

North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

December 20, 2018

MEMORANDUM

TO: Vanessa Patrick
Human Environment Unit
NC Department of Transportation

FROM: Renee Gledhill-Earley 
Environmental Review Coordinator

SUBJECT: Historic Structures Survey Report, Widen NC 55 (Williams Street) from
US 1 to SR 1160 (Olive Chapel Road), Apex, U-2901, Wake County, ER 18-3867

Thank you for your October 29, 2018, memorandum, transmitting the above-referenced report. We received the report on November 26, 2018 and have completed our review.

Based on the information provided in the report, we concur that the Apex Dome Building (WA4854) lacks the necessary integrity for listing in the National Register of Historic Places. This determination in no way affects its status as a Wake County Landmark.

We are pleased to note that NCDOT intends to work with the owners, Town of Apex, Capital Area Preservation, and our office to develop a preservation solution for the building as part of the proposed widening project.

The above comments are made pursuant to Section 106 and 110 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

cc: Mary Pope Furr, NCDOT, mfurr@ncdot.gov



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

ER 18-3867

To: Renee Gledhill-Earley

From: Vanessa E. Patrick

Due -- 12/19/18

Date: October 29, 2018

H- *2 letters
12/18/18
RJK*

Subject: *Apex Dome Building (WA4854) – National Register Eligibility*

NCDOT initiated historic architectural investigation for the state-funded ^{U-2901}~~U-2501~~, Wake County project in 2016. We identified several resources of varying significance to be factored into the development of the project design. The emergence of final plans, as well as federal permit locations, in 2018 revealed that compliance with not only GS 121-12(a), but also Section 106 needed to be established for two resources. In consultation with the NCHPO and the USACE, NCDOT found that the project will not adversely affect the National Register-listed Apex Historic District (WA4047, WA4097, and WA4423), but will adversely affect the Apex Dome Building (WA4854).

Designated a Wake County Landmark in 2006, the Apex Dome Building is neither listed in the National Register, nor has it received a formal determination of eligibility. As it stands in proximity to a federal permit area, the USACE requires a statement of its status to satisfy the provisions of Section 106 for the project. The following summary account concludes that while the building is of proven local significance, it does not meet the more rigorous criteria of the National Register. NCDOT is committed to mitigating the adverse effect imposed on the building by the U-2501 project and will do so regardless of its National Register eligibility.

The Apex Dome Building is a one-story, nonagonal, wooden-framed structure resting on a shallow, concrete-slab foundation. Measuring approximately forty feet in an irregular diameter, it is surrounded by a narrow, shed-roofed walkway and roofed with a wooden-framed geodesic dome. Sheathed in vertical board siding and metal shingle roofing, both of replacement materials, the building displays multiple door and window openings, all with simple, unadorned surrounds and in original location. Windows are nearly square in dimension, glazed with single, fixed panes, and appear in the bays facing W. Williams Street (NC 55) to which the building is oriented. All doors are replacements: three are glazed with single, nearly full-height panes and three are of generic faux-panel design, the

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latter confined to the rear bays facing Harwood Street. The walkway roof is composed of rectangular sections angled to echo the planes of the adjacent dome and supported by four square wooden posts with simple block bases and caps. Its soffit is sheathed and punctuated with recessed light fixtures, and plain raking boards finish the rafter ends. With the exception of the walkway itself, which is the outer edge of the concrete slab foundation, its associated components are largely of new materials. The dome, composed of triangular panels, is somewhat elongated and less than hemispherical, and sits on a low clerestory containing four, currently infilled, rectangular openings. The interior of the building is finished in contemporary fashion to suit its present use as an office and includes a striking ceiling treatment reflecting the composition of the dome. A partition wall towards the rear of the single room, apparently a reinstatement of an earlier if not original feature of the building, creates several small auxiliary spaces accommodating a rest room, systems equipment, a kitchenette, and storage. The Apex Dome Building stands in its original location on a small (about 0.10 acre) parcel surrounded by a graveled parking lot and flanked to the north by W. Williams Street (NC 55), the east by an auto body shop, the south by a residential area, and the west by a wooded, undeveloped lot.

When the present occupant of the Apex Dome, Mike Vala (Crown Builders and Developers, Inc.), purchased the building in 2006 it had experienced nearly fifty years of diverse commercial use and consequent change and deterioration. Working with Capital Area Preservation, Mr. Vala instituted careful renovations over the next several years, including repair and extensive replacement of structural elements, exterior siding and roofing, water-proofing, and re-wiring and installation of an HVAC system. Whenever practicable, original materials and features were retained or replaced in kind. Mr. Vala also made possible the compilation of a well-researched report on the building, prepared by Rebecca Osborn of Capital Area Preservation in 2006, that informed the renovation work, as well as provided the documentation supporting the Apex Dome's recognition as a local landmark.

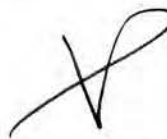
Ms. Osborn's investigation of the Apex Dome Building included an interview with its original owner Louis C. Smith. Mr. Smith engaged local architect Dale A. Blosser to design a building for his fruit and vegetable business and selected the geodesic dome as an effective means of attracting attention to the "roadside stand." Blosser, a graduate of the North Carolina State College School of Design, derived his knowledge and advocacy of the geodesic dome from the annual teaching seminars offered at the school by Buckminster Fuller in the early 1950s. For Mr. Smith's new building, constructed in 1960-1961, Blosser placed an order with the Pease Woodwork Company of Hamilton, Ohio, licensed by Fuller to supply kits for wooden-framed and plywood "Peasedomes" and configured the supporting structure accordingly.

Considering Buckminster Fuller's significant presence in North Carolina during the 1950s and 1960s – including his Raleigh-based company Synergestics, Inc. for which Dale Blosser worked in the later 1960s – no precise accounting of Peasedomes, other Fuller-licensed products, or Fuller-inspired structures in the state exists. Besides the building in Apex only four geodesic domes are recorded in the state survey. Lack of

adequate context hampered the 2006 state study-list application for the Apex Dome and suggests the need for a comprehensive thematic study. Preparation of the study-list application also raised questions about the historical integrity of the Apex Dome Building. Within the first several years of the building's existence, leaking of the plywood dome, though treated with sealant, necessitated the application of metal roofing. A succession of commercial occupants changed windows and doors, paint colors, and overall structural soundness. The most recent renovations, though carried out with admirable sensitivity to the original design, entailed extensive replacement of historic fabric, the introduction such elements as the ceiled and illuminated walkway soffit, and, most notably, the reconfiguration of the interior. Upgrading of original materials and improvement of the interior have extended the life of the building, but nevertheless constitute a loss of integrity inconsistent with the requirements of National Register eligibility. Like the NCHPO reviewers of the study-list application, we are compelled to recommend that the Apex Dome Building at present cannot be determined eligible for listing in the National Register.

The Apex Dome Building has never been in better structural or aesthetic condition, and it fully warrants its designation as a Wake County Landmark as an example of automobile-oriented commerce and the architectural philosophy of Buckminster Fuller. NCDOT recognizes the exterior protections landmark status bestows and intends to move the building to a nearby, comparable site along W. Williams Street to prevent its unavoidable impact by the U-2501 project. We have begun to develop a mitigation plan, just as would be established in a memorandum of agreement for an eligible property, in consultation with the property owner, Capital Area Preservation, the Town of Apex, and NCHPO.

Thank you for considering our recommendation.



V.E.P.

Copy to:
Gary G. Roth, Capital Area Preservation, Inc.
Candice Andre, VHB, Inc.
Zahid Baloch, P.E., NCDOT

Apex Dome Building (WA4854)
105 W. Williams Street (NC 55), Apex, Wake County
PIN: 0741299730

Wake County Landmark (2006)

All photographs October 2018 except when otherwise noted



Google Maps, 2018 Image



Looking SE from 1st Street



Looking N from Harwood Street



Dome (above) and walkway roof (below), looking SW

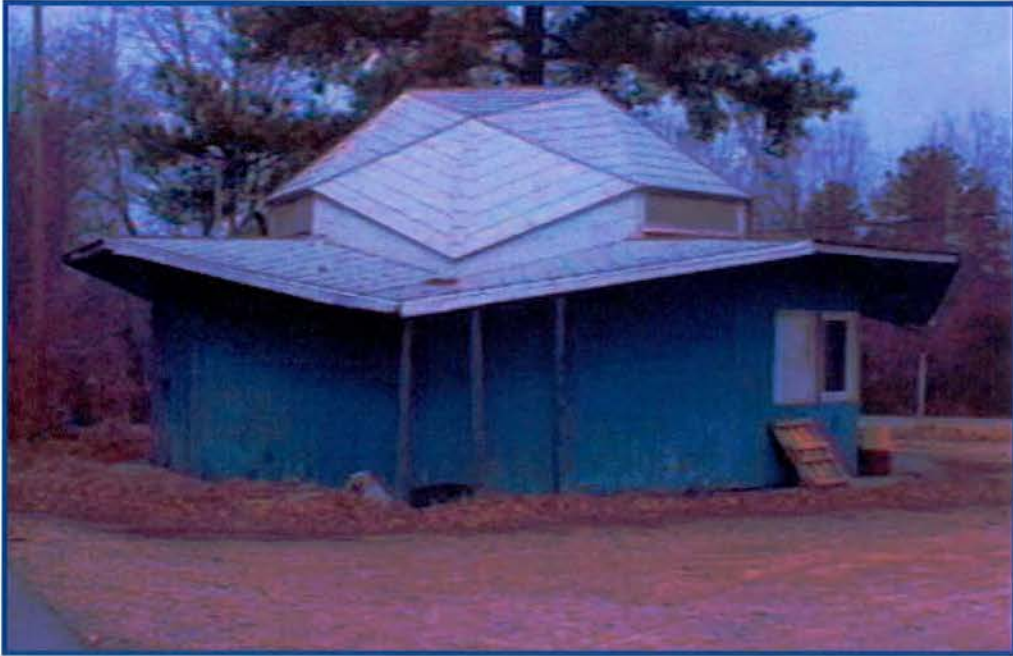




Looking NE



Looking SW



1996 – looking W



2008 – looking SW

Both images from Wake County Real Estate Data
(<http://services.wakegov.com>)