

A photograph of the Circular Congregational Church, a large stone building with a prominent central tower and a circular apse, set against a cloudy sky. In the foreground, a cemetery with various stone monuments is visible. The entire image is overlaid with a semi-transparent teal filter.

Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church

SIMEON WARREN, BRENT FORTENBERRY, WILL BULLOCK, HOSEA SANDSTROM

Background

HOW IT ALL STARTED

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church

BACKGROUND

Spring 2017

Simeon Warren of American College of Building Arts and Stephen Cofer-Shabica, Sexton of the Circular Congregational Church, meet to discuss graveyard maintenance

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church



Fall 2017

Public awareness of potential danger, survey site

- Become aware: develop a simple survey of site
- Mark stones which have a potential to cause harm
- Site's responsibility to act upon any dangers to the public
- Be proactive. Don't wait for an accident



BACKGROUND

Fall 2017

Conversation evolved towards stabilizing monuments and the opportunity to educate new craftspeople using the sites historic fabric

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church



BACKGROUND

Fall 2017

American College of the Building Arts

- Masonry Class to Stabilize Monuments
- Students
 - Jackie Uργο
 - Maggie Adkins
- Professor Simeon Warren

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church





Monument Stabilization

ASSESS, CLEAN, AND REPAIR

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church

Assess and Secure

Stabilize monuments which cannot be left alone with temporary means

- Consult an expert if necessary



Stabilize and Repair

Reinstall on a sound foundation

- Use original materials



Clean

Remove the organics on the stone using a soft brush and D2



From Hazard to Stable

- New foundation
- New bricks
- Full bed joints
- No epoxy
- All natural materials
- Clean / remove organics on stone
 - NOTE: Stone in background will likely have a similar issue in ten years time as it was stabilized in the same manner











MONUMENT STABILIZATION

Halloween Mischief

Expect the unexpected

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church















State Historic Preservation Office (SHPO) Grant Application

PRESERVATION GRANTS

Project Funding

Grant application for documenting the site and continued maintenance

- March 1st, 2018
- South Carolina Department of Archives and History
- Contact Brad Sauls



Project Funding

The Circular Congregational Church (CCC) Graveyard Documentation and Preservation Education Initiative

- A collaboration between CCC and the American College of the Building Arts (ACBA) utilizing four areas of focus:
 - Part A: Hands-on preservation and conservation workshop for ACBA students
 - Part B / C: Professional hands-on graveyard workshop for preservationists and seminars for managers of historic graveyards
 - Part D: Develop new conditions assessment and documentation model



Public Workshop

May 2019 – Open to the public as well as students

Instructors

- Professor Simeon Warren, ACBA
- Moss Rudley, NPS Superintendent of HPTC
- Jon Appel, Atlas Preservation



Community at Work

- Dig
- Make upright
- Replace soil & sand
- Utilize stable materials
 - Marble rock & granite











From Analog to Digital

LEVERAGING PRINT RECORDS TO CREATE AN ONLINE DATABASE

The Seven Binders

The church had a wonderful recorded history of its monuments

- Neatly organized in 3-ring binders
- Locked in the church office
- No public access
- No backups

GRAVESTONE RECORD Circular Congregational Church

FAMILY NAME	WELLS	NAME ON STONE	Henry D Wells
DEATH DATE	1870 May 30	AGE AT DEATH	40+ yr
BIRTH DATE	1829 Aug 30	PLACE OF BIRTH	
FOOTSTONE	H D W / 1870		

STONE INSCRIPTION:

Sacred / to the memory of / HENRY D WELLS / Born / Aug 30th 1829 /
Died / May 30th 1870. /
[ALL CAPS]

STONE ART NOTES:

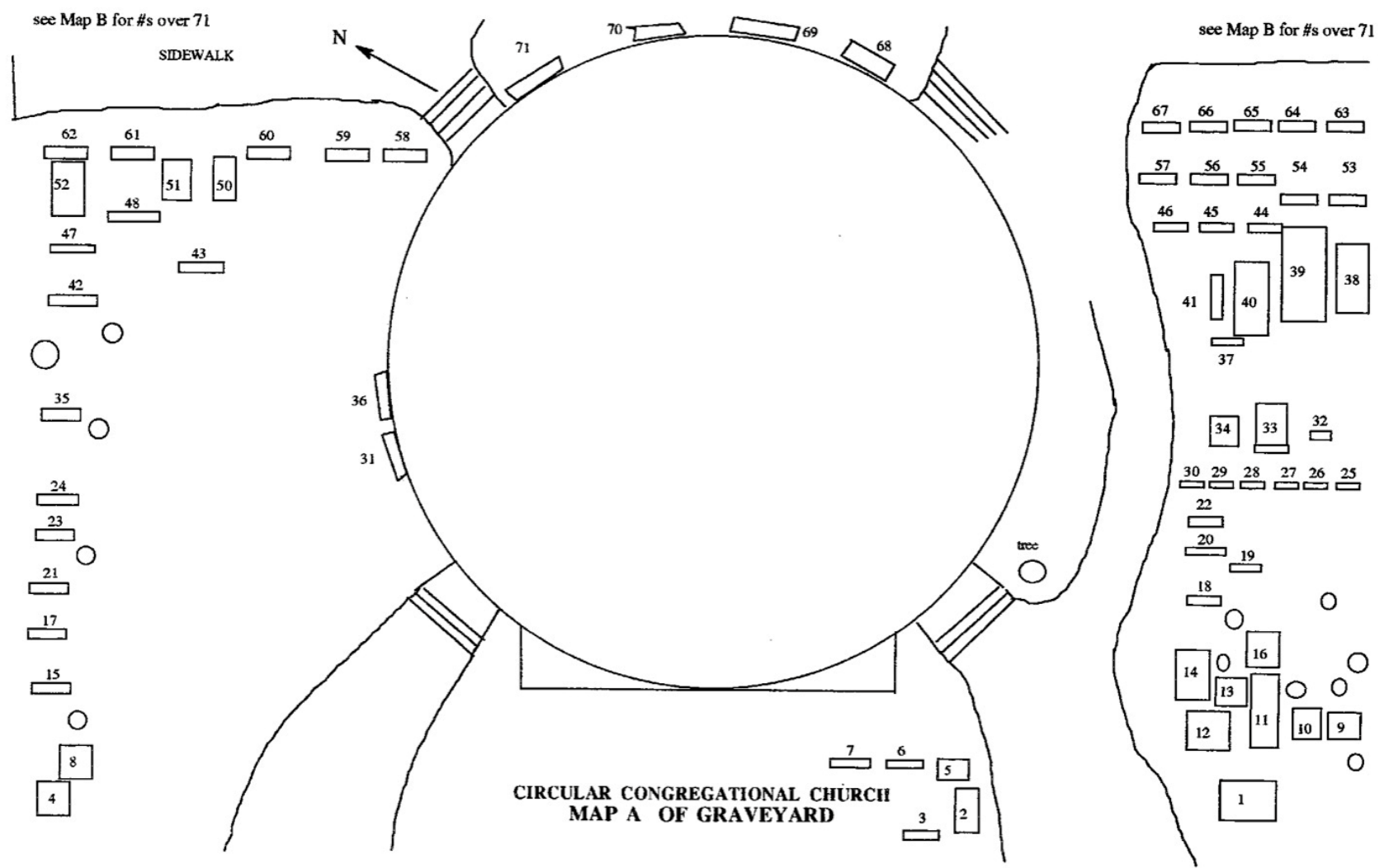
upright marble on sandstone base; decorative marble cradle; low sandstone
wall around #279-#281; carver: D A Walker

COMMENTS:

MAP LOCATION --- 279 P

DAR 043

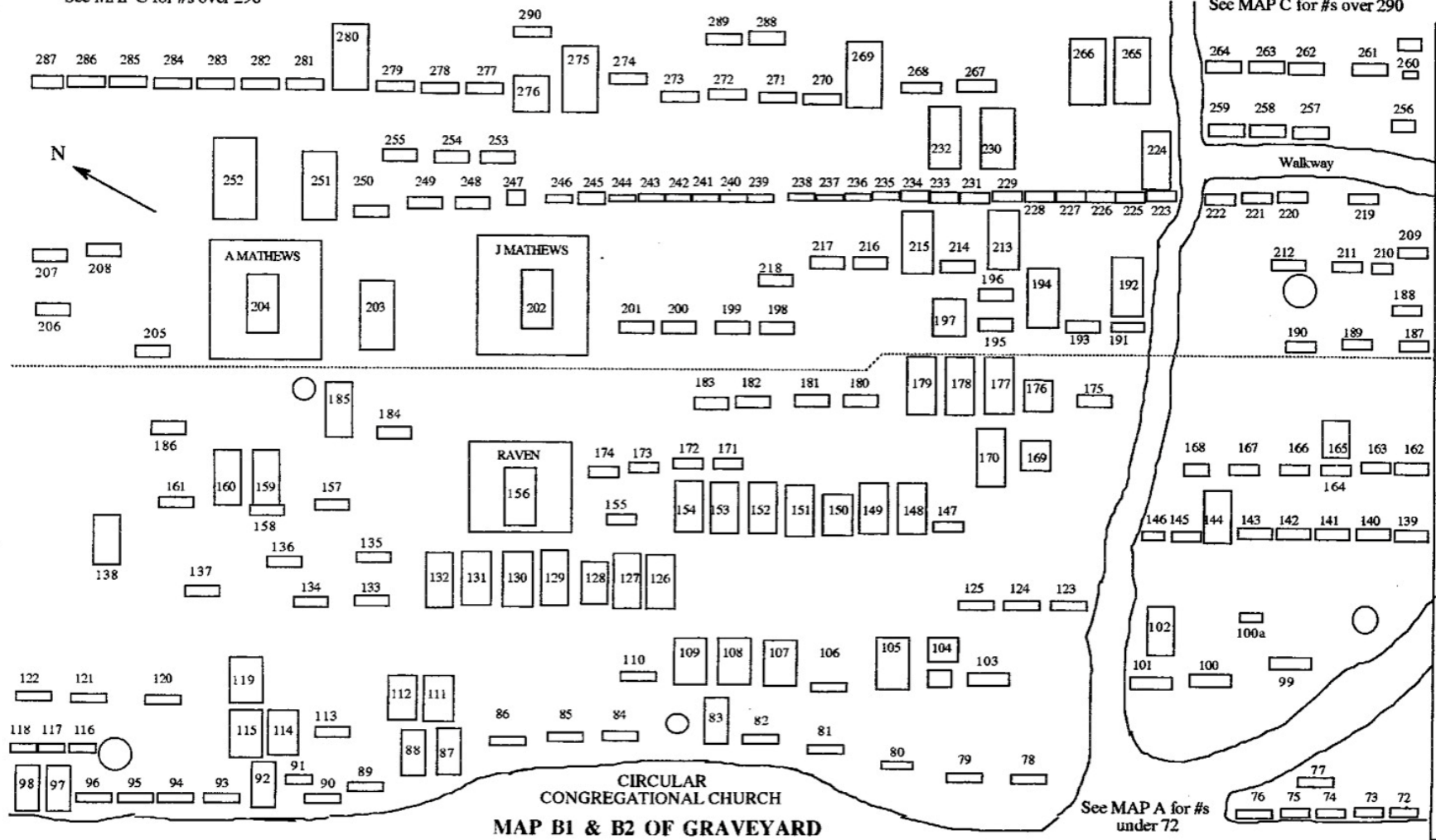




CIRCULAR CONGREGATIONAL CHURCH
MAP A OF GRAVEYARD

See MAP C for #s over 290

See MAP C for #s over 290

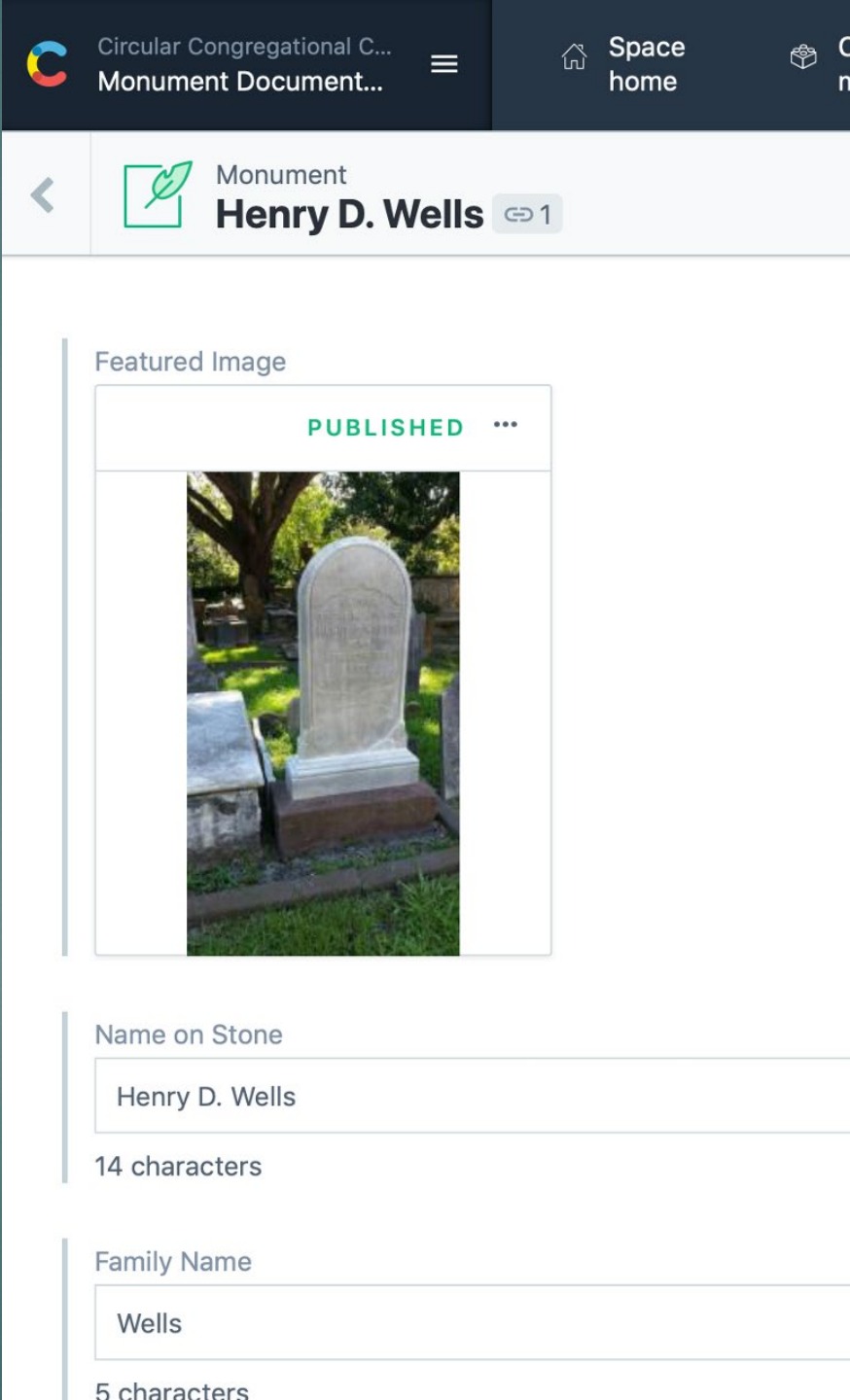


CIRCULAR CONGREGATIONAL CHURCH
MAP B1 & B2 OF GRAVEYARD

See MAP A for #s under 72

Developing Digital Content

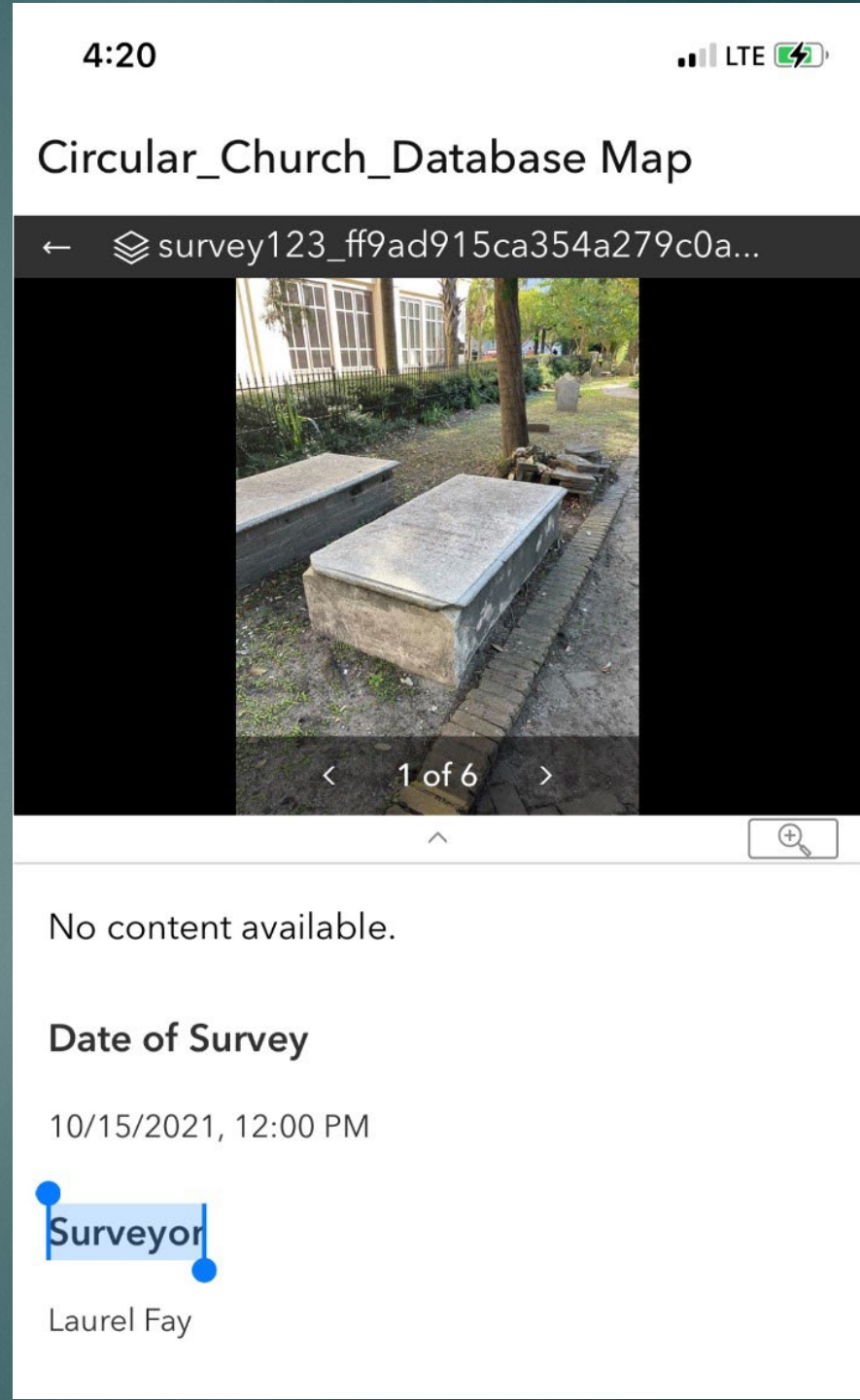
- Set up a new database structure with fields based on the original binders
- Utilized volunteer manpower to capture and input:
 - Existing content from binder pages
 - Monument photos
 - Current conditions assessments
 - Historic cultural resources data
 - Additional research notes
 - Videos such as oral history



ArcGIS

Brent R. Fortenberry, Associate Dean of Research & Graduate Studies, Louisiana State University

- Previously: Tulane
- Utilized ArcGIS and worked with his students to capture:
 - Survey123 form for content entry
 - Additional monument photos
 - Present conditions assessments
 - Site mapping



Circular Congregational Church – Monument Assessment

Evaluated by: _____ Date: _____

First Name: _____ Last Name: _____

Family Name: _____

Plot Number: _____ Artisan: _____

Footstone:

- Yes
- No

Type (Choose One):

- Tablet/Standing headstone, ground mounted
- Tablet/Standing headstone, with base
- Tablet/Standing headstone with border motif, ground mounted
- Tablet/Standing headstone with border motif, with base
- Tablet/headstone, wall mounted (plaques, reinstalled fragments, etc.)
- Standing monument (obelisks, columns, figures, etc.)
- Flat stone, square
- Flat stone, shaped profile
- Box tomb/vault
- Footstone
- Fencing/enclosure
- Mausoleum

Construction methods (Choose One):

- Dry fit
- Mortar (note mix, presence of Portland cement, historic lime mortar if possible)
- Metal pins, cramps, dowels, or fasteners, original (*note type of metal: wrought, cast iron, mild steel, bronze, lead, etc.)
- Metal pins, cramps, dowels, or fasteners, part of repair campaign (*note type of metal: wrought, cast iron, mild steel, bronze, lead, etc.)

Fencing/Enclosure:

- Yes
- No

Materials (Choose All That Apply):

- Brick
- Marble
- Granite
- Slate
- Sandstone
- Brownstone
- limestone
- Artificial stone: Cast stone/concrete/ composite stone
- Soapstone
- Stucco coating
- Blue stone
- Grave goods
- Other: _____

Style (Choose One):

- Lettering, hand (include transcriptions)
- Lettering, machine/modern tools
- Carvings, illustrations, relief work, motifs
- Sculpted/ three dimensional work
- Denomination/ belief system specific
- Stylistic elements indicative of a time period
- Folk/vernacular features

Size:

- Height: _____
- Width: _____
- Depth: _____

Prioritization (Choose One):

- Urgent: within a year
- Moderate: within 5 years
- Mild: long term monitor

Date of Next Review: _____

Site Description: _____

Previous repairs (Choose All That Apply):

- Replacement pieces, sympathetic (such as a replacement carved stone)
- Replacement pieces, unsympathetic (cement or materials out of keeping with original fabric.)
- Sandblasting
- Coatings
- Chemical scarring or damage from earlier cleaning
- Epoxies, consolidants, glues to re-adhere damaged pieces

- Vegetation
- Cracking
- Spalling
- Delamination
- Efflorescence
- Flaking

Suggested Repair (Choose All That Apply):

- Sod/vegetation removal, landscaping
- Cleaning
- Repairing
- Resetting
- Mortar repair/repointing
- Replacements
- New foundations
- Stabilizing/mothballing/protective enclosure
- Fragment storage
- Reconstruction/replacement

Current Conditions (Choose All That Apply):

- General rating: excellent, good, fair, poor, risk of loss
- Settling/ out of plumb/ off level
- Loose stones/out of place stones/ fragments
- Weathering/ erosion of carving/lettering
- Weathering/erosion of structural elements/stone shapes
- Rising damp
- Soiling

Repair Protocol: _____

Marker Number

Unique ID

Marker Descriptor

A short descriptive layman's name for the marker.
For example: John Doe Cross or Jane Doe Tablet

Name

Name of persons interred, if applicable

Date of Birth

Date of birth of the deceased listed on the marker.
Date format - choose the most applicable
mm/dd/yyyy
mm/xx/yyyy
xx/xx/yyyy
N/A

Surface Texture
 Rough hewn

 Smooth

 Polished

 Other
Primary Material(s)

Check all that apply

 Bronze

 Granite

 Limestone

 Marble

 Slate

 Wood

 Brick
Overall Condition Rating

Poor - requiring immediate stabilization or treatment
Fair - expected to require treatment in the next year
Good - stable, but could use light treatment
Excellent - like new/recently treated

Primary Photo*

Photo of grave marker

Drop image here or select image

**Additional Photos**

1 Drop image here or select image

**Comments**

Please note any details, elements, conditions, or additional notations that are relevant to this marker.



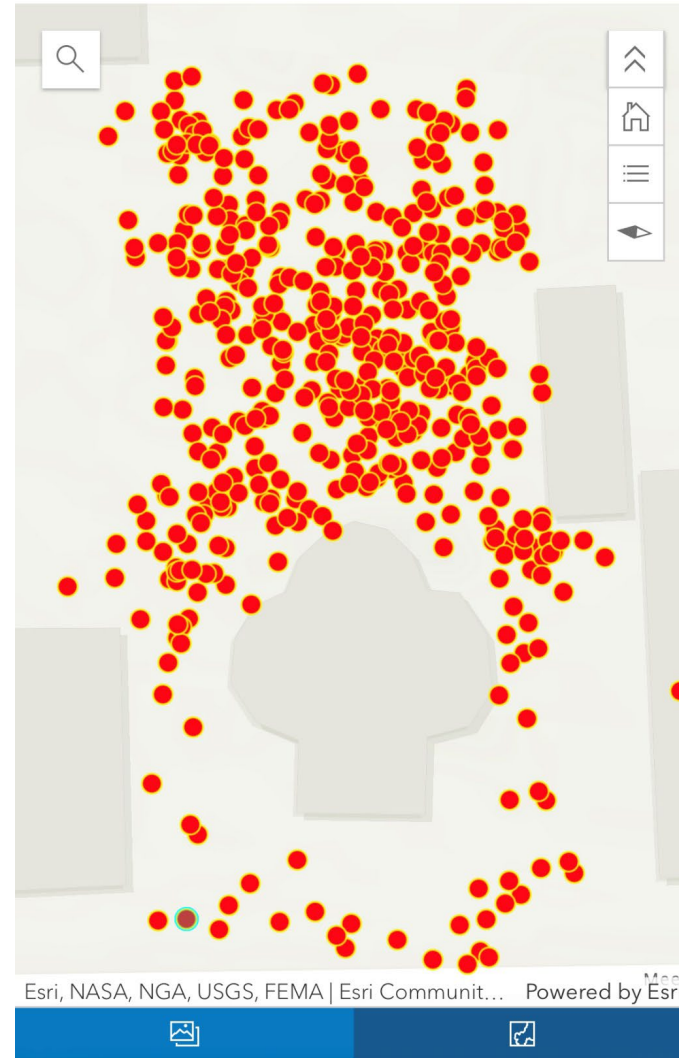
EZRA ALBERT STITH
BORN AND DIED
APRIL 27 1906

Circular_Church_Database Map

survey123_ff9ad915ca354a279c0a...



Circular_Church_Database Map



FROM ANALOG TO DIGITAL

3d Point Cloud

Brent R. Fortenberry, Associate Dean of Research & Graduate Studies, Louisiana State University

- Leica lidar scan of entire site
 - Create precise geospatial location data of monuments
 - Generates a 3d point cloud of the cultural landscape





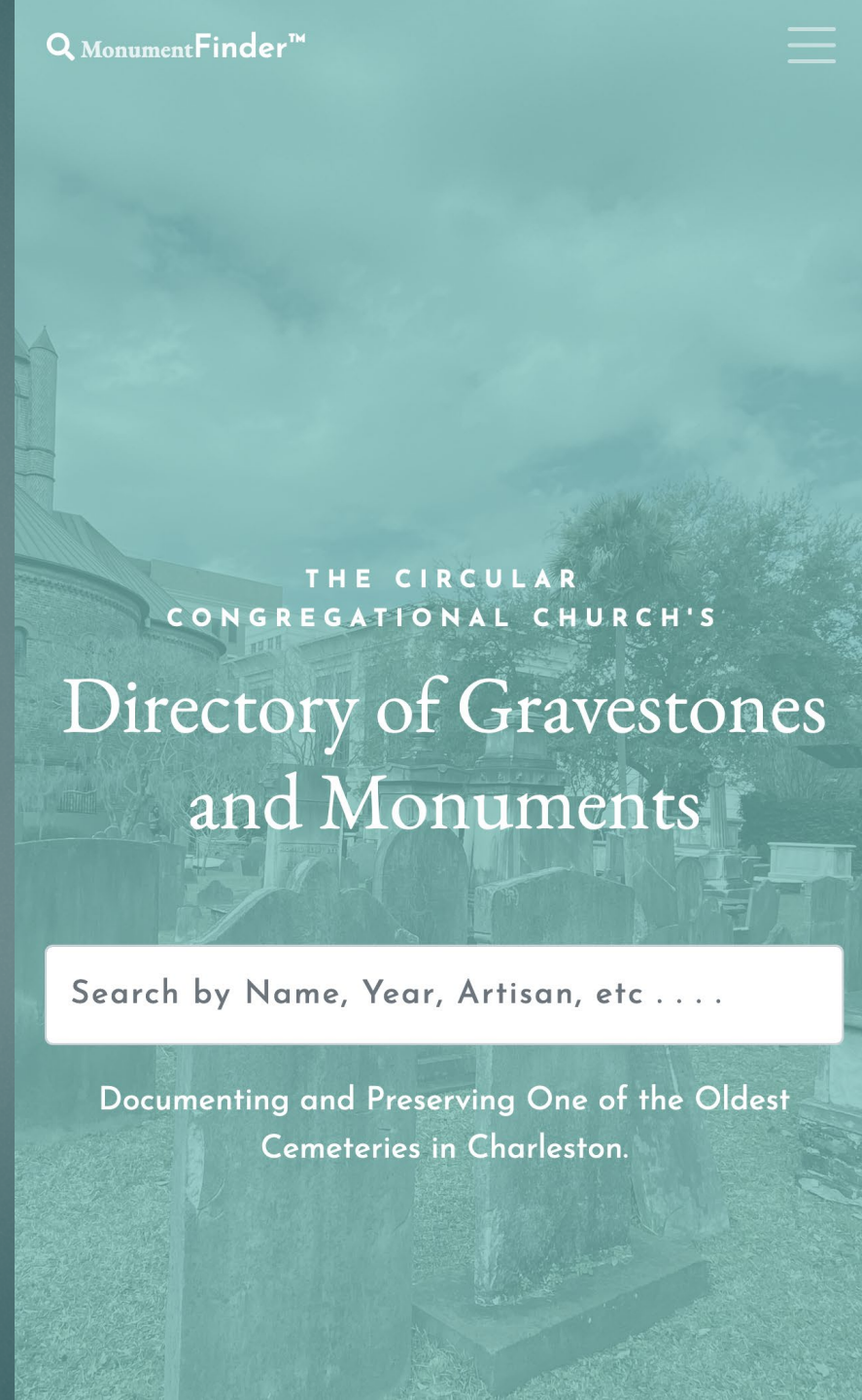


FROM ANALOG TO DIGITAL

Hello World.

Progressive web app (PWA) to display the new digital monument records:

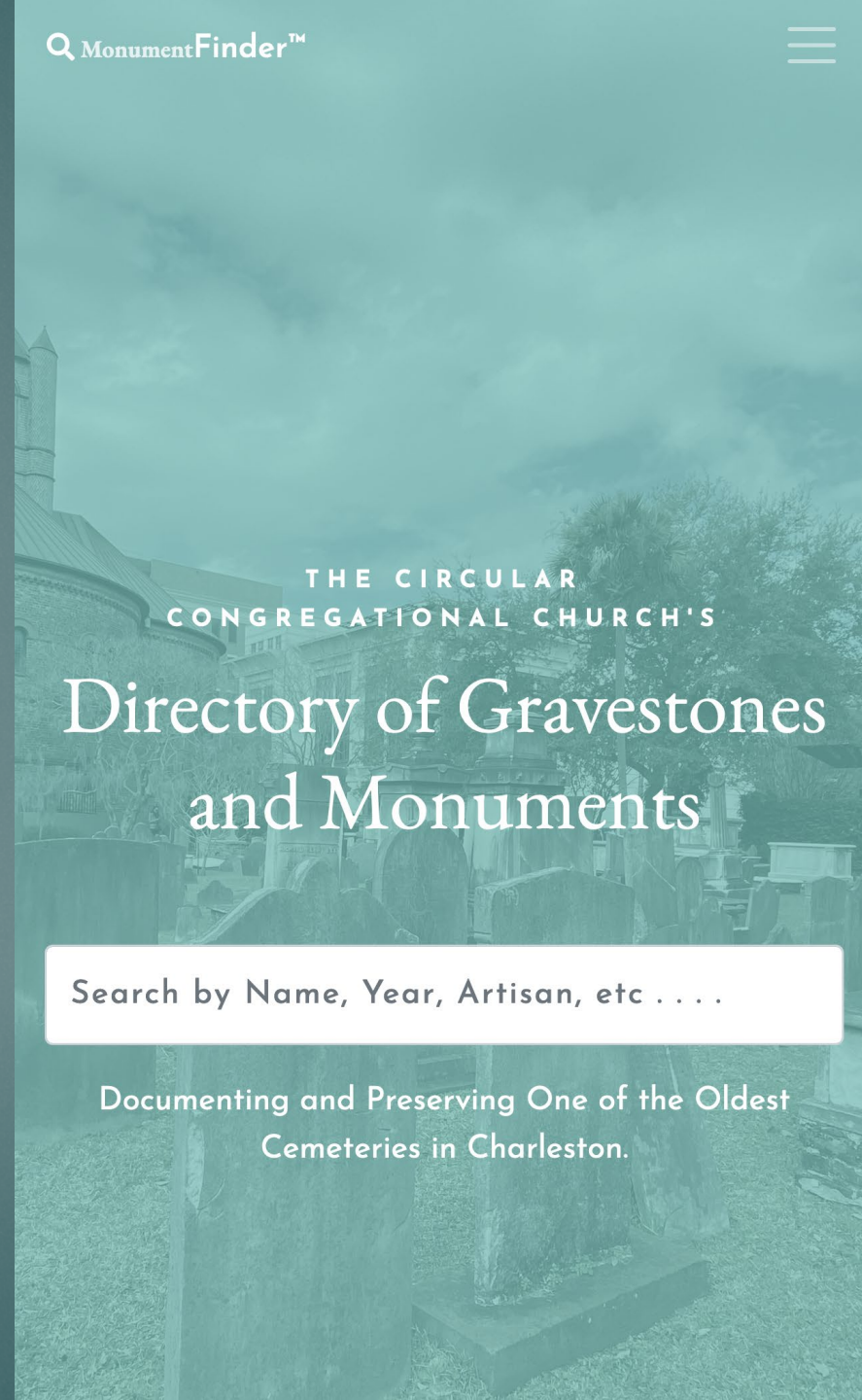
- Completely web-based (no apps to download)
- Responsive
- Secure admin portal for site owners to quickly view maintenance data within public-facing records
- Optional non-monument pages for the church including “History” and “Give”



FROM ANALOG TO DIGITAL

Home

Simple search-driven interface



THE CIRCULAR
CONGREGATIONAL CHURCH'S

Directory of Gravestones and Monuments

Search by Name, Year, Artisan, etc

Documenting and Preserving One of the Oldest
Cemeteries in Charleston.

THE CIRCULAR CONGREGATIONAL CHURCH'S
Directory of Gravestones and Monuments

Search by Name, Year, Artisan, etc

Documenting and Preserving One of the Oldest Cemeteries in Charleston.



FROM ANALOG TO DIGITAL

Monument Directory

- Sortable
 - Last name
 - Date of birth
 - Date of death
- Filterable
 - By first letter of last name

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Conserving, Preserving, and Documenting Monuments at the Circular Congregational Church

Q MonumentFinder™



THE CIRCULAR CONGREGATIONAL
CHURCH'S

Directory of Gravestones and Monuments

SORT BY:

NAME ▼

DOB

DOD



THE CIRCULAR CONGREGATIONAL CHURCH'S Directory of Gravestones and Monuments

Clear A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

SORT BY:

NAME ▾

DOB

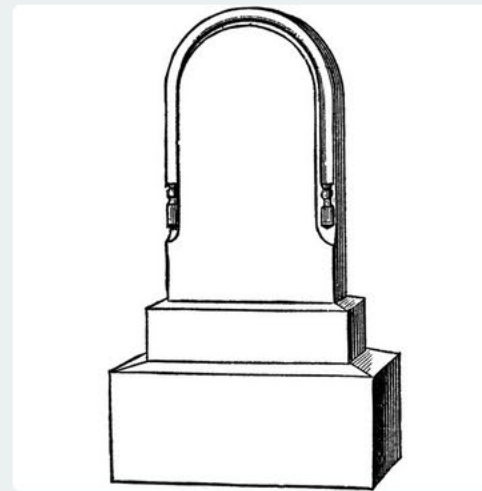
DOD



FAMILY NAME: BAILEY

St Julien E Bailey

CONTINUE READING ▾



FAMILY NAME: BART

Octavia A Bart

CONTINUE READING ▾



FAMILY NAME: BASSETT

Nathan Bassett

1701 — 1738

CONTINUE READING ▾

THE CIRCULAR CONGREGATIONAL CHURCH'S Directory of Gravestones and Monuments

Clear A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

SORT BY:

NAME

DOB ▼

DOD



FAMILY NAME: TORRANS

John Torrans, Esqr

1702 — 1780



FAMILY NAME: TORRANS

Elizabeth B Hatter

1735 — 1817



FAMILY NAME: TOOMER

Major Anthony

Toomer

Monument Page

- Public-facing content includes
 - Featured image
 - Full name
 - Family name
 - Date of birth
 - Date of death
 - Inscription
 - Materials and methods
 - Images
 - Precise location



◀ RETURN TO SEARCH

John Torrans, Esqr

Family Name: Torrans

Date of Birth: Sunday January 1, 1702

Date of Death: Saturday January 1, 1780

Inscription:

BENEATH / THIS STONE RESTS
THE BODY OF / JOHN TORRANS,
ESQR/ WHO WAS BORN IN THE
COUNTY OF DERRY IN THE / NORTH OF
IRELAND SETTLED IN THIS CITY IN THE /
YEAR 1758 AND DIED 1780 AGED 78 YEARS. /
INTERRED HERE IS ALSO THE REMAINS OF /

◀ RETURN TO SEARCH

John Torrans, Esqr

Family Name: Torrans

Date of Birth: Sunday January 1, 1702

Date of Death: Saturday January 1, 1780

Inscription:

BENEATH / THIS STONE RESTS THE BODY OF /
JOHN TORRANS, ESQR/ WHO WAS BORN IN THE
COUNTY OF DERRY IN THE / NORTH OF IRELAND SETTLED IN THIS
CITY IN THE / YEAR 1710 AND DIED 1780 AGED 70 YEARS /

MONUMENT FACTS

Research "A white woman
Notes: bridged the races. Then
she found slave
traffickers in her
family."

*from the Post & Courier,
07/01/2018*

[Go to article](#)

Inscription:

BENEATH / THIS STONE RESTS THE BODY OF /
JOHN TORRANS, ESQR/ WHO WAS BORN IN THE
COUNTY OF DERRY IN THE / NORTH OF IRELAND SETTLED IN THIS
CITY IN THE / YEAR 1758 AND DIED 1780 AGED 78 YEARS. /
INTERRED HERE IS ALSO THE REMAINS OF / ELIZABETH B HATTER
HIS WIFE / WHO WAS BORN IN
NEW YORK THIRD DAUGHTER / OF THE HONBLE WM SMITH OF
THAT CITY / WHO SURVIVED HER HUSBAND MR TORRANS /37
YEARS AND DIED ON THE 11TH DECR 1817 L AGED 82 YEARS.
THEY REST IN HOPE TILL THE LAST TRUMPET'S / JOYFUL SOUND.
THOMAS COCHRAN / CONSORT OF ELIZA C TORRANS DIED 3RD
FEBRUARY 1830/ AGED 49 YEARS & 11 MONTHS. [NW SIDE]

Footstone? No

Fencing/Enclosure? No

Dimensions: N/A

Bio?

traffickers in her
family."

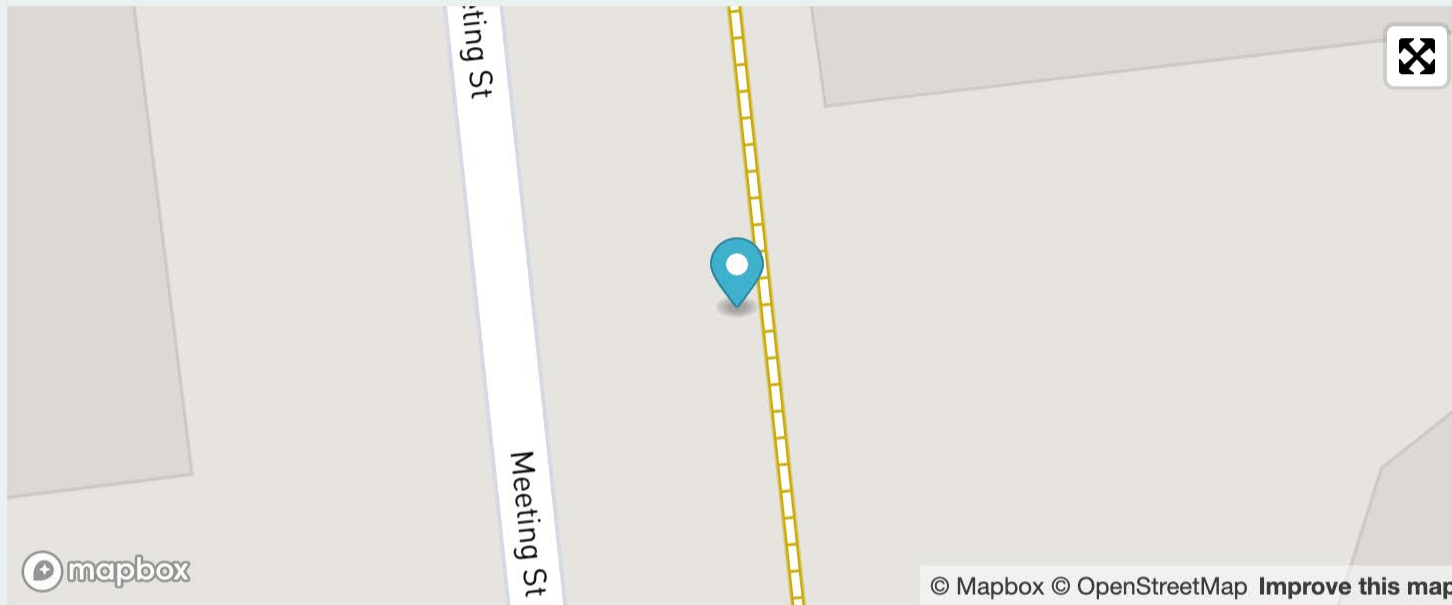
from the Post & Courier,
07/01/2018

[Go to article](#)[View PDF](#)

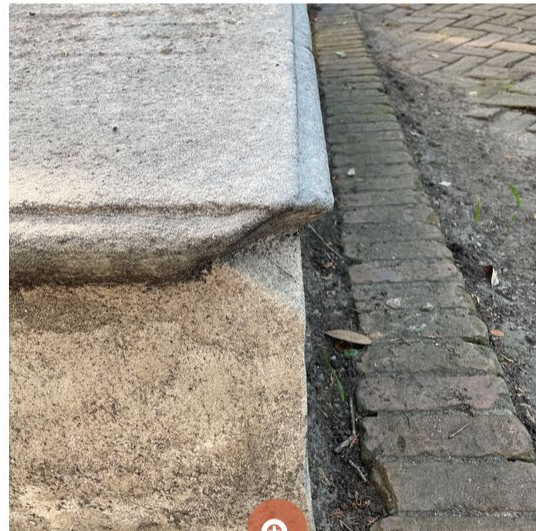
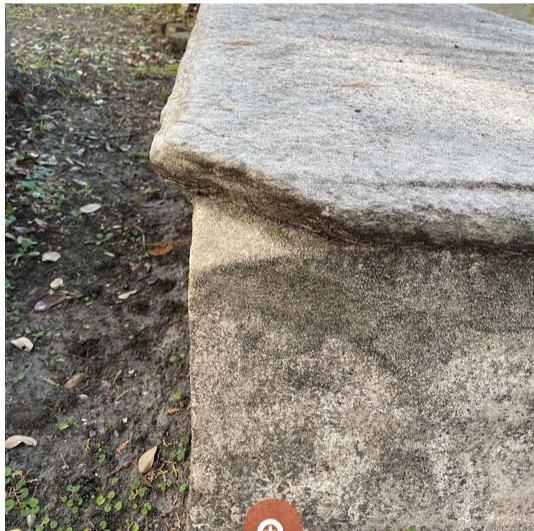
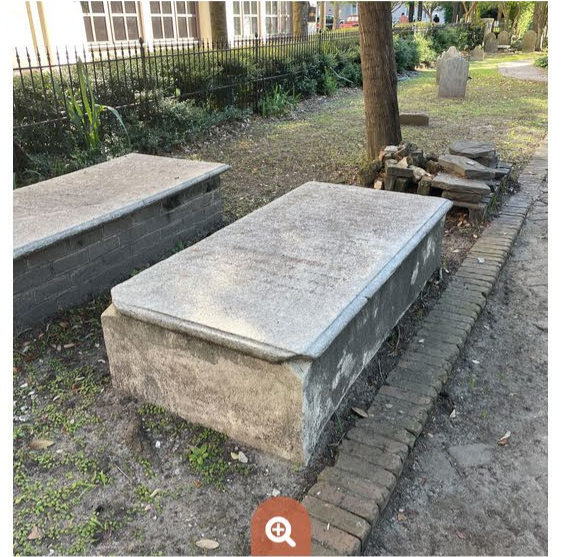
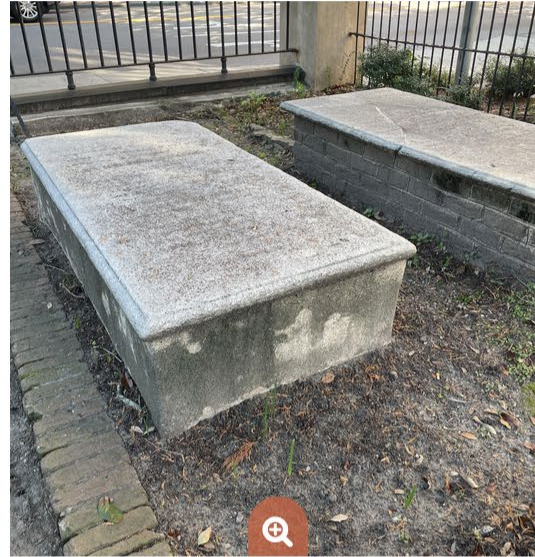
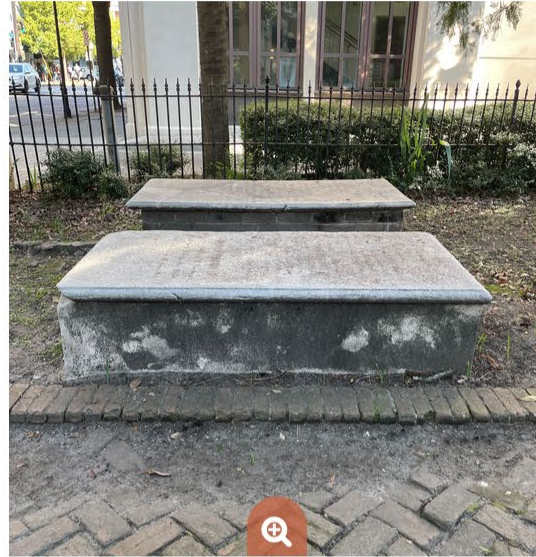
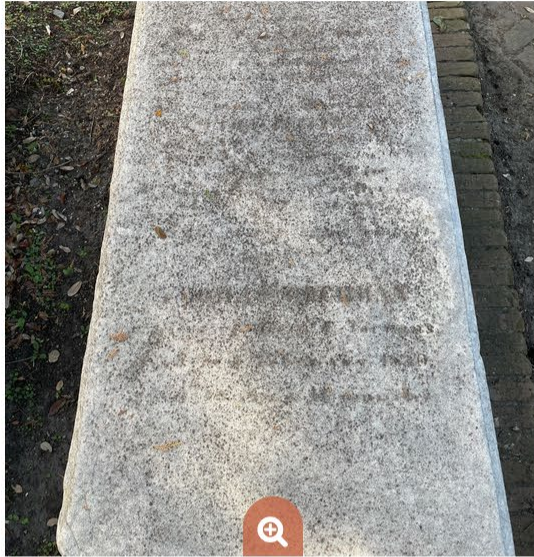
Fencing/Enclosure? No

Dimensions: N/A

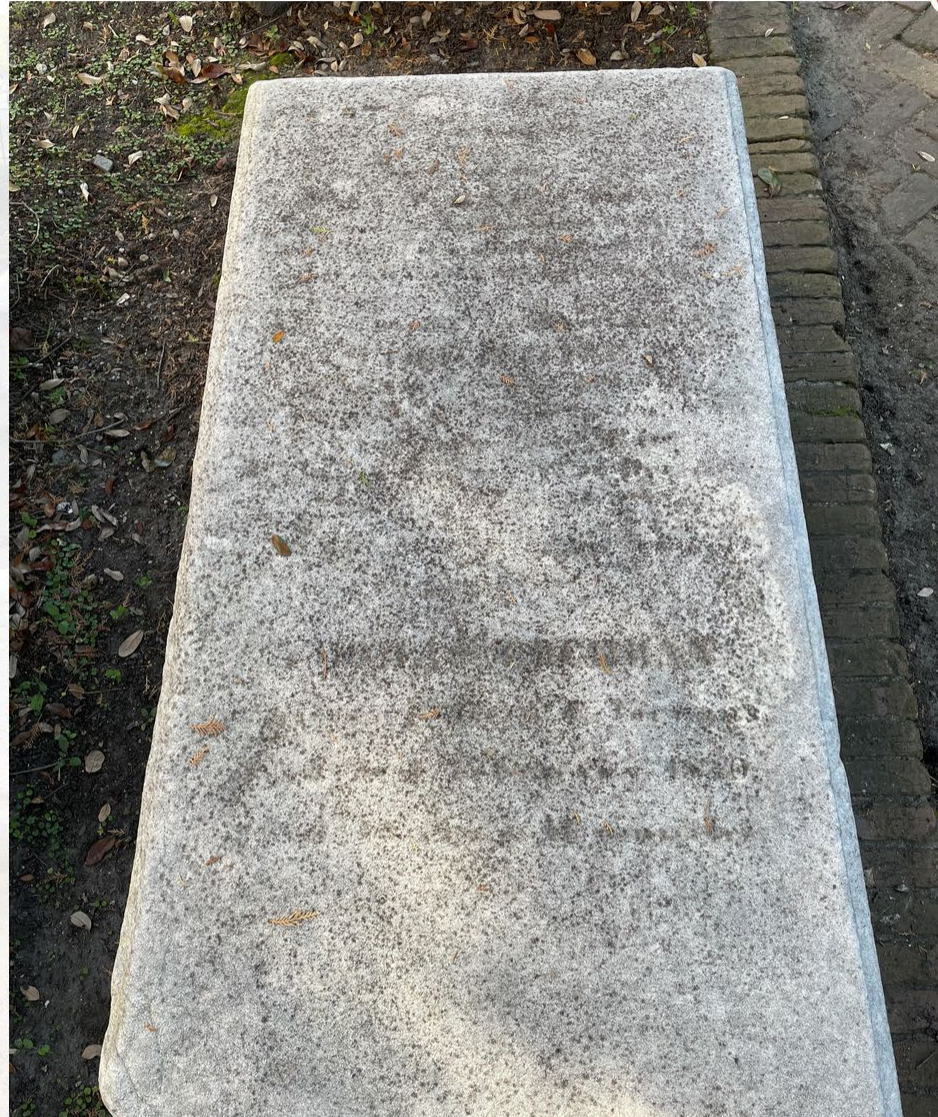
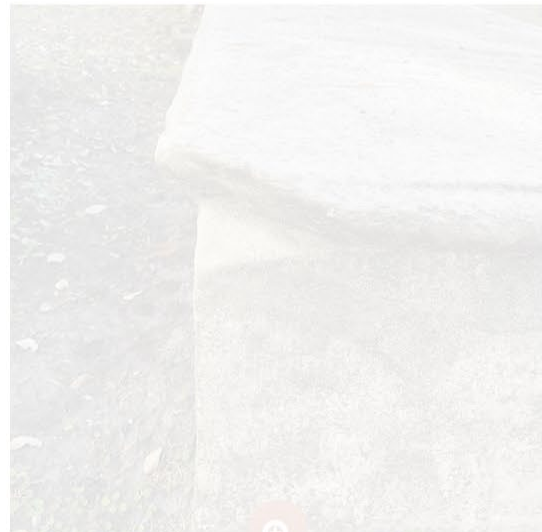
Bio?



EDIT



EDIT



Admin Portal

- Additional data for tracking monument conditions
 - Priority
 - Date of next assessment
 - Current conditions
- Suggested Repairs
 - Approved protocols for various issues
 - Image and video tutorials



◀ RETURN TO SEARCH

Thomas Bennett

MAINTENANCE STATUS

Priority: **Five Years** ●

Date of Next Assessment: **Friday February 24, 2023**

Environmental and Site Description:

Lots of vegetation growth

Current Condition(s): **Vegetation**

EDIT

◀ RETURN TO SEARCH

Thomas Bennett

MAINTENANCE STATUS

Priority: **Five Years** ●

Date of Next Assessment: **Friday February 24, 2023**

Environmental and Site Description:

Lots of vegetation growth

Current Condition(s): **Vegetation**

Suggested Repairs:

Cleaning



Environmental and Site Description:

Lots of vegetation growth

Current Condition(s): **Vegetation**

Suggested Repairs:

Cleaning

[View Protocol ▾](#)

Family Name: **Bennett**

Date of Birth: **Friday February 1, 1754**

Date of Death: **Tuesday February 1, 1814**

Inscription:

IN MEMORY OF THOMAS BENNETT

BORN 11 FEB'Y 1754 DIED FEB'Y, 1814

**ALSO OF ANNA H BENNETT WIFE OF THOMAS BENNETT BORN DECEMBER
1752 DIED JUNE 1830**

"BLESSED ARE THE DEAD / WHO DIE IN THE LORD"

MONUMENT FACTS

Style: **Lettering, hand**

Materials: **GraniteMarble**

[View Protocol ▲](#)

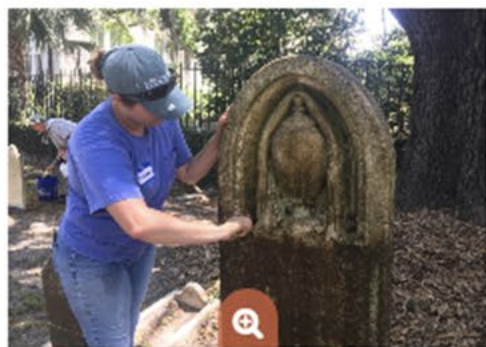
HEADSTONE AND MONUMENT CLEANING PROTOCOL ONE

Skill Level:

Easy; applicable project for volunteers and parishioners

Materials & Tools:

- Soft bristle brush with wooden or plastic handle; Tampico or natural bristles recommended
- D/2 brand or similar historic-masonry approved organic cleaner
- Hand pump sprayer or hose
- Clean water source for rinsing
- Soft plastic spatula



Do's:

- Practice on a less visible part of the stone before working on the front face

FROM ANALOG TO DIGITAL

Non-monument Pages

- Used to help tell the larger story of the church
- Encourage users to support the cause

Q MonumentFinder™



SUPPORT OUR PRESERVATION
EFFORTS

Donate Now

Thank you for joining Circular members and friends in making a gift to the church. Please click the "Donate" button and follow the instructions.



SUPPORT OUR PRESERVATION EFFORTS

Donate Now

Thank you for joining Circular members and friends in making a gift to the church. Please click the "Donate" button and follow the instructions.



Other ways to give:

- Mail a check to P.O. Box 776, Charleston, SC 29402
- [Download Circular's app](#) and press "Give" on the bottom menu
- [Donate Stock](#)
- Give to [Circular's Endowment](#)



FIN.

SPECIAL THANKS TO

SHPO

Circular Congregational Church

Bill Simpson

Stephen Cofer Shabica

Kathryn Cullinan

American College of Building Arts

Joy Beasley, Associate Director of Cultural Resources,
NPS

Kirk Cordell, Executive Director, National Center for
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