the wall is to be replaced with a foundation wall, then the rim beam should be replaced with a full depth 2x rim band, built-up as needed to fill the space at the ends of the floor joists. Joists should be fastened directly to the inside face of the new rim if they have less than 1½" of bearing over the new sill plate.
- Remove the and replace the above-noted deteriorated piers and replace them with new 16"x16" hollow CMU piers with solid 4" caps centered over 24"x24"x8" thick poured concrete footings.
 - * ○ Additionally, add a 16"x16" hollow CMU pier with a solid 4" cap centered over a 24"x24"x8" thick poured concrete footing set at least 12" into suitable bearing soils beneath the front-end of the above-noted improperly supported girder.

February 9, 2017

Project No. 17-069

- A qualified mason should spot replace/repair loose bricks, and repoint all deteriorated mortar joints.

The above-listed determinations were made in accordance with common engineering principles and the intent of the 2012 edition of the *North Carolina Residential Building Code*. Sequencing, and means and methods of construction are considered to be beyond the scope of this report. Contractor is to provide adequate temporary shoring prior to cutting or removing structural load bearing elements. Please feel free to contact us, should you have any questions or concerns regarding this matter.

Sincerely,
Chuck LaVerdiere, PE
Stonewall Structural Engineering, PLLC
Lic. #P-0951



02-09-17

PICTURE ADDENDUM



Picture 1 – 1024 Dorothea Drive, Raleigh, NC



Picture 2 – Example of leaning pier/curtain wall



Picture 3 – Example of leaning pier/curtain wall



Picture 4 – Racked interior doorway at front room



Picture 5 – Hump in floor at front room



Picture 6 – Damaged perimeter rim beam



Picture 7 – Deteriorated masonry piers along leftmost girder



Picture 8 – Inadequate support at front end of leftmost girder

