October 21, 2015

Ms. Leslie Barras
Plea For The Trees

221 N. Clifton Avenue, #19 Louisville, KY 40206

Dear Ms. Barras:

On behalf of Plea For The Trees ("PFTT"), you have requested my evaluation and opinion with respect to documentation developed during the initial phase of consultation under Section 106 of the National Historic Preservation Act relating to the Bowman Field (Louisville, KY) Safety Program.

Background of the Undertaking

As I understand, Bowman Field is a general aviation airport managed by the local airport sponsor, the Louisville Regional Airport Authority ("LRAA"), and operated with oversight by the Memphis Airports District Office of the Federal Aviation Administration ("FAA"). In its oversight role, the FAA formally evaluates and approves the Airport Layout Plan ("ALP"), an element of the overall Master Plan for the airport. LRAA eligibility for federal Airport Improvement Program funding is linked to meeting FAA requirements for the Master Plan, particularly the ALP element.

The FAA has established a number of imaginary airspace surfaces on and around Bowman Field relating to aircraft approach areas and departure areas for each of the four existing runways ("RW"). Human-made and natural obstructions that penetrate these surfaces and that are determined by FAA to constitute a hazard to navigable airspace are required to be addressed as part of the ALP process. The FAA indicated in December 2011, when this project was first announced publicly, that the relevant surface was the aircraft departure elevation/slope surfaces at each runway end. In May 2013, the LRAA informed property owners around the airport that the undertaking is now based upon FAA's application of the aircraft approach elevation/slope surfaces. According to the FAA and LRAA, there are hundreds of trees that penetrate the approach profile that require "mitigation." To date, the agencies' sole proposed approach to "mitigation" is destruction of these trees through complete removal or trimming the trees. The specifics of the affected trees and proposed mitigation measures for each tree have not been publicly disclosed to date.

PFTT submitted a request to FAA to be recognized as a consulting party in the Section 106 process on May 23, 2014. On June 1, 2015, the FAA responded by letter by informing PFTT that the first consultation meeting would be held on June 24, 2015 and providing a draft Cultural Resource Evaluation. The draft document is titled "Draft Report. Historic Architectural Survey for the Bowman Field Safety Program, Jefferson County, Kentucky" (Brockington and Associates. December 2014) (hereafter "draft CRE," and "Brockington" or "author").

Scope of Evaluation

Per our discussions, the scope of the evaluation consisted of:

- 1. A review of Brockington's draft Cultural Resource Evaluation and comments on the draft CRE by Plea For The Trees and other Section 106 consulting parties.
- 2. A review of relevant state and local documentation (e.g., cultural resource study specifications of the Kentucky State Historic Preservation Office ["SHPO"], relevant local contexts and National Register nominations). Additionally, I asked for the tree inventory that Brockington's draft report cites, but understand that the FAA has not provided the inventory to the consulting parties after their requests.
- 3. A site visit to Bowman Field and its environs and discussions with Michael Hayman, arborist for Seneca Gardens.
- 4. Development of a written opinion as to whether the vegetation element of the landscapes in the historic residential suburbs within the draft Areas of Potential Effect ("APE") contributes to the historic significance of these residential areas.

In addition, I developed a brief historic context on the suburbanization of the Bowman Field area generally from Cave Hill Cemetery to Bowman Field and from Bardstown/Taylorsville Roads to Frankfort Avenue. This effort was required for me to undertake the required identification and evaluation of potential historic properties for the purpose of eligibility recommendations because the information presented by Brockington as an "historic context" in the draft CRE does not meet National Register specifications as a framework for evaluation. Further, Brockington's work ignored other national, state, and local contexts essential to developing evaluation criteria for the particular areas and landscapes

under review. Since the draft CRE contains none of these criteria, I have developed them in this report.

I have now completed my review of the documentation and undertaken a site visit to Bowman Field and environs on September 22, 2015. This letter report contains my written opinion as to whether the vegetation in the suburbs in question is contributing to the historic significance of these suburbs. Note that this report is intended to supplement the comments previously provided by the consulting parties. There are aspects of those comments, including PFTT's, which I have not addressed in this report, but that do need to be addressed by the FAA to fulfill its Section 106 responsibilities, such as the re-evaluation of the boundaries and areas of significance of Bowman Field.

Qualifications

A resume is provided in Attachment 1 to this letter report. My work experience spans over four decades, with primary areas of applied experience in geography, community and transportation planning, urban and suburban development, historic preservation, and ecology and natural resources. For the purpose of presenting my resume as part of this report and opinion, the description of relevant experience focuses upon the period from the early 2000s to date. During that time, I have also served as the Director of the Center for Historic Architecture and Design at the University of Delaware and co-directed the establishment of the Masters' Program in Historic Preservation at the University. My academic position at the University of Delaware is Professor of Urban Affairs & Public Policy, Geography and Material Culture Studies.

In the late 1990s, the National Park Service, through the Office of the Keeper ("Keeper") of the National Register of Historic Places, became interested in developing a comprehensive work drawing upon a cultural landscape approach for the identification, evaluation, and National Register-listing of privately financed and constructed suburban neighborhoods and associated suburban resources (e.g., parks, schools) in the United States. In my role as Director of the Center for Historic Architecture and Design at the University, I had previously directed and developed an historic context for Wilmington. That work led to discussions with the Keeper regarding the need for a more extensive, national framework for nominations of these resources.

The outcome of these discussions and extensive research and writing effort was the September 2002 publication of the *National Register Bulletin*, *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places*, coauthored by myself and Linda Flint McClelland, at that time, a historian for the National Register. Additionally, a national Multiple Property Listing, "Historic Residential Suburbs in the United States, 1830-1960, MPS" was developed in tandem with our Bulletin work to promote surveys of these resources, development of local contexts, and facilitate determinations of eligibility and National Register nominations. Additional information regarding my role in this publication is found in the "Foreword" section of the Bulletin, by Carol D. Schull, the Keeper at the time of the publication.

I should also note that I was familiar with Bowman Field and its environs prior to your contact and my September 2015 visit there, having visited and stayed in Louisville several times.

Summary of Conclusions

With respect to whether or not the vegetation in the Bowman Field suburban neighborhoods has historic significance, the answer is yes, and on two levels. The first level is that, by definition under the National Register of Historic Places, the subdivision is the basic suburban property type in which the *land and its vegetation* are character-defining features that reflect the American suburban ideal of a group of single-family houses on their own parcels in a semi-rural environment. The second level is that, within this context, the vegetative elements of the two Suburban Property Types in the narrow APEs (Garden Suburb, Post World War II and Early Freeway Suburb) around Bowman Field are very significant historically, at a level of significance not grasped by the draft CRE.

Following this introductory material and summary of conclusions, the remainder of this report is organized and presented as follows:

- Presentation of an historic context for the suburban neighborhoods as the basis for evaluation of eligibility,
- Review and evaluation of Brockington's draft CRE's recommendations regarding overall eligibility of each of neighborhoods and public and private parks and golf courses in the narrow APEs,

- 3. Presentation of existing national guidelines regarding evaluation of the vegetative aspect of historic residential suburbs,
- Review and evaluation of Brockington's draft CRE's recommendations regarding whether vegetation is contributing to the resources within the narrow APEs, and
- 5. Conclusions

Areas of Potential Effect

As background, Section 106 regulations of the Advisory Council on Historic Preservation define an APE as:

The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties . . . (36 CFR 800.4(d))

The draft APEs in the CRE appear to have been drawn to only capture the areas in which trees are proposed to be cut. In addition to direct physical effects from the blast or undertaking, in defining an APE, federal agencies must consider the potential for secondary physical effects, visual effects, auditory effects, social-cultural effects, and effects on historically and culturally significant natural resources, such as plants.

PFTT recognizes the inadequacy in the APEs, commenting that the draft APEs are insufficient to account for direct, indirect, and cumulative effects of the tree removal program. Thomas F. King, a leading authority on the Section 106 process, states that "One common mistake agencies make is to equate the APE with the undertaking's footprint for example the construction site." This mistake has been made by FAA in the Bowman Field case where APEs have been erroneously established as the areas of impact of tree "mitigation," emanating from the runway extensions, which PFTT calls the "narrow" APEs. King uses the analogy of throwing a live hand grenade to establish effects – the place where the grenade lands is the footprint of the project, but the area of effect is equivalent to the blast radius of the grenade exploding.

To fully account for the full effects of the undertaking on the suburban landscape, and evaluate the indirect noise, visual, and related effects of the proposal removal of hundreds of canopy trees, PFTT recommends expanding the APE to a larger circular APE that connects the outmost edge of each of the narrow APEs associated with the four runways. I think this is an

excellent recommendation. In order to present and describe the historic contexts below, I will use references to the "narrow" APEs and the "full" APE.

Suburban Historic Context for the Bowman Field Area

Under the National Register, the significance of an historic property can be judged and explained only when evaluated within its historic context. An historic context consists of three parts: an historic theme of which the properties are a manifestation, the chronological periods into which the theme can be divided and the geographic extent of the properties. As the PFTT comments point out, Section 2.0 in the draft CRE is presented as a suburban historic context, but is not an historic context at all. Instead, it is a narrative that cobbles together sections of histories of the area from one particular and very dated report, the 1979-1980 *Louisville East Survey*.

Another shortcoming of the CRE pointed out by PFTT is the draft report's failure to use the excellent contexts and nominations developed for suburban historic properties in the Louisville area to frame their methodology. These readily available resources include the historic context on historic Louisville housing, *They Came, The Saw, They Bought* (by Janie-Rice Brothers, *et.al.*) and, most importantly, an outstanding National Register Multiple Property Nomination *Suburban Development in Louisville and Jefferson County, 1868 – 1940.* Although this nomination concentrates on the railroad–oriented country houses of the late nineteenth century, it also develops a basic context, which includes the Cave Hill-to-Bowman Field area. Additionally, given the importance of vegetation and trees as character-defining features in the Bowman Field area, it is surprising that Brockington did not incorporate the National Register Nomination for the Olmsted Park System in Louisville into their research and recommendations. And, finally, the National Register Nomination for the Bowman Field Historic District is not referenced or used in the evaluation of the surrounding area even though it specifically identifies the verdant setting of these environs as contributing to the "ambiance" of the airport.

The chronological periods or stages in the development of suburbs in the United States are tied to the development of transportation technologies, which made outward movement from the city and suburbanization possible. According to the *National Register Bulletin, Historic Residential Suburbs*, the general periods of suburban development are comprised of the

Railroad and Horsecar Suburbs (1830 to 1890), Streetcar Suburbs (1888 to 1928), Early
Automobile Suburbs (1908 to 1945), and Post World War ("WW") II and Early Freeway
Suburbs (1945 to 1960).

With the information in the local documentation you provided, PFTT's comments, and the full historical narrative in *Louisville Survey East*, it is fairly straightforward to put together a basic historic context for the suburbs in the Bowman Field area.

Suburban Context of the Full APE. The appropriate geographic extent of the Bowman Field Suburban Historic Context includes the area from Cave Hill Cemetery to Bowman Field and from Bardstown/Taylorsville Roads to Frankfort Avenue. The subdivision-by-subdivision approach that was used in the identification and evaluation of residential areas in the draft CRE fragments these important overall patterns and areas of community development.

In terms of a suburban historic context, PFTT's comments call for increased attention to nineteenth century suburban development, to place greater emphasis on the role of the streetcar in spurring suburban development, and, finally, to include the Post WW II and Early Freeway Suburbs. The area within the narrow and full APEs experienced development in all four periods of transportation history, which fosters a rich collection of associated suburban areas. The subdivisions associated with these periods are listed in the Table 1 below. Although in this short analysis, I cannot do more than skim the history of suburban development, I will touch on the points raised by PFTT.

The Railroad Period began in 1858 and extended into the 1920s according to the Jefferson County Multiple Resource Nomination. A rail line paralleled Frankfort Avenue, facilitating early suburban development in communities such as Clifton. Without access to rails, Bardstown Road developed more slowly. By the early 1860s, however, "the southern side of Bardstown Road, the entirety of Lexington Road and Frankfort Avenue and the first few miles of Brownsboro and River Roads were lined with country houses." (p. E7) The scattered country estate development continued into the 1900s.

However, with the arrival and development of the streetcar from 1905 to 1930, suburban development accelerated with the construction of six radiating trolley lines called "Interurbans," according to an early (1909) *Courier-Journal* description provided by PFTT. The Jefferson County Multiple Resource Nomination on suburbs notes that "the interurban rail

system spawned upper middle class communities, such as Audubon Park..."(p. E4), and it appears that the Bowman Field environs similarly attracted upper middle class families. The most significant streetcar line to the development of subdivisions in the Bowman Field area was the Jeffersontown Division or "J-Line" that ran out Bardstown/Taylorville Roads and beyond Bowman Field.

The interurban lines continued to run until approximately 1933. It was during this period that the Garden Suburb became a popular type of suburban development, for which the natural character of the areas was ideally suited, featuring vegetation of canopied hardwoods and park-like character. Further, during this early suburbanization period, large areas within the area of the narrow and full APEs were developed as public and private open spaces and recreational activities (Seneca Park and Big Spring Country Club), and Bowman Field itself was established.

Following the start of the Great Depression in 1929, the break from the Streetcar to the Early Automobile Period was abrupt, when the streetcars were discontinued around 1933. The early automobile allowed suburban development to infill between the streetcar lines, which continued until 1945. In terms of Post WWII subdivisions, PFTT points out that "Seneca Village and Seneca Village No. 2... were developed as early freeway suburbs during a real estate boom spurred by housing needs for veterans and their families." McCoy Manor is also a post WWII subdivision, but is infill between Seneca Vista and Seneca Manor.

PFTT identified thirty-three (33) subdivisions in the full APE that are categorized by the periods and years in Table 1 below. A suburban boom occurred in the area during the Streetcar Period from 1906 to 1929 with the construction of thirteen (13) subdivisions, followed by five (5) subdivisions platted in the period from the Great Depression until the start of WWII.

A "boom" appears following WWII and with the start of the Early Freeway era, marked by the platting of fifteen (15) subdivisions.

Table 1: Chronological Periods for the Suburban Historic Context for the Full Area of Potential Effect

TREETCAR SUBURBS AND ASSOCIATED SUBURBAN RESOURCES (1900-1929):				
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1. Kaelin Subdivision	1906 1908			
3. Bon Air 4. Strathmoor				
		5. Wellington		
		6. Broadmeade 7. Briscoe 8. Strathmoor Village		
9. Beaumont	1925			
10. Kingsley* 11. Broadmeade 4 12. Hathaway				
		13. Airview	1928	
		14. Big Spring Country Club and Golf Course*	1927	
15. Seneca Park and Golf Course*	1928			
16. BOWMAN FIELD	1929**			
EARLY AUTOMOBILE SUBURBS (1930-1944):	KO CHRISTO			
17. Broadmeade Section 5	1931			
18. Seneca Manor*	1934			
10 Comage Wiete*	1935			
20 Sonoca Cardone	1027			
21. Wellingmoor	1939			
POST WWII AND EARLY FREEWAY (1945-1960):	on Single			
22. Alanmeade	1946			
23. Seneca Village*	1947			
24. McCoy Manor*	1949			
25. Seneca Village No. 2*	1951			
26. Ingleside	1952			
27. Big Springs Gardens	1953			
28. Park Hills	1955			
29. Seneca Hills	1955			
30. Hollin Terrace	1956			
31. Big Springs Village	1957			
32. Broad Fields	1959			
33. Cherosen Hills	1959			
34. Kiltmore Gardens	1961			
35. Williamsburg Estates	1964			
36. Rostrevor	1965			

^{*}Property within the draft narrow APEs.

^{**}Start date of period of significance based on the National Register nomination. Wellesley's subdivision date is not entirely clear.

The foregoing historic context provides the basis for interpreting the significance of the suburban areas and their associated resources in the narrow APEs, described as follows.

Sub-Suburban Historic Context for the Narrow APEs. From the larger context described above, I developed a suburban historic context framework of the thirteen (13) historic properties in the Bowman Field narrow APEs, including the six subdivisions. Methodologically, I also combined the subdivisions within the narrow APEs to analyze their overall vegetative cover. Brockington's evaluation of individual properties fragmented the landscape and led to erroneous conclusions about the significance of the vegetative cover. The six sub-subdivisions in the narrow APEs are Seneca Vista, McCoy Manor, Seneca Manor, Kingsley, Seneca Village, and Seneca Village No. 2.

Table 2: Themes and Chronological Periods of Suburban Historic Properties in the Narrow APEs

STREETCAR SUBURBS (and associated suburban resources) (1900-1929):		
Kingsley	1926	
Big Spring Country Club and Golf Course		
Seneca Park and Golf Course	1928	
BOWMAN FIELD	1929	
EARLY AUTOMOBILE SUBURBS (1930-1944):	tan at tso	
Seneca Manor (and Seneca Gardens)	1934	
Seneca Vista	1935	
POST WWII AND EARLY FREEWAY (1945-1960):	801 (198 d	
Seneca Village	1947	
McCoy Manor	1949	
Seneca Village No. 2	1951	

Overall then, of the six subdivisions, one is of the Streetcar period, two are associated with the Early Automobile period, and three are Post WWII and Early Freeway developments. Seneca Park/Golf Course, Big Spring Country Club/Golf Course, and Bowman Field itself fall in the Streetcar period. When the properties are organized by the four narrow APEs, a distinct geographic pattern can be seen as reflected in Table 3 below. Four of the six subdivisions are concentrated in the W/SW APE associated with RW 6 and two are in the S/SE APE associated

with RW 33. Three of the four subdivisions in the RW 6 W/SW APE were established in the 1920s and 1930s (and the portion of Seneca Park along the east side of these subdivisions date to these decades as well). The one Post WW II subdivision of McCoy Manor is a one-street infill between Seneca Vista and Seneca Manor.

The RW 33 S/SE APE contains two Post WWII suburbs. The RW 15N/NE APE covers the larger area of Seneca Park/Golf Course affected by the proposed tree removal, while the RW 24 NW APE includes the Big Spring Country Club/Golf Course.

Table 3: Historic Properties Organized by Narrow APEs

Narrow APE Identifier	Themes/Chronological Periods	Property
RW 6, W/SW	Streetcar (1900-1929)	Kingsley Seneca Park
	Early Automobile (1930- 1944)	Seneca Manor (and Seneca Garden) Seneca Vista
	Post WW II and Early Freeway (1945-1960)	McCoy Manor
RW 33, S/SE	Post WW II and Early Freeway (1945-1960)	Seneca Village Seneca Village No. 2
RW 24, NE	Streetcar (1900-1929)	Big Spring Country Club and Golf Course
RW 15, N, NW	Streetcar (1900-1929)	Seneca Park and Golf Course

This organization essentially results in two suburban properties: Garden Suburb in the RW 6 APE and Post WWII and Early Freeway in the RW 33 APE. This framework will be used in my own evaluation of identification and eligibility below.

Review of the Draft CRE's Overall Evaluation of Resources for Eligibility

In their architectural survey of the historic properties in the four narrow APEs, Brockington generally surveyed thirteen (13) properties, consisting of one (1) public park and associated golf course, one (1) private club and associated golf course, six (6) suburban neighborhoods and some of their buildings, and five (5) individual buildings. The draft CRE recommends seven (7) properties as eligible for the National Register of Historic Places: Seneca Park Golf Course and all six of the subdivisions. The standard, boilerplate justification for all subdivisions is that Subdivision X "is eligible for the NRHP" under Criteria A (community planning and design), B (association with important persons), and/or C (architecture and

design). The specific recommendations of the draft report regarding the properties and associated criteria are Big Spring Country/Club Golf Course (not eligible due to lack of integrity), Seneca Park Golf Course (although declaring the golf course lacks integrity, the report recommends eligibility under Criterion A), Seneca Vista (A,B,C), McCoy Manor (A, C), Seneca Manor (A, C), Kingsley, (A,B, C), Seneca Village (A,C), and Seneca Village No. 2 (A,C).

As presented, the recommendations for overall eligibility or ineligibility of the properties are not supported by any applied analysis of the National Register criteria for historic significance or evaluation of all aspects of integrity. The draft report simply declares properties as eligible or ineligible. There is not even a reference to explain what theme applies to a property that is recommended as eligible under Criteria A and C, such as "represents an important planning trend of Garden Suburbs." Although my conclusion is that the properties are eligible (as explained below), the draft CRE alone is insufficient for eligibility determinations in this consultation. Some of the specific omissions are addressed as follows.

In Section 2.0 of the draft CRE (the narrative that is presented as a "historic context" for the suburbs), Brockington does not reference, refer to, or use the basic document for evaluating historic suburbs, the *National Register Bulletin: Historic Residential Suburbs, Guidelines for Evaluation and Documentation.* This Bulletin develops the national historic context: "The Suburbanization of Metropolitan Areas in the United States 1839 to 1960." This context was prepared through the Office of the Keeper of the National Register of Historic Places with the express intent of being adapted and applied at the state, metropolitan, and local levels to evaluate suburban properties. Brockington seems to be unaware that it exists and, thus, does not apply the National Register criteria for evaluating suburbs to determine the eligibility of the six subdivisions. And, as PFTT notes, they also seemed to be unaware of the National Cooperative Highway Research Board's *A Model for Identifying and Evaluating the Historic Significance of Post WWII Housing*.

In terms of the National Register guidelines for evaluation, the report only uses the most general National Register Bulletin, How to Apply the National Register Criteria for Evaluation. Even then, the draft report manages to misapply these guidelines, especially with regard to determining "integrity." In addition to meeting one or more of the National Register criteria of significance, a property should meet at least three or four of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The

author instead assigns an overall—and undefined—rating (low, moderate, or high), rather than evaluate each property in terms of the seven aspects of integrity.

With respect to the associated suburban resources, Seneca Park Golf Course was found to be eligible for the National Register, but on a curious basis. Although the author determines that the course has experienced physical changes and possesses "little degree of its original design integrity" (while not reviewing the original design plans of the Olmsted firm), the golf course is still recommended as National Register eligible under Criterion A through its origins as a Works Progress Administration ("WPA") project. At the same time, the golf course was deemed by the author not to qualify under Criterion C ("Design/Construction," which the report mislabels as "Design/Architecture") because of lack of integrity. Although Brockington appears to understand elsewhere that to be eligible for the National Register of Historic Places, a property must both meet one of the four criteria of significance and retain integrity, they seemed to have slipped here. If the Seneca Golf Course lacks physical integrity, it cannot be eligible under Criterion A regardless of its significance. The appropriate approach to this property, as noted by Metro Louisville Parks, the Olmsted Parks Conservancy, and PFTT is to evaluate Seneca Park in its entirety, including the golf course, and apply the correct standards to the evaluation.

Overall then, the evaluation of eligibility of the six suburban neighborhoods and associated suburban resources is inadequate as presented and fails to meet both national guidelines and SHPO specifications. The SHPO specifications relating to conducting intensive cultural resource surveys within an APE require that the researcher "evaluate those resources against the criterion for inclusion in the National Register" (p. 3), and "evaluate integrity, according to the basis for significance established by historic contexts (pp. 37-38).

My Conclusions Regarding Eligibility of the Bowman Field Resources Within the Narrow APEs

The two overall suburban properties identified in Table 3 (Streetcar/Early Automotive and Post WWI/Early Freeway) each encompass a group of contiguous subdivisions, the significance of which is based upon design. This approach to boundary selection for the purpose of identification and evaluation is specifically identified in the *National Register Bulletin, Historic Residential Suburbs* (p 107). My conclusion is that these two properties *are* eligible under Criteria A and C. With respect to the RW 6 Garden Suburbs Suburban Property,

we can see the evolution of Garden Suburbs from 1924 to 1926 (the Streetcar Period) through successive phases of transportation-based chronological periods. The development process of suburban landscapes is exemplified throughout, including shared best practices of Garden Suburbs design by developers, creating a unified Garden Suburban landscape, including the later infill of McCoy Manor. Rather than existing as the isolated subdivisions presented in the draft CRE, each of the developments reinforce each other. Based upon my review, the RW 6 Garden Suburbs Suburban Property retains, at minimum, integrity of location, design, setting, feeling, and association.

Within the RW 33 Post WWII and Early Freeway Suburban Property, Seneca Village No. 2 is very strong in development design while Seneca Village is less so. At the same time, Seneca Village's landscape is strong, particularly the canopy trees, while that of Seneca Village No. 2 is less so. Together, the RW 33 Post WWII and Early Freeway Suburban Property is also eligible under Criteria A and C and retains integrity of location, design, setting, and feeling, at minimum.

It should be noted that a complete National Register nomination (as opposed to a survey conducted for the purpose of a determination of eligibility in a Section 106 undertaking) would more extensively explore these areas, including other themes of historical significance (e.g., the Jewish community in PFTT's comments).

The remainder of this letter report more specifically addresses the vegetation element of the suburban context for the Bowman Fields environs. The vegetation, particularly the trees, is the common character-defining element of the two Suburban Properties and of the larger area within the full APE.

<u>The Role of Vegetation in Historic Residential Subdivisions and Associated Suburban Resources</u>

The role of vegetation was well established in the design and layout of subdivisions by the 1930s, and was considered important for maintaining long-term real estate value. In 1936, in *Principles of Planning Small Houses*, the Federal Housing Administration ("FHA") advised developers that "trees and shrubbery may be used to enhance the architectural character . . . and add to the living quality of a property." Vegetation would not typically be shown on

¹FHA, Principles of Planning Small Houses. Technical Bulletin No. 4, 1936, revised July 1, 1940, p. 44.

subdivision plats, but would be planted according to "best practice" as reflected in, for example, the Urban Land Institute's *Community Builders Handbook*. Founded in 1936, the Urban Land Institute (ULI) is an association of builders and developer whose goal is to promote best practices in land development.

ULI first codified these landscape practices in 1947 in the *Community Builders*Handbook, which has been updated over the years.² With a primary focus on suburban residential development, the handbook devoted a section to "Landscape Plantings." The introduction to this section states that "A planting scheme should contribute to the beauty of the development and should serve a useful purpose as well." (p. 73) The text then describes the desired landscape elements starting with (a) the need "to preserve existing trees whenever possible as a good tree may add greatly to the value of the lot." The features recommended for planting included (b) street trees, (c) other tree plantings to break vistas and provide shade, and (d) shrubs and evergreens to be planted when required to prevent erosion, provide ground cover, or act as a screen. In addition, the handbook recognized that (d) trees and shrubbery can screen objectionable views and absorb and deflect noise, (f) hedges can be used strategically as accents and in play area, and, finally, (g) vines can enliven blank masonry walls.

The *National Register Bulletin, Historic Residential Suburbs* specifically includes vegetation as a landscape characteristic of subdivisions and recognizes that the vegetation element often reflects actions of the original developer, the neighborhood association (where present), and/or individual owners (p. 13):

Trees, shrubs, and other plantings in the form of lawns, shade trees, hedges foundation plantings and gardens often contribute to the historic setting and significance of historic neighborhoods. Planting were often the results of conscious efforts to create an attractive neighborhood as well as a cohesive, semi-rural setting. Pre-existing trees—often native to the area—may have been retained. Street trees planted for shade or ornamental purposes may reflect a conscious program of civic improvements by the subdivider . . . In addition, the

²Urban Land Institute, Community Builders Handbook (Washington, D.C.: The Urban Land Institute, 1947).

grounds of individual residences may be notable examples of domestic landscape design.

Thus, the vegetative element may be the result of an overall planting plan by the developer, such as street trees, and set of planting on lots, and/or by individual owners on their lots.

National Register Bulletin 18: How to Evaluate and Nominate Designed Landscape
identifies several layers of properties that may feature landscapes that contribute to historic
significance or may even attain such significance in their own right, including:

- city planning or civic design subdivisions and planned communities/resorts
- small residential grounds
- · estate or plantation grounds arboreta, botanical, and display gardens
- parks (local, State, and national) and camp grounds
- grounds designed or developed for outdoor recreation and/or sports activities such as country clubs, golf courses, tennis courts, bowling greens, bridle trails, stadiums, ball parks, and race tracks that are not part of a unit listed above
- parkways, drives, and trails

At the level of individual house lots, the yard is the primary character defining vegetative feature of the subdivision. Since the mid-nineteenth century, the yard has been seen as a feature of natural beauty to complement the house. Writing in 1870 on the art of beautifying home grounds, Frank J. Scott, stated that "... a freshly mown meadow is always beautiful and well kept lawn alone produced beauty [but] large trees are necessary to enliven their beauty." By 1912, the U.S. Department of Agriculture responded to the "widespread movement of civic art to improve and beautify cities and towns by park and art commissions, civic associations, and individuals" seeking technical advice on landscape design, and particularly lawns:

The greensward is the canvas upon which all architectural and landscape effects are produced ... Suburban railways, the extension of electric lines into the

³Frank J. Scott. 1870. "The Lawn."

country, and the return of man to natural ways of living are all factors contributing to the growing interest in matters pertaining to lawn making....

Lawns should be beautiful and useful.⁴

The detached house on its own lot with yard epitomizes the goals of home ownership in a semi-rural environment. The size of the yard in relation to the footprint of the house (floorarea ratio (FAR)) also establishes the lower density of the subdivision. While the plantings of individual yards typically reflect the tastes of homeowners, they may also reflect the influence of "authorities," such as FHA's recommendations for tree plantings to frame the house and unify the composition. Slow-growing trees were recommended so as not to obscure the view of the house. As noted at p. 13 of the *Historic Residential Suburbs Bulletin*, private yards may also reflect once-popular trends in domestic landscape design or include vegetation left from previous land uses. Neighborhood-wide, plantings are frequently dominated by grassy lawns, occasional specimen trees, shade trees, and shrubbery. Plants may also have strong thematic appeal for their seasonal display.

Thus, whether included as part of the initial plan for a development, or added incrementally over time, vegetation is a character-defining feature of a suburban development.

Significant Vegetative Character-Defining Features within the APEs

In my opinion, the RW 6 Garden Suburbs Suburban Property and the RW 33 Post WWII and Early Freeway Suburban Property within the narrow Bowman Field APEs qualify as historic landscapes both as designed historic landscapes, as defined in the *National Register Bulletin, Designed Historic Landscapes*, and as historic suburban landscapes under the *National Register Bulletin, Historic Residential Suburbs*.

In terms of the larger vegetative context, these properties are part of a larger cultural corridor identified above that extends in an easterly direction from Cave Hill Cemetery, adjacent to downtown Louisville, through Cherokee Park and Seneca Park, and terminating at

⁴U.S. Department of Agriculture. June 10, 1912. "Lawn Soils and Lawns." Farmers' Bulletin No. 494, prepared by Oswald Schreiner, L.C. Corbett, and F.L. Mulford, p. 28.

Bowman Field. On the south, the corridor is bounded by Bardstown/Taylorville Roads and on the north most immediately by I-64, but more generally by Frankfort Avenue.

The dominant natural features of this cultural corridor is hilly topography covered with a climax vegetation of Kentucky hardwoods consisting principally of oaks and maples. It was this natural character that attracted Cave Hill as one of the first garden cemeteries in the United States in 1845, followed by the Olmsted Cherokee Park in 1891, and Olmsted Seneca Park and Bowman Field in 1928-29. From the mid-nineteenth century, this area also attracted suburban development, first, as railroad-oriented country estates of the well-to-do. Subsequently, with the arrival of the streetcar in 1903, the area provided an ideal landscape for Garden Suburbs that arose from the American City Beautiful and English Garden City Movements in the 1890s. According to the *National Register Bulletin, Historic Residential Suburbs* (p. 41):

In the years preceding and following World War I, American landscape traditions fused with English Garden City influences to form distinctive American garden suburbs with gently curving, tree lined streets; open landscaped lawns and gardens; and attractive homes in a panoply of styles. While American designers looked to the historic precedents offered by the European continent for inspiration, the residential communities they fashioned were unequivocally American in the treatment of open space, accommodation of the automobile, the entrepreneurship of real estate developers, and reliance on American industry to make housing functional yet aesthetically appealing.

As explained above under the suburban context for the full APE, the character of this broader cultural corridor is itself defined by hilly landscapes with vegetative features down to the scale of yards in the subdivisions. The Bowman Field environs is a part of this designed and cultural landscape, as described below (the "second level" of review).

The second level of my review addresses the historic significance of the vegetative elements of the specific properties within the narrow APEs: RW 6 Garden Suburbs Suburban

Property, RW 33 Post WWII and Early Freeway Suburban Property, and RW 15 and RW 24 (Seneca Park and Big Spring Country Club, respectively, associated suburban resources).⁵

The mature hardwoods throughout the APEs are their most distinctive and striking vegetative feature. Although the composition of vegetation remains the same overall, it assumes different design characteristics in the different types of properties, which are subdivisions, golf courses, and parks. The vegetative cover of the subdivisions as a mature canopied hardwood climax lends these residential areas their park-like character. The tree canopy consists of the merged crowns of tall canopy trees. Ecologically, the shade of the canopy inhibits growth on the forest floor creating an open park-like landscape. There are four horizontal vegetative levels within a canopied forest and within these canopied subdivisions. There is the ground-cover level, yards; there is the shrub level, one that extends to 20 feet above ground level, and then there is the understory level of the canopy, consisting of intermediate-sized canopy trees that extend to 50 feet above ground level.

Finally, the upper over-story canopy tops 100 feet or more. The largest canopy trees are oaks and maples, with a few ash and elm. To counteract the loss of the ash and elm from disease, I understand from Michael Hayman that a purposeful planting effort has been conducted for years in Seneca Gardens, Seneca Vista, Kingsley, and Seneca Park to provide more diversity of canopy species, including blight-resistant American chestnut. Individually, canopy trees function as shade trees. This vegetation is found throughout the six subdivisions and Seneca Park.

Canopy trees are significant as design features both in groups of trees and as individually sited. In the six subdivisions, the primary group character-defining features are street trees forming canopies over streets. These are particularly mature in the RW 6 Garden Suburbs Suburban Property.

Understanding the ecology of the canopied tree cover is an essential part of understanding the significance and irreplaceability of this natural and historic feature and, therefore, the adverse effects that result from its destruction. A mature climax vegetation of hardwoods is a very intricate ecological system and takes 60 or 70 years to mature. In

⁵I did not focus upon Big Spring in this letter report because of its private setting and the lesser amount of historical documentation available. That is not to say that additional research and evaluation is not warranted; it is, especially given the insufficiencies in the draft CRE.

simplest terms, there are shade-tolerant and shade-intolerant plants. Deciduous trees are shade tolerant, while coniferous trees are shade-intolerant and cannot survive in a shady environment. As oaks, maples, and other canopy deciduous trees grow, they create shaded environments in which intermediate canopy trees can grow. The open effect in the canopied forest is created because the shade reduces the light and energy available, resulting in smaller plants at the ground level. The planning of Garden Suburbs heightens that effect through the planting of canopy trees and creation of the open space of yards.

The road circulation system is also a character-defining feature of subdivisions. The circulation system is usually self-contained and the streets are often curving. When flanked with canopy street trees, the combination creates one of the most distinctive vegetative character-defining features of the Garden Suburb – the canopied street. The street system in the RW 6 Garden Suburbs Suburban Property consists of curved grids, with the exception of McCoy Manor. Canopied streets are found throughout. The circulation system is also self-contained and intact in the RW 33 Post WWII and Early Freeway Suburban Property. Overall, street tree features range from very mature ones in the RW 6 Garden Suburbs Suburban Property (dating from the 1920s and the 1930s in some locations) to newer ones, such as the street tree features in Seneca Village No. 2.

Another character-defining feature is the individual canopy trees serving both as shade and ornamental trees. In examining the distribution of isolated shade trees within all of the neighborhoods, I observed two patterns. Where street trees are not present, there is an intermediate shade tree in almost every front yard. Backyards are the most common location for shade trees and many of these are high-canopy trees. Cutting or trimming these individual trees would also constitute an adverse effect.

Review of the Draft CRE's Evaluation of Vegetation

With regard to the historical signification of the vegetative element of the surveyed properties, Brockington concluded, in the Executive Summary, that "archival research, including a review of historic aerial photographs, did not reveal any particular vegetative plantings or features such as trees that would be considered character defining features. In addition, the inventory of trees around Bowman Field . . . suggests that the majority of plantings are of the low canopy and ornamental variety typically planted by property owners. A lesser

percentage of plantings appear to have developed organically (e.g. along fence rows) and represent the taller growing variety. "Therefore, overall, the draft report concludes that vegetation associated with the properties in the APEs is not a character-defining feature, nor historically significant.

Thus, while Brockington recommended all six subdivisions within the narrow APEs as eligible for the National Register, they did not consider the vegetative element to be a contributing factor to their historical significance and eligibility. In fact, the consultants only "evaluated" vegetation in the four subdivisions that might lose trees, and not in the two that will not (Kingsley, McCoy Manor). For the directly impacted subdivisions, unsupported by any evaluation, Brockington used exactly the same boilerplate language for each subdivision to conclude that vegetation was not historically significant and therefore not a contributing element: "The neighborhood does not appear to be developed with design specific to vegetation. Landscape design elements of the original platting and build out included setbacks, uniform spacing between houses and general roadway circulation. Planting appears to have been developed organically or by individual property owners over time. Neither the type nor overall height of the tree is considered to be a contributing element of the neighborhood."

The key phrases used to disqualify vegetation as being historically significant in the draft recommendations are:

- 1. "did not appear to be developed with design specific to vegetation,"
- 2. "developed organically," and
- 3. "by individual property owners."
- 4. Trees themselves were disqualified when they were not of the proper height or of the right type.

As typifies the report throughout, no definitions of terms are provided and, as noted by PFTT, the draft CRE omits "any explanation of standards used to identify and evaluate the landscape components." In addition, PFTT cites other important sources that, although referenced by Brockington in the Reference section, were not incorporated into their analysis. These include National Register Bulletin on Designed Historic Landscapes and Preservation Brief 36, Protecting Cultural Landscapes: Planning Treatment.

I will assume that, in terms of vegetation, Brockington's four stock phrases identified above mean the following: 1. vegetation has to be part of the original design intent of the subdivision for it to be a contributing element; 2. "organically" means occurring naturally or unplanned by humans; and 3., plantings by owners on their own lots cannot be historically significant or contributing. In terms of 4. (trees as contributing elements), I assume the report text means what is says, but have no idea what that is – how tall is "tall" and what is the "right" type of tree to be deemed worthy?

Question of original intent. Brockington holds the position that vegetation cannot be considered a character-defining feature unless it can be shown to be a part of the original intent of a subdivision or property. This position is wrong on two counts; first, every feature in an historic property that developed during its period of significance must be described and evaluated for its significance. Secondly, there is evidence that the character of the vegetation in the Bowman subdivisions does, in fact, reflect original intent. While being part of the original design may lend greater significance to a feature, it is not a prerequisite for consideration. Indeed, the *National Register Bulletin* on *Designed Historic Landscapes* states that "Some later vegetation, especially specimen varieties, may also possess significance in its own right regardless of its relationship to the original design or implementation." (p.7) All planting and vegetation that is more than 50 years old should be evaluated in the Bowman Field subdivisions.

More fundamentally, however, the National Register guidelines recognize that properties evolve over time and each stage can be significant. This view is embodied in the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, which define the method of preservation by "treatment" as focusing upon "the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time." Also, significant trees and wooded areas that predate planned subdivisions are not necessarily noncontributing but, as mentioned earlier, may be part of the very factors that attracted development.

The evidence that there was original intent to create a suburban park-like landscape is seen in the subdivision plans for each of the Suburban Property Types (Garden, Post WWII and Early Freeway). Curiously, Brockington, notes that "Landscape design elements of the original platting and build out included setbacks, uniform spacing between houses and general

roadway circulation," but chose not see that evidence as constituting original design intent for vegetation. Intention for yards and planting space is demonstrated in both the RW 6 and RW 33 properties by subdividing the area into individual lots with detached houses equally spaced with deep setbacks from the street. In addition, in the plats, the streets have 60-foot right of ways which include 20-foot planting strips for trees flanking the 20-foot wide streets. Further, utilities ran though backyards to leave streets open for planting. Finally, the evidence of original intent to create street canopies is seen in the actual planting of trees with appropriate canopies lining the street. That these mature trees are old enough to date to development of the subdivision is further evidence of original design intent.

Therefore, under National Register guidelines and requirements, Brockington has no basis for excluding consideration of vegetation under the rationale that it was not part of the original design, while ironically supplying evidence that it was.

Lastly, by definition, the private yard with trees and shrubbery is the primary vegetative element of the subdivision. The vegetation of yards is a very important character-defining feature both individually and together as they form a flat vegetative floor of the subdivisions with open lines of site. In addition to grass, most of the yards I observed in the narrow (and full) APEs contain a variety of vegetation in the form of shrubs, flowers, and ground cover. The architecture survey apparently did not evaluate yards in any detail. The reason for this substantial omission may reflect the draft report's erroneous premise that only vegetation that reflect "original design intent" of the developer/subdivision qualifies a landscape for historic significance, thereby excluding vegetation that is later propagated by homeowners from consideration as contributing. This approach to evaluation is completely wrong and contrary to applicable National Register guidelines.

Finally, and importantly, it should be noted that Brockington's omission of landscape elements may well have begun with the survey. PFTT observed that Sections 1.2.1 and 1.2.2 ("Project Overview and Sponsorship" and "Methods and Investigation") omit any reference to or discussion of the archival work or fieldwork that was conducted to evaluate **the affected landscapes** (their emphasis), particularly vegetation. However, since copies of the survey forms were not included in the draft CRE, it is not possible to know exactly what was surveyed. The "Guidelines for Surveying Historic Suburbs" in the *National Register Bulletin* on *Historic Residential Suburbs* requires that distinctive aspects of landscape design be surveyed, including

"identify[ing] principal types of vegetation, noting distinctive patterns such as the use of ornamental or shade trees, shrubbery, and specimen trees." The guidelines also require "describing the general sizes of lot and the placement of houses, including the arrangement of corner lots. " (p. 87) There is no mention of types or distinctive patterns of vegetation, nor even of lot size that I can find anywhere in the draft CRE.

Conclusions

As a general observation, I agree with the July 10, 2015 comments of PFTT that "[Brockington's] approach to the vegetation analysis turns an aphorism on its head: the report fails to see the trees for the forest." (p.3) The draft CRE fails in presenting and understanding how landscapes are identified and evaluated for historic significance and, thus, the ineligibility determinations are unsupported. The report more broadly fails in the absence of an historic context and the significant failure to apply guidance on the identification and evaluation of the specific types of properties in this undertaking's APEs.

PFTT's comments and this letter report demonstrate that vegetation is recognized by the National Register of Historic Places as a character-defining feature of the different periods of suburban development in the National Park Service's bulletins on Historic Designed Landscapes and Historic Residential Suburbs. Based upon my knowledge of the area and my most recent site visit, I have also described in this letter report the specific vegetative character-defining features of the historic suburban landscapes of the Bowman Field APEs (full and narrow).

What needs to be recognized is that the prior vegetation of hardwood forest and hilly picturesque natural landscape was the feature that attracted the parks, golf courses, and subdivisions to the area. Although each of these land uses, in turn, resulted in modifications of the vegetation and trees to meet the needs of these different uses, the mature climax hardwood forest remained essentially the same. The proposed airspace "mitigation" would destroy this important ecological and cultural feature and constitute an adverse effect under Section 106.

Sincerely,

David L. Ames Louisville, KY

RESUME Covering the Period from 2002-2015

DAVID L. AMES, Ph.D.

Professor of Urban Affairs & Public Policy, Geography and American Material Culture Studies

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Email: davames@udel.edu

Web Site: http://www.udel.edu/CHAD/AmesBio.html

ACADEMIC POSITIONS:

Professor of Urban Affairs & Public Policy and Geography and Material Culture Studies, University of Delaware, 1979 to date. Affiliated faculty - Center for Material Culture Studies, University Transportation Center, Delaware Design Institute.

Professor of American Material Culture Studies in the Center for American Material Culture Studies, 2001 to date.

Associate Professor of Urban Studies and Planning, Virginia Commonwealth University, Richmond Virginia, 1971 to 1979.

Assistant Professor of Geography and Planning, University of Cincinnati, 1967 to 1969.

ADMINISTRATIVE POSITIONS:

Director, Center for Historic Architecture and Design, University of Delaware, 1984 to 2014

Co-director of the Master's Program in Historic Preservation, University of Delaware, 2010 -2013

Dean, College of Urban Affairs and Public Policy, University of Delaware, 1979 to 1991 Acting Dean, School of Community Services, Virginia Commonwealth University, 1978-1979

Associate Dean, School of Community Services, Virginia Commonwealth University, 1974-1978

Chair, Department of Urban Studies and Planning, Virginia Commonwealth University, 1971-1974

PLANNING POSITIONS:

Director of Long Range Planning and Research, Ohio-Kentucky-Indiana Regional Planning Authority, 1969 to 1971

EDUCATION:

George Washington University, A.B., 1961, Geography
George Washington University, A.M., 1965, Geography and Regional Science
Clark University, Ph.D., 1969, Urban Geography

RECENT PUBLICATIONS/PAPERS/REPORTS (2002 to present):

Books

- Co-edited with Richard Wagner Goucher College), Challenges in Compatibility: Design in Historic Preservation: The Challenge of Compatibility (Newark: University of Delaware Press, 2009).
- David L. Ames and Linda Flint McClelland, Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places, Washington, DC: US Government Printing Office, 2002), http://www.nps.gov/history/nr/publications/bulletins/suburbs/suburbs-start.htm.

Articles/Chapters

- David L. Ames, "Reading the Read House: A Reinterpretation," *New Stories from Old Things* (Newark, DE: University of Delaware Press, 2016), forthcoming.
- David L. Ames, "Shopping Malls: Machines for Selling," Deborah Andrews, ed., *Shopping: A Material Culture Perspective*, (Newark: University of Delaware Press, 2014).
- David L. Ames, Michelle Oswald M, Sue McNeil and Rebekah Gayley, "Identifying Resiliency Performance Measures for Megaregional Planning: A Case Study of the BOSWASH Transportation Corridor, " *Transportation Research Record*, Winter 2013.
- Oswald, M., McNeil, S., Ames, D., Mao, W. (2012) Transportation Planning In Response to Climate Change: Methods And Tools For Adaptation In Delaware. *Transportation Research Board 91st Annual Meeting Conference Proceedings*. Winter, 2012.
- Oswald, M., McNeil, S., Ames, D., Mao, W. (2012) Transportation Planning In Response to Climate Change: Methods And Tools For Adaptation In Delaware. *Transportation Research Board 91st Annual Meeting Conference Proceedings.* 2012
- David L. Ames and Leila Hamroun, "Principles of Architectural Preservation," Companion to Cultural Resource Management, Thomas F. King, editor, Wiley-Blackwell Publishers, 2011.
- With Michelle Oswald, Sue McNeil, and Rebekah Galey, "Indicators of Resiliency for Transportation Corridors," ASCE Journal of Urban Planning and Development. 2011.
- David L. Ames, "Introduction: Design in Preservation as Problem Solving," *Challenges in Compatibility: Design in Historic Preservation,* David Ames and Richard Wagner co-editors (Newark, DE: University of Delaware Press, 2010).
- David Ames, et. al. "The Challenge of Nominating the Underground Railroad in Delaware as an Historic Highway," *Preservation Education and Research*, Vol. Two, 2009 pp. 41-53.
- Oswald, Michelle, McNeil, Sue, and Ames, David. (2009). Evaluating the Current State of the BosWash Megalopolis Corridor and Indicators of Resiliency. 5th AISIM Conference Proceedings. University of Iowa: Iowa City.
- David L. Ames, Sarah Beetham, Lael Ensor, Ann Fangmann, Erin Ferriter,
 Robin Krawitz, and Debra Martin, "The Challenge of Nomination the
 Underground Railroad in Delaware as a Historic Byway, *Preservation Education*and Research, Volume 2, 2009.

David L. Ames, "Introduction," Co-edited with Richard Wagner, *Challenges in Compatibility: Design in Historic: The Challenge of Compatibility* (Newark: University of Delaware Press, 2009).

Newsletter Articles

- David L. Ames, "Why Public Administrators and Planners Should Love Historic Preservationists," *DAPA Public Service Reader*, Dec. 2010.
- David L. Ames, Rebecca Sheppard and Chandra Reedy, "Preservation Comes of Age," *Connect*, School of Public Affairs and Administration UD, 2011, pp. 14-15.
- David L. Ames, "Trees and Water: Two Keys to Sustainable Neighborhoods," *Connect*, School of Public Affairs and Administration UD, 2011, pp. 11-12.
- With Caroline Barry and Allison Calkins, "Research Pays Off: the Byways Program Showcasing Delaware," *Transearch*, Spring 2011, pp. 9-11 (Delaware Center for Transportation).

Conference Papers

- With Michele Anstine, "The 1804 Read House of New Castle, Delaware in the Context of American Renaissance-inspired Houses, "Second Annual Palladian Symposium: Charleston and the Development of American Architecture," Charleston, South Carolina April 2013,
- With Rebecca Sheppard, Angela Gladwell and Laura Kelley, "Learning by Doing:
 Exploring the Role of Fieldwork in Historic Preservation and Historic
 Environment Curricula," Preservation Education: Sharing Best Practices and
 Finding Common Ground," Roger Williams University, Providence, Rhode Island,
 8-9, 2012.
- "Keynote: The Recent Past in Virginia: An Oxymoron?" Virginia Annual State Historic Preservation Conference, Hampton, Virginia, Sept. 8, 2010.
- "The Threat of Sprawl to Byways," National Preserving Historic Roads Conference, Washington, D.C. September 17, 2010.
- with Sue McNeil and Michelle Oswald, "Radical Roads: The Revolutionary Influence of the Interstate Highways System on the Pattern of Urbanization in the United States, "Annual Meetings of the Urban Affairs Association, Baltimore Maryland, March, 2009.
- "Discovering Suburbs Through the National Register of Historic Places: An Analysis of the Application of the National Register Bulletin, *Historic Residential Suburbs*" Biennial Meeting of the Society for American City and Regional Planning History, Oakland, California, October, 2009.
- "The Challenge of the Underground Railroad as a Historic Byway," Sixth Biennial Conference on Historic Roads Preserving the Historic Road 1998-2008, September 11, 2008, Albuquerque, NM.
- "Diversity in Detail: The Evolution of Workers' Rowhouses in Wilmington DE: 1850 to 1930" Biennial Meeting of the Society for American City and Regional Planning History, Seattle, Washington, October, 2007.
- "Linear Urban History: The Challenges of Urban Roads as Scenic and Historic Highways," Presented at the 37th Annual Meeting of Urban Affairs Association, Seattle Washington, April 26, 2007.
- With Erin Ferriter, and Jonathan Justice, "New Urbanism in Old New Castle,

Delaware," Presented to the 36th Annual Meeting of the Urban Affairs Association. Montreal, Canada April 20, 2006.

With Eric Gollannek, "Changing Lanes on the Vernacular Strip: A Taxonomy of Commercial Properties along the American Highway" Presented to the Annual Meeting of the Vernacular Architectural Form, Tuscon, Arizona, April, 2005.

With Eric Gollannek, "Truckin' Along: The Influence of the Truck on Early Urban Highway Design: The Case of Philadelphia Pike Delaware" A Paper Presented at the Semi-Annual Conference of the Society of American City and Regional Planning History, Coral Gables, Florida, October 22, 2005 also presented to the SUAPP faculty research forum February, 2005.

Monographs/Technical Reports

- David L. Ames *et. al*, Feasibility Study of the Proposed Extension of the Coastal Heritage Scenic Byway from Route 9 to Lewes, (Center for Historic Architecture and Design, University of Delaware, Feb. 2013).
- David L. Ames and Candice Myruski, *Historic Photographs of Delaware's Transportation*From the Hammond Glass Plate Collection: 1922 1938 (Center for Historic Architecture and Design, University of Delaware, Feb. 2013).
- David L. Ames, Tim Pouch, Allison Rice and Laura Proctor, *Delaware Virtual Byway Project: Final Report* (Center for Historic Architecture and Design, University of Delaware, 2013).
- David L, Ames, Candice Myruski, et.al, Historic Photographs of Delaware's Coast: From the Hammond Glass Plate Collection 1922-1938, (Center for Historic Architecture and Design, University of Delaware, 2013).
- David L. Ames, Editor, *A Critical Look at Sustainability and Historic Preservation*, Proceedings of the Sixth National Forum on Historic Preservation Practice, (Baltimore: Goucher College, March 19-21, 2009).
- David L. Ames, et. al. with the Delaware Underground Railroad Coalition, Nomination of Harriet Tubman Underground Railroad Historic Byway to the Delaware Scenic and Historic Highway Program, (Center for Historic Architecture and Design, University of Delaware, 2009) funded by DelDOT.
- David L. Ames, et.al. Nomination of Proposed Western Sussex Scenic and Historic Highway to the Delaware Scenic and Historic Highway Program, (Center for Historic Architecture and Design, 2009) funded by DelDOT.
- With Tori Walker, *Field Guide to Delaware City Architecture*, Center for Historic Architecture and Design, University of Delaware 2008.
- David L. Ames, Andrew Homsey, Xuan Jiang ad Rebecca Galey, *Exploring Sussex: Toward Heritage Tourism in Sussex County, Delaware* (Center for Historic Architecture and Design and Institute for Public Administration, UD 2008).
- David L. Ames, Eric Gollannek and Sarah Rector, A Manual for Nominating Roads to the Delaware Scenic and Historic Highway Program, (Center for Historic Architecture and Design, University of Delaware, 2006), Funded by DelDot.
- David L. Ames, David Amott, and Eric Gollannek, *A History of Delaware Roads and a Guide to Researching Them,* (Center for Historic Architecture, 2006).
- David L. Ames and Eric Gollannek, *Nomination of Philadelphia Pike to the Delaware Scenic and Historic Highway Program* (2005).

Co-edited with Richard Wagner, A Critical Look at Cultural Landscapes and Historic Preservation: Pre-conference Proceedings of the Fourth National Forum on Historic Preservation Practice (Goucher College, Baltimore, March 18-20, 2004).

David L. Ames and Janet Sheridan, Delaware Historic Bridges Project. A series of discussion/policy papers were written under a grant from DelDOT (NCHRP Project 25-25, Task 15 2007) to explore issues about historic bridges in Delaware.

RESEARCH:

2014-2015

DELDOT Byways Research Program, \$130,000 – support stipends of three graduate students

2013-2014

DELDOT Byways Research Program, \$130,000 – support stipends of three graduate students

2012-2013

DELDOT Byways Research Program, \$130,000

UDUTC Update Megalopolitan Literature Review by graduate student, \$3,000 National Landmarks Nomination for the Read House in New Castle, with Michele Anstine. I was asked by the DHS and the National Parks Service to assist in the preparation of a National Landmarks Nomination for the Read House. I have been doing this as faculty research and public service.

2011-2012

DELDOT Byways Research Program, \$130,000

National Landmarks Nomination for the Read House in New Castle, with Michele Anstine

2010-2011

DELDOT Byways Research Program, \$130,000

National Landmarks Nomination for the Read House in New Castle, with Michele Anstine

UD Chrysler Community Legacy Project, \$1,000

Global Studies China/Tibet Grant with Reedy and Sheppard, \$50,000

2009-2010

DELDOT Byways Research Program, \$125,000

UDUTC - Impact of Climate Change in I-95 with Sue McNeil, \$58,120

UD Grant from Professional Studies to Convert Historic Preservation Certificate

Program to On-line Delivery, \$28,000 (with Sheppard and Reedy)

2008-2009

DELDOT Byways Research Program, \$125,000

2004-2008

Annual DELDOT Byways Research Program, approx. \$100,000 per year
Delaware Transportation Center – Defining Historic Bridges, 2006, \$50,000
Preparation of Scenic and Historic Highway Application to DELDOT, New Castle County
Planning Department, 2006-2007, \$50,000

History and Photographic Documentation of Rockwood, New Castle County County Planning Department, 2005-2007, \$40,000

Odessa Design Guidelines Project, Town of Odessa, 2005, \$4,000

Graduate Research Assistants Supported – these contracts have provided stipends for five to six graduate research students a year averaging about \$15,000 per stipend. SPAA has matched with tuition at 100% until 2011-2012 and then at 90%

TEACHING/CURRICULUM DEVELOPMENT:

Teaching and Courses Taught 2008-2013. With a faculty appointment in the School of Public Policy and Administration, I am a member of the program faculties in Historic Preservation and Urban Affairs and Public Policy and teach in both programs. I have also been invited over the years to give guest lectures in a number of graduate and undergraduate classes in other programs and departments.

Courses Taught 2014-2015

None – on sabbatical

2013-2014

UAPP 420/720 Introduction to Architectural Photography
UAPP/MSST 629 HIST 652 Theory and Practice of Historic Preservation (with Reedy)
UAPP 964 Pre-candidacy Study
MAUAPP/MAHP Adviser - 3
Analytic Paper - 1
Ph.D. Guidance/Dissertation Committee Urban Affairs - 3

2012-2013

On sabbatical spring 2013
UAPP 420/720 Introduction to Architectural Photography
UAPP/MSST 629 HIST 652 Theory and Practice of Historic Preservation (with Reedy)
UAPP 964 Pre-candidacy Study
MAUAPP/MAHP Adviser - 3
Analytic Paper - 1
Ph.D. Guidance/Dissertation Committee Urban Affairs - 3

Engineering – 4 Preservation Studies -1

Preservation Studies - 2

2011-2012

GEOG/UAPP 434/634 Planning Sustainable Communities and Regions
UAPP 420/720 Introduction to Architectural Photography
UAPP MSST 639 HIST 653 Theory and Practice of Historic Processing Control

UAPP/MSST 629 HIST 652 Theory and Practice of Historic Preservation (with Reedy)

UAPP 862 Teaching Practicum for Doctoral Student (TA)

UAPP 870 Directed Readings

MAUAPP/MHP Advisees - 4

Analytic Papers - 3

Ph.D. Guidance/Dissertation Committee -

Urban Affairs – 2

Engineering – 3

Preservation Studies -1

2010-2011

GEOG/UAPP 434/634 Planning Sustainable Communities and Regions
UAPP 420/720 Introduction to Architectural Photography (Converted to on-line format with Office of Professional Studies support)

UAPP/MSST 629 HIST 652 Theory and Practice of Historic Preservation (with Reedy)

(Converted to on-line format with Office of Professional Studies support)

MAUAPP Advisees - 4

Analytic Papers - 2

Thesis chair or committee – 5

Dissertation -

Engineering - 2

Preservation Studies - 2

2009-2010

GEOG/UAPP 434/634 Planning Sustainable Communities and Regions

UAPP 420/720 Introduction to Architectural Photography

UAPP 870 Directed Readings

UAPP/MSST 629 HIST 652 Theory and Practice of Historic Preservation (with Reedy)

MAUAPP Advisees - 5

Analytic Papers-5

Thesis chair or committee - 4

Dissertation -

Engineering - 1

Preservation Studies - 3

2008-2009

GEOG/UAPP 629 Issues in Land Use and Environmental Planning

UAPP 420/720 Introduction to Architectural Photography

UAPP/MSST 629 HIST 652 Theory and Practice of Historic Preservation (with Reedy)

UAPP 667 New Urbanism w/ Middlebrooks and Bruck

MAUAPP Advisees - 5

Analytic Papers - 5

Thesis chair or committee – 5

Dissertation -

Engineering - 1 Preservation Studies - 3

Curriculum Development

Urban Affairs and Public Policy. I have been active in curriculum development in the Masters in Urban Affairs and Public Policy program of study and in particular the Concentrations in Urban and Regional Planning and Historic Preservation until they were deleted in 2010. I have taught a required core course in planning GEOG/UAPP 434/634, "Planning Sustainable Communities and Regions." I have advised students interested in planning and directed analytic papers and dissertations.

Historic Preservation. My primary effort in curriculum development during this period, along with Dr. Rebecca Sheppard, CHAD's Associate Director and co-director of the concentration in historic preservation and Dr. Chandra Reedy, was the development and approval by the SPPA faculty and the University of a Masters and Certificate Program in Historic Preservation.

On-line Education. In 2010, with a grant from the UD Office of Professional Studies, Ames and Reedy developed an online version of UAPP 629, "Theory and Practice of Historic Preservation Planning" and in spring 2010, Ames converted UAPP 720, "Introduction to Architectural Photography," to an online format. To date, they have been offered as hybrid courses in conjunction with classroom courses.

Digital Instruction. In the fall of 2011, with colleagues Lance Winn from Art, Ritchie Garrison with Winterthur Program, and Sheppard and Reedy, we received a grant from the Office of Information Services to apply I-Book and I Pads to instruction needs in Historic Preservation. We have also been participating in the Digital Humanities Forum in CAS and were invited to present a paper on "Rephotography" to one of their forums last spring. "Introduction to Architectural Photography" is digitally based and involved in community outreach as described in the UDaily story, http://www.udel.edu/udaily/2014/nov/main-street-preservation-111113.html.

SERVICE AND PUBLIC ENGAGEMENT:

Service to School of Public Policy and Administration

Convener, Center Directors Group, 2013
Member of SUAPP Steering Committee, 2009-2010
Convener, Faculty Affinity Group in Planning, 2011 to present
Director, Center for Historic Architecture and Design
Faculty Coordinator with Peuquet of Concentration in Urban and Regional
Planning, to 2010
Faculty Coordinator with Sheppard, Concentration in Historic Preservation in
MA in Urban Affairs, to 2010
Co-director, Master's Program in Historic Preservation, 2009-2013
Member, Committee to Develop Masters in Historic Preservation, 2009-2010

Member Committee to Examine Feasibility of Planning Program, 2008-2009 Convener, Faculty Planning Affinity Group, 2010 and 2013

Service to College of Arts and Science

Member of the Executive Committee of the Winterthur Program in American Material Culture

Member of the Admissions Committee for the Preservation Studies Doctoral Program

Affiliated faculty of the Center for Material Culture Studies
Member, Steering Committee for Delaware Design Institute
Member, Selection Committee for Material Culture Fellows Committee
Member faculty vetting committee for 2014 Emerging Scholars in Material
Culture Symposium
Member, Search Committee for GIS faculty in Geography Department

University Service

Member of the Visiting Committee on Architecture of the UD Board of Trustees
Conduct tours of University of Delaware Historic Architecture for Alumni Weekend in June, 2009, 2010, 2011, 2012
Advice on the Campus's Historic Buildings and Landscape Solicited by Facilities Planning staff
Developed Concept and Plans with Material Culture colleagues for Interpretive Brick Wall on Opera House in Bookstore Court, 2012

Public Engagement with the Larger Community

Since nearly all on my research has an applied aspect, it involves community and working with local agencies and organization wherever the project is located. This is especially true of the Byway project in Delaware, which is a grass roots effort with each Byway having a sponsor consisting of representatives from state agencies, local governments, non-profit organizations, and individuals. We provide assistance directly to these groups in the form of research and technical assistance. We have active involvement throughout the state from Northern Delaware with the Philadelphia Pike Nomination, in central Delaware with the Harriet Tubman nomination and corridor management plan process, and in southwestern Delaware in Sussex County with the Nanticoke Heritage Byway.

Community Service

Member, State of Delaware Historic Preservation Historic Review Board Board Member, Quaker Hill Historic Preservation Foundation Member of Board of Preservation Delaware, Inc., 2010 to 2013 Completed Audio Tour of Historic Architecture on Wilmington's Market Street in conjunction with Delaware Historical Society and Delaware Humanities Forum

External Public Service

Member Sub-committee of DENREC Sea-Level-Rise Advisory Committee, 2010–2013

Member DELDOT Coastal Heritage Byways Advisory Committee (now Bayshore Byway), 2012 to present

Member DELDOT Harriett Tubman Underground Railroad Byway Advisory Committee, 2010 to present

Completed Audio Tear of Historics Archit a through Willes

PROFESSIONAL MEMBERSHIPS:

Vernacular Architectural Forum
Society of Architectural Historians
Society for American City and Regional Planning History
National Trust for Historic Preservation
National Preservation Policy Forum
Urban Affairs Association
Delaware Association for Public Administration