NPS Form 10-900 (Rev. 10-90)

other (explain):

United States Department of the Interior National Park Service

# National Register of Historic Places Registration Form

483



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property				
historic name other names/site	Campbell's Covered Bridge			
2. Location				
city or town	123 Campbell Covered Bridge Road not for publication   Gowensville vicinityX   arolina code _SCcountyGreenville code _045zip code _29356			
3. State/Federal /	Agency Certification			
determination of eligibility professional requirement this property be conside  Signature of certifying Elizabeth M. Johnson State of Federal age	ity under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X_nominationrequest for meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and a set forth in 36 CFR Part 60. In my opinion, the property X_meetsdoes not meet the National Register Criteria. I recommend that red significantnationally X_statewide _ locally. (_See continuation sheet for additional comments.)  In order the National Historic Preservation Officer, S.C. Dept. of Archives and History, Columbia, S.C. ency and bureau  Itymeetsdoes not meet the National Register criteria. (_See continuation sheet for additional comments.)			
Signature of comme	nting or other official Date			
State or Federal age	ncy and bureau			
4. National Park S  I, hereby certify that this pentered in the National  See continuation selectermined eligible for National Register	Register Para VIII Book 71109			
See continuation si determined not eligible National Register removed from the Nati	for the			

Campbell's Covered Bridge Greenville County, South Carolina Name of Property County and State 5. Classification Ownership of Property Category of Property Number of Resources within Property (Check as many boxes as apply) (Check only one box) (Do not include previously listed resources) private \_ building(s) Contributing Noncontributing X public-local district buildings public-State site sites public-Federal X structure structures object objects 0 Total Name of related multiple property listing Number of contributing resources previously listed (Enter "N/A" if property is not part of a multiple property listing.) in the National Register 6. Function or Use **Historic Functions** (Enter categories from instructions) Category: Transportation Subcategory: Road-Related **Current Functions** (Enter categories from instructions) Category: Vacant/Not In Use Subcategory:

# 7. Description

# Architectural Classification

(Enter categories from instructions) None

#### Materials

(Enter categories from instructions)

foundation

Stone, Concrete

walls

Wood

roof

other

Metal (Galvanized Steel)

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

NPS Form 10-900-a (8-86)

OMB No. 1024-0018

United States Department of the Interior National Park Service

#### National Register of Historic Places Continuation Sheet

Section number 7 Page 5

Campbell's Covered Bridge
Name of Property
Greenville County, South Carolina
County and State

Campbell's Covered Bridge, built in 1909, is located in rural north Greenville County, South Carolina, near Gowensville, and crosses Beaver Dam Creek on Campbell Covered Bridge Road. This wooden bridge with a metal roof is 35' long by 12' wide.

It sits on a rock foundation with a concrete cap, as masons supplemented existing rock formations on each side of Beaver Dam creek as load-bearing abutments and partial foundations. Concrete was poured atop the rock formations, and 12" x 12" heart-of-pine sills were mounted on the concrete cap with 4.5" iron rods. Once the two trusses were in final position, they were braced or tied in place for the remaining construction of the bridge decking, sides and roof. Buttresses were then built at each end of the bridge and at the center point of each truss. They rested on the main timbers carrying the floor load and extended three feet past the sides of the bridge to provide stability along the weak axis of the truss.

Campbell's Covered Bridge is a four-span Howe truss bridge with counter braces. The two outer spans are 9' long and the two inner spans are 8' long. Each truss is 4" x 8", and each counter brace is made from 2" x 8" pine boards nailed together in an interlocking pattern. Vertical tie rods called kingposts, made from 1" diameter iron rods, are in between each span, tying the top and bottom chords together. This method of truss construction absorbs and transfers a passing vehicle's weight to the rock abutments on each end of the bridge.

The builder, Charles Irwin Willis (1878-1966), allowed the truss ends to follow the natural lay of the land and built the rest of the bridge to fit; as a result—and according to Willis's design—the bridge is neither square nor plumb.<sup>1</sup>

The siding of the bridge consists of 1"  $\times$  6" pine boards with 1" battens covering the joints. Siding covers the three wooden buttresses that jut out on each side of the deck, forming a triangular shape and sheathed with cedar shakes. A gable roof of five-V galvanized steel covers the structure. The bridge is open at both ends, with a gap at the top between the siding and roof to allow for air circulation. The deck is made from 2"  $\times$  6" pine boards. The trusses are exposed on the interior of the bridge.

In 1951, Pleasant Hill Road was rerouted, and the historic roadbed was renamed Campbell Covered Bridge Road. It remained a gravel-over-clay road until it was resurfaced by tar and gravel in 1987. In 1964, the bridge siding, deck, and roof were repaired and the bridge was painted, most likely for the first time. Local traffic continued to use the bridge, but most traffic used the rerouted Pleasant Hill Road instead. In 1984, Greenville County closed the bridge to all vehicular traffic.

Retaining walls were built and the dirt was dumped up against each end of the bridge, in effect creating two dead end roads. By 1990, the bridge needed renovation once more; worn or rotted boards were replaced with fresh rough-cut pine boards and the tin roof was replaced with a galvanized steel roof.

<sup>&</sup>lt;sup>1</sup> Jean Martin Flynn, Campbell's Covered Bridge (Greer, S.C.: The Greer Citizen Press, 1992), pp. 4-11.

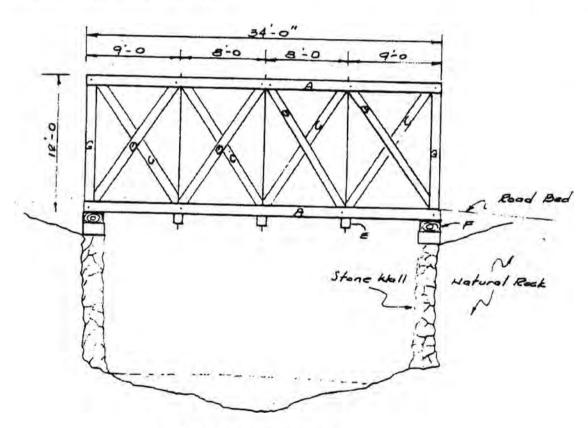
#### United States Department of the Interior National Park Service

# National Register of Historic Places Continuation Sheet

Section number 7 Page 6

Campbell's Covered Bridge
Name of Property
Greenville County, South Carolina
County and State

Since the bridge weighed between 85,000 and 100,000 pounds, a 50-ton jack was used to lift the bridge off the foundation to replace the large sills at each end with new sills of pressure-treated lumber. Cracks between the pressure-treated pieces allow air to circulate, preventing any buildup of moisture in the future. The bridge was repainted at that time as well.



CUT AWAY VIEW MAIN TRUSSES

PARTS LIST

A. 6-2×10 Pine Noiled Together

B. 2-4×8 Pine

C. 2-2×8 Pine

D. 1" diameter Iron Rod

E 8×10 Pine

F. 2-12×12 Pine Sills

G. 4×10 Pine

USDI/NPS NRHP Registration Form Campbell's Covered Bridge Greenville County, South Carolina Name of Property County and State 8. Statement of Significance Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing) X A Property is associated with events that have made a significant contribution to the broad patterns of our history. B Property is associated with the lives of persons significant in our past. X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction. D Property has yielded, or is likely to yield information important in prehistory or history. Criteria Considerations (Mark "X" in all the boxes that apply.) a owned by a religious institution or used for religious purposes. b removed from its original location. c a birthplace or a grave. d a cemetery. e a reconstructed building, object, or structure. f a commemorative property. g less than 50 years of age or achieved significance within the past 50 years. Areas of Significance Period of Significance (Enter categories from instructions) 1909-1959 Engineering Transportation Significant Dates 1909 Significant Person **Cultural Affiliation** (Complete if Criterion B is marked above) N/A N/A Architect/Builder Willis, Charles Irwin Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.) 9. Major Bibliographical References (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.) Previous documentation on file (NPS): Primary location of additional data: \_ preliminary determination of individual listing (36 CFR 67) has been X State Historic Preservation Office requested. Other State agency previously listed in the National Register Federal agency previously determined eligible by the National Register Local government \_ designated a National Historic Landmark

recorded by Historic American Buildings Survey #

recorded by Historic American Engineering Record #

University

Name of repository:

Columbia, S.C.

S.C. Department of Archives & History,

Other

NPS Form 10-900-a (8-86)

OMB No. 1024-0018

United States Department of the Interior National Park Service

#### National Register of Historic Places **Continuation Sheet**

Section number 8 Page 7

Campbell's Covered Bridge Name of Property Greenville County, South Carolina County and State

Campbell's Covered Bridge, built in 1909, is eligible for listing in the National Register of Historic Places under Criterion A for its role in transportation in early twentieth century Greenville County and the "Dark Corner" region of northwestern South Carolina, and under Criterion C as an excellent intact example of a Howe truss covered bridge and the only surviving covered bridge in the state.

#### ADDITIONAL INFORMATION

This bridge was one of four covered bridges built in this part of northern Greenville County in the first decade of the twentieth century; before that time, the only safe crossing over Beaverdam Creek was a narrow rock shoal. Morrow's Covered Bridge and McClain's Covered Bridge spanned the Middle Tyger River on Pleasant Hill Road and S.C. Highway 14, respectively, and a third unnamed covered bridge spanned the South Tyger River between S.C. Highways 101 and 253. Campbell's Covered Bridge was the largest and most sophisticated of the four.

The construction of this bridge connected several rural communities and small towns in the immediate vicinity, so that a 25-mile trip which had once taken a full day before the bridge was completed could be made in about an hour afterwards.2

Charles Irwin Willis (1878-1966), an accomplished local builder in the northern part of Greenville County, built the bridge. Long and large timbers required for the bridge exceeded the capability of most sawmills, and had to be sawed by a nearby sawmill owned and operated by James M. Suddeth. When completed, the bridge was named for Alexander Lafayette Campbell (1836-1920), local landowner and millwright who lived at the site and operated a corn grist mill about 50 feet downstream from the bridge.3

William Howe, of Spencer, Massachusetts, patented his new wood and iron rod truss design in 1840, then extended the patent with improvements in 1850. His truss was the first to be designed using mathematical stress analysis. The truss consists of wooden upper and lower chords, which are linked together with sets of dual iron rods and wooden braces and counter braces. The braces and counter braces are butted against the chords on angle blocks. The iron rods are adjusted with large nuts.

The Howe truss design is the reverse of the more common Pratt truss design. In the Pratt design, diagonal members all slant toward the closest bridge end, so they are subject to compressive forces. This design requires large steel members, making it an uneconomical choice in many instances. The Howe truss,

<sup>&</sup>lt;sup>2</sup> Archie Vernon Huff, Jr., Greenville: The History of the City and County in the South Carolina Piedmont (Columbia: University of South Carolina Press, 1995), p. 270; Flynn, p. 11. <sup>3</sup> Flynn, p. 11.

NPS Form	10-900-a
(8-86)	

OMB No. 1024-0018

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 8

Campbell's Covered Bridge
Name of Property
Greenville County, South Carolina
County and State

originally designed to combine diagonal timber compression members and vertical iron rod tension members, was more efficient than the Pratt truss for building longer bridge spans carrying heavy loads. It was adopted by the railroad industry and eventually became one of the most widely used trusses for steel railroad bridges.<sup>4</sup>

Plans are underway for Campbell's Covered Bridge, the last extant covered bridge in South Carolina, to become the focal point of a new 15-acre passive park planned by the Greenville County Recreation District.

<sup>&</sup>lt;sup>4</sup> See, for background on covered bridge construction and the Howe truss system, Eric Sloane, American Barns and Covered Bridges (New York: Funk & Wagnalls, 1954); Richard Sanders Allen, Covered Bridges of the South (Brattleboro, Vt.: The Stephen Greene Press, 1970); Donald C. Jackson, Great American Bridges and Dams, Great American Places Series (New York: Wiley, for the National Trust for Historic Preservation, 1988); and Brian J. McKee, Historic American Covered Bridges (Oxford and New York: Oxford University Press for the American Society of Civil Engineers, 1997).

#### United States Department of the Interior National Park Service

#### National Register of Historic Places Continuation Sheet

Section number 9 Page 9

Campbell's Covered Bridge
Name of Property
Greenville County, South Carolina
County and State

#### SELECT BIBLIOGRAPHY

- Allen, Richard Sanders. Covered Bridges of the South. Brattleboro, Vt.: The Stephen Greene Press, 1970.
- Batson, Mann. A History of the Upper Part of Greenville County, South Carolina. Taylors, S.C.: Faith Printing, 1993.
- Campbell's Covered Bridge Engineering File, 1881-2008. Office of the Greenville County Engineer, Greenville, S.C.
- Flynn, Jean Martin. Campbell's Covered Bridge. Greer, S.C.: The Greer Citizen Press, 1992.
- Greenville County Judge's Probate Office, Will of A.L. Campbell, Apartment 161, File 36.
- "Historical marker dedicated at Campbell's Covered Bridge," The Times Examiner (Greenville, S.C.), June 5, 2002.
- Huff, Archie Vernon, Jr. Greenville: The History of the City and the County in the South Carolina Piedmont. Columbia: University of South Carolina Press, 1995.
- Jackson, Donald C. Great American Bridges and Dams. Great American Places Series. New York: Wiley, for the National Trust for Historic Preservation, 1988.
- McKee, Brian J. Historic American Covered Bridges. Oxford and New York: Oxford University Press for the American Society of Civil Engineers, 1997.
- Sloane, Eric. American Barns and Covered Bridges. New York: Funk & Wagnalls, 1954.
- Wehunt, Greg, James, Lynn and Leonhardt, Toni. "Campbell's Covered Bridge," Clingstone Magazine (Summer 1975), 35-39.

Name of Property	d Bridge		County and S	County, South Carolina
			Obdity and C	nate -
10. Geographical I	Data			
Acreage of Property	Less than one acre			
UTM References Place additional UTM refe	erences on a continuation sheet)			
Zone Easting Northi 1 17 384745 38 2		Northing		
See continuation sh	eet.			
Verbal Boundary Des	scription (Describe the bounda	ries of the property on a continua	tion sheet.)	
Boundary Justification	n (Explain why the boundaries v	were selected on a continuation s	heet.)	
11. Form Prepared	d By			
name/title	Weylin Brown and D	ean Campbell, with ass	istance from SHPO staff	
organization	Greenville County H	istoric Preservation Con	nmissiondate	14 March 2009
street & number	302 Paris Mountain			ne (864) 421-5940
city or town	Greenville	state	S.C. zip co	de <u>29609</u>
Additional Docum	entation			
	items with the completed	form:		
Submit the following	MENAN - PROMETER - PROMETER			
Continuation Sheet				
Continuation Sheet	s	cating the property's location	on.	
Continuation Sheet Maps A USGS map (7.5	s 5 or 15 minute series) indic	cating the property's location		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs	s or 15 minute series) indic historic districts and prope	erties having large acreage		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl	s 5 or 15 minute series) indic	erties having large acreage		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl Additional items	s or 15 minute series) indichistoric districts and propertices, and propertices and propertices.	erties having large acreage		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl Additional items	s or 15 minute series) indic historic districts and prope	erties having large acreage		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl Additional items (Check with the SHPO or	s or 15 minute series) indichistoric districts and propertices, and propertices and propertices.	erties having large acreage		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl Additional items (Check with the SHPO or	s or 15 minute series) indichistoric districts and propertices, and propertices and propertices.	erties having large acreage		
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl Additional items (Check with the SHPO or  Property Owner  (Complete this item at the	s or 15 minute series) indictions in the following of the	erties having large acreage	or numerous resources.	
Continuation Sheet Maps A USGS map (7.5 A sketch map for Photographs Representative bl Additional items (Check with the SHPO or	s or 15 minute series) indice this toric districts and properties and white photograph of the series of the SHPO or FPO.)	erties having large acreage hs of the property.  Roads and Bridges	or numerous resources.	(864) 467-7016 29601

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended(16 U.S.C. 470 et seq.). Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.0. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

NPS Form	10-900-a
(8-86)	

OMB No. 1024-0018

United States Department of the Interior National Park Service

## National Register of Historic Places Continuation Sheet

Section number 10 Page 10

Campbell's Covered Bridge
Name of Property
Greenville County, South Carolina
County and State

#### **Verbal Boundary Description**

The nominated property is shown as the black polygon marked "Campbell's Covered Bridge" on the accompanying Greenville County Plat for the Greenville County Recreation District, original in Greenville County Plat Map Book PLL 1063, Page 7-7.

The bridge crosses Beaver Dam Creek in a Northeasterly to Southwesterly direction on Campbell Covered Bridge Road

# **Boundary Justification**

The boundary of the nominated property is restricted to the historic covered bridge and its immediate setting.

#### United States Department of the Interior National Park Service

## National Register of Historic Places Continuation Sheet

Section number Photographs Page 11

Campbell's Covered Bridge
Name of Property
Greenville County, South Carolina
County and State

The following information is the same for each of the photographs:

Name of Property:

Campbell's Covered Bridge

Location of Property:

123 Campbell Covered Bridge Road

Gowensville vicinity

Greenville County, South Carolina

Name of Photographer:

Dean Campbell

Date of Photographs:

15 November 2008

Location of Negatives:

S.C. Department of Archives and History, Columbia, S.C.

- Head on view, from the south, showing SC Historical Marker
- 2. Head on view, from the north
- 3. Angled view, from the northeast
- 4. Angled view, from the northwest
- 5. Full side view of the bridge, from the middle of the creek bed from the west
- Close up view of one of two Howe trusses, showing criss-crossing wooden braces and vertical tie rods (Kingposts), which exemplify the unique Howe design
- View of stone abutments with concrete caps on which 12 x 12 heart-of-pine sills sit to provide foundation support for the bridge, taken from the creek bed underneath
- View of a tie rod brace and criss-crossing wooden braces, which provide flooring support, taken from the creek bed underneath
- View of one of three buttresses, which extend three feet past the sides of the bridge to provide stability along the weak axis of the truss, taken from the creek bed underneath
- 10. Side view featuring the exteriors of two buttresses, taken from the creek bed underneath

# UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

# NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Campbell's Covered Bri NAME:	dge
MULTIPLE NAME:	
STATE & COUNTY: SOUTH CAROLINA,	Greenville
DATE RECEIVED: 5/21/09 DATE OF 16TH DAY: 6/23/09 DATE OF WEEKLY LIST:	DATE OF PENDING LIST: 6/08/09 DATE OF 45TH DAY: 7/04/09
REFERENCE NUMBER: 09000483	
REASONS FOR REVIEW:	
OTHER: N PDIL: N PERI	SCAPE: N LESS THAN 50 YEARS: N OD: N PROGRAM UNAPPROVED: N DRAFT: N NATIONAL: N
COMMENT WAIVER: N	
ACCEPTRETURNREJE	CT 1.1.09 DATE
The second secon	Entered in National Register of Historic Places
RECOM./CRITERIA	
REVIEWER	DISCIPLINE
TELEPHONE	DATE
DOCUMENTATION see attached comments  If a nomination is returned to the nomination is no longer under comments.	e nominating authority, the





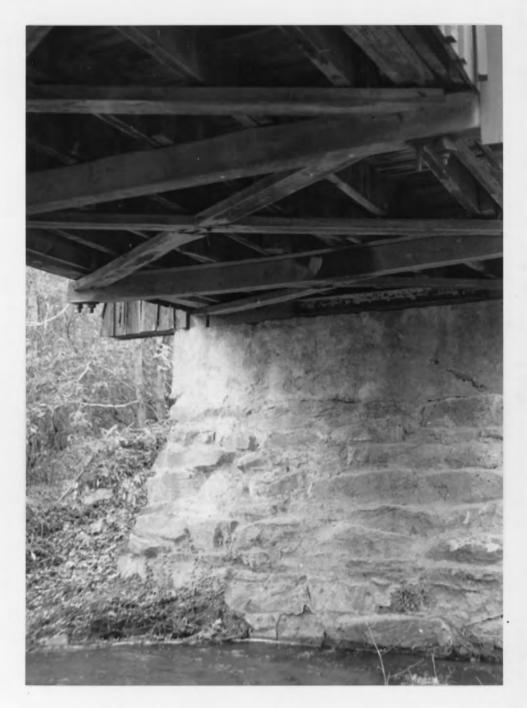






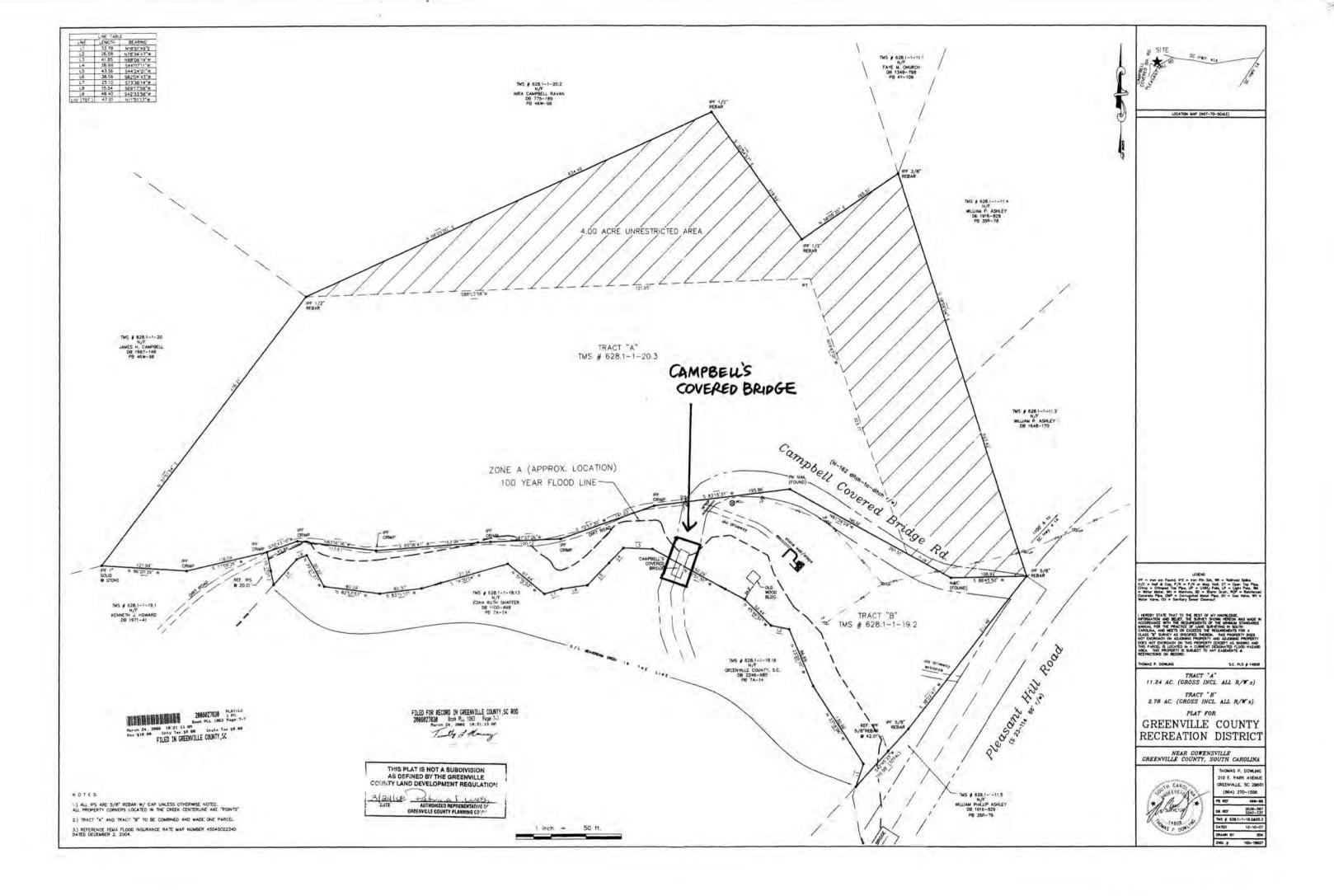
















Monday, 18 May 2009

Dr. Janet Matthews Keeper, National Register of Historic Places U.S. Department of the Interior National Park Service 1201 Eye (I) Street, NW, 8th Floor Washington, DC 20005

Dear Dr. Matthews:

Enclosed is the National Register nomination for Campbell's Covered Bridge, in Greenville County, South Carolina, recently approved by the South Carolina State Board of Review. We are now submitting this nomination for formal listing in the Register.

If I may be of further assistance, please do not hesitate to contact me at the address below, call me at (803) 896-6182, fax me at (803) 896-6167, or e-mail me at power@scdah.state.sc.us. I hope to hear from you soon.

Sincerely,

J. Tracy Power

Historian and National Register Co-Coordinator

State Historic Preservation Office