

UVA Office of University Building Official

Annual Report 2009-2010



Introduction

The University of Virginia Office of University Building Official (OUBO) is charged with the administration of the Virginia Uniform Statewide Building Code as part of the Management Agreement between UVA and the Commonwealth of Virginia pursuant to the Restructured Higher Education Financial and Administrative Operations Act of 2005. Elaine B. Gall, P.E. has served as the University Building Official since February 2009 and oversees the associated duties for administration of Virginia's building codes. Duties involved include review of plans, processing of building permits, inspections, and issuance of Certificates of Occupancy. Mrs. Gall and her staff report directly and solely to the Board of Visitors as described in the management agreement with the Commonwealth of Virginia.

Overview

Significant increases in construction activity continued in the 2009-2010 year. OUBO issued 172 building permits compared to 148 the previous year. 355 plan reviews were accomplished as compared to 324 in 2008-2009. Responsible for all structures owned by the University of Virginia, members of staff traveled to a number of locations including Blandy Farm, UVA College at Wise, and Fan Mountain to provide onsite consultations and inspections.

The Office of University Building Official issued Certificates of Occupancy for a variety of structures including laboratories, dining halls, residential buildings, offices, and classroom buildings. Certificates of Occupancy were issued for such buildings as:

- Arts Center Addition and Renovation - UVA College at Wise
- Dining and Residence Halls - UVA College at Wise
- Student Lab Modular Building - Blandy Farm
- Primary Care Center Annex
- Carter-Harrison Vivarium
- South Lawn North and South Wings
- Baseball Stadium Addition



College at Wise Residence Hall – Completed August 2009

In addition to the above, OUBO staff participated in 9 Value Management studies to identify cost savings, better functionality, and improved energy efficiency of buildings. Staff also updated the University of Virginia Design Guidelines to include requirements for desired design features for University of Virginia structures that are above and beyond the minimum standards of building codes. These include energy efficiency standards as part of our desire to minimize our carbon footprint and utility costs and security measures to improve student safety in classrooms.



South Lawn Project – North and South Wings Occupied Fall 2009

Plans Review

355 project reviews for 142 projects were completed in 2009-2010. 355 reviews reflect a 10% increase over last year and a 33% increase in two years. Most, but not all, reviews fall under the following five categories and break down as follows:

<u>Project Category</u>	<u>Projects</u>	<u>Reviews</u>
Academic	33	106
Medical	48	114
UVA Wise	6	16
Athletics	7	20
Housing	4	18

By being on grounds, the Office of University Building Official was able to provide services to improve efficiency. Small projects were often handled by a process called “on-board” reviews which enables the project manager and A/E to meet with staff to perform a plan review together as opposed to the more traditional method designed for large projects of sending plans in for review. This was particularly helpful with the many small Medical Center projects that have resulted from relocations made necessary by the current Bed Expansion Project.

With a second year of significant increases in project reviews, the office instituted other measures to meet the specific needs of the University of Virginia. Rather than set priorities based on a first-come, first-served basis as would be the case if competing with other state agencies for review priority, OUBO often set priorities based first on construction schedules, emergency project needs, and funding available thus allowing UVA to have better control over its own review and construction schedules.



UVA College at Wise Arts Center - Occupied Fall 2009

Building Permits

Between April 1, 2009 and March 31, 2010, building permits were issued for 172 projects compared to 148 for the previous year. The office also issued permits for temporary structures such as bleachers for athletic and graduation events and staging for outdoor concerts. Partial permitting increased as the University seeks to begin construction prior to design completion. Thus partial permits for demolition, foundations, and even structural core were issued to allow limited work to begin while remaining design work was being completed. Permits issued included:

<u>Project Category</u>	<u>Permits</u>
Academic	57
Medical	56
UVA Wise	2
Athletics	11
Housing	10

While not all projects require a full plan review, staff members provide consultation and assistance for every permit issued. Increasing numbers due to both an increase in project numbers and partial permitting led the Office of University Building Official to institute a number of efforts to improve efficiency of the process.

In January 2010, we instituted electronic processing utilizing password protected building permits. This significantly improved turnaround time since the process no longer relies on transfer of hard copies which was particularly for medical projects that required signatures from persons remotely located.

In addition, a central email account was created for submittal of permit applications which can then be posted on a website and is not dependent on a single individual's email account. This is particularly helpful to persons outside of Facilities Management less familiar with the process. Staff training related to issuing permits was also held to increase the number of staff members available for permit processing.



Baseball Expansion and Site of Four Additional Temporary Permits for Increased Spectator Seating - Occupied Spring 2010

Inspections

The Office of University Building Official performs construction inspections to document compliance with life safety and accessibility standards prior to granting occupancy. The Management Agreement between the University and the Commonwealth of Virginia requires approval from the State Fire Marshal's Office prior to issuance of Certificates of Occupancy and OUBO staff continued to maintain a working relationship with that office by keeping them involved during construction and notifying them of issues that would affect compliance and occupancy. This outstanding relationship was perhaps best exemplified by the several occasions this year when the State Fire Marshal approved buildings based on OUBO final inspections rather than performing their own inspections, indicating their trust and respect for our program. This allowed UVA to continue on its own schedule rather than being delayed while awaiting time slots in the State Fire Marshal's schedule.

Assistance and information continued to be emphasized as the primary means of constructing buildings that comply with the Virginia Uniform Statewide Building Code. OUBO staff developed checklists containing items believed to be most helpful to construction managers and contractors. Staff attended numerous pre-construction meetings to go over items needed for individual projects and posted checklists on Facilities Management websites. Contractors are well-informed early in each project of what is needed to pass OUBO and State Fire Marshal inspections.

OUBO also performed inspections when single items were ready for inspection, particularly as it related to accessibility issues where measurements are critical to state auditors. For example, when the first of numerous accessible showers were installed, inspections were made and issues noted for that single installation. Once corrected, the contractor could then apply the knowledge gained for all remaining accessible showers and use the first as a prototype for the remaining. This helped to prevent the delays and expenses that would have been involved had problems not been noted until the end of the project.



Emily Couric Clinical Cancer Center - Currently Under Construction

Certificates of Occupancy

During the 2009-2010 reporting year, 19 Certificates of Occupancy were issued. In addition, the Office of University Building Official issued 14 Certificates for Reoccupancy for major renovations to existing buildings. Of particular notice was the significant number of projects completed at UVA College at Wise where Certificates of Occupancy were issued for the following buildings:

- New Residence Hall
- New Dining Hall
- Complete Renovation of the Science Building
- Renovations and Addition of the Arts Center
- Smiddy IT Wing



UVA College at Wise Dining Hall Occupied December 2009

Occupancy was granted for numerous other projects including:

- South Lawn North and South Wings
- Baseball Stadium Expansion
- Bayly Art Museum Renovations
- Blandy Farm Modular Lab
- Batten I-Lab Renovations

- Carter-Harrison Research Vivarium
- Focused Ultrasound
- Clinical Pedestrian Bridge
- Outpatient Clinic at Fontaine
- Hospital Zero Level - 5 project

The Annex to the Primary Care Center received three separate Certificates of Occupancy within a two-week timeframe. Just prior to opening for use as business offices, a large snowfall event was forecast for Charlottesville. UVA Medical Center requested permission to utilize the empty building for emergency sleeping quarters for hospital staff needing to stay in Charlottesville and close to the hospital during the storm. OUBO staff worked with the UVA Medical Center and Facilities Management to gain approval from the State Fire Marshal for this temporary emergency use to begin on February 4, 2010 which was followed by an extension for a second winter storm forecast for February 10. The building was finally occupied for its original intended purpose a week later on February 17.



Primary Care Center Annex Occupied February 2010

University Building Official and Review Unit Biographical Information

University Building Official: Elaine B. Gall, PE, Certified Building Official

B.S. in Mechanical Engineering, Virginia Tech

M.S. in Fire Protection Engineering, University of Maryland

Certified Building Code Official, Fire Code Official, Fire Protection Inspector, Fire Protection Plan Reviewer, and Mechanical Inspector based on certification tests and attendance of related DHCD Code Academy and Department of Fire Programs Training.

Appointed by Governor in July 2009 to serve on the Virginia Fire Services Board.

Member of the Virginia Building and Code Officials Association, National Fire Prevention Association, and Virginia Fire Services Board Code Committee.

- Virginia registered engineer, 24 years professional experience, all of which includes code and plan review and construction inspection experience. Experience includes serving as Deputy State Fire Marshal and Regional Engineer in Roanoke involved with University of Virginia projects and facilities.
- Primary responsibility is to administer the Virginia Uniform Statewide Building Code program for all new construction and renovations and to oversee all activities related to maintaining compliance with Codes and the Management Agreement with the Commonwealth of Virginia.
- Also responsible for plan review and consultation related to fire safety provisions including fire suppression and fire alarm systems, and fire-resistance rated construction.

Review Unit Managing Architect: Sandy H. Lambert III, AIA

B.S. in Architecture, University of Virginia

Member of American Institute of Architects

Completing 28th year with the University of Virginia.

- Virginia registered architect, 44 years professional experience, 18 years code review experience at University, (including first Chief Review Architect 1991).
- Primary responsibility is management of Review Unit, scheduling for project reviews and value management participation, document reviews for contract administration, architectural and ADA accessibility and building code consultation.
- Primary editor of University Facilities Design Guidelines, contributing editor of University Higher Education Capital Outlay Manual (HECOM), and contributing editor of Facilities Management Division 1 Guideline Specifications; and related training of Facilities Planning and Construction project managers and construction administration managers.

Senior Mechanical Engineer: Ronald Herfurth, PE

B.S. in Mechanical Engineering, Virginia Tech

Member of American Society of Heating Refrigeration and Air-Conditioning Engineers

State and International Code Council certified as mechanical plans examiner, plumbing plans examiner, commercial mechanical inspector, and commercial plumbing inspector.

Current position since 1991 and completing his 22nd year with The University of Virginia.

- Virginia registered engineer, 31 years of commercial and institutional practice, including 18 years code review experience at the University.
- Primary responsibility is review and in-house consultation for plumbing, heating, ventilation and air conditioning, and energy management and conservation, value management studies, editing of University Facilities Design Guidelines, Certificates of Use and Occupancy inspections.
- Senior administrative assistant to Review Unit Managing Architect and co-editor of University Facilities Design Guidelines.
- Standing member and chairman of interdepartmental Facilities Management HVAC Committee.

Senior Civil/Structural Engineer: Shashi Kavde, PE

B.S. in Civil Engineering, National Institute of Engineering, Mysore, India

M.S. in Structural Engineering: Drexel University, Philadelphia, PA

Registered Professional Engineer in Virginia, North Carolina, and New Jersey

Member of American Society of Civil Engineers, American Concrete Institute and American Institute of Steel Construction

University of Virginia employee since 1996

- Over 41 years of civil and structural design and construction management for private and government projects (sports, mass transit, industrial, defense, research, environmental facilities, and institutional/residential buildings), plus
- 13 years at the University reviewing Construction Documents for Building Code Compliance and constructability for all projects.
- Additional responsibilities include editing of University Facilities Design Guidelines, HECOM Manual, Value Management Studies, Certificate of Use and Occupancy Inspections, and inter discipline/departmental coordination.
- Expedient inspections and in-house consultation for structural and civil engineering “hot-button” issues for University facilities.

Senior Review Architect: Robert A. Waite, Jr.

B.S. in Architecture, University of Virginia

Registered Architect in Virginia

Member of the International Code Council

ICC qualified Residential Building and Plumbing Official

Senior Project Manager, University of Virginia and James Madison University 1987-2000

Has also operated private home inspection business since 2000

- Hired in December 2008 to perform document reviews for architectural, ADA accessibility and contract administration requirements.
- Provides building code and accessibility consultation to University employees, design professionals, and contractors.
- Performs inspections for accessibility compliance.

Senior Electrical Engineer: Sathish Anabathula, PE

B.S. in Electrical Engineering, Jawaharlal Nehru Technological University, Hyderabad, India

M.S. in Electrical Engineering, Louisiana Tech University

MBA, Louisiana State University, Shreveport

Active Member of International Electrical and Electronics Engineers

Completed Virginia Code Academy Core Module Training towards achieving State Electrical Plans Examiner Certification

Current position since January 2010

- Registered Professional Engineer in Virginia and Louisiana
- Over 6 years of professional electrical engineering design, safety and code compliance experience in higher education/ health care facility.
- Primary responsibility is review and in-house consultation for electrical, telephone/data and fire alarm systems, value management studies, Certificates of Use and Occupancy inspections.
- Additional responsibilities include assisting in editing of University Facilities Design Guidelines and HECOM Manual.

Currently working on making University of Virginia recreational centers usable as emergency shelters as a part of Commonwealth of Virginia Emergency Shelter Initiative.