Facilities Planning & Construction 2016-2017Annual Report

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# Facilities Planning and Construction Annual Report 2016-2017

(July 1, 2016 – June 30, 2017)

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> Annette Cyphers, P.E. Director

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## Facilities Planning and Construction

## Foreword

Facilities Planning and Construction (FP&C) is responsible for the execution of the University's Capital Project Program. We provide management of all design and engineering services, management of all construction services, and procurement for all construction contracts and design/engineering professional services contracts for the University community. Our goals is to set the standard for excellence in higher education and healthcare project delivery.

We are here to:

- Provide leadership to support the University community in the development and implementation of projects for planning and construction.
- Assure appropriate design and construction standards and criteria established by the University, the state, or other appropriate agencies are followed.
- Identify and implement opportunities to balance quality and cost of construction, focusing on value based decision making and life cycle costs.
- Continue to develop innovative best practices for professional and construction services procurement and administration that maximize competition and diversity while assuring continued conformance to the University's restructuring requirements.
- Maintain in-house design services to support the University's various renovation programs.
- Encourage appropriate participation of all stakeholders throughout the project.

The work is accomplished by two production divisions, the Academic Division and the Health System Division. They are supported by a Contract Administration Division and an Administration Division and work in cooperation with the Office of the University Building Official, the Office of the Architect for the University, and Facilities Management.

Annette Cyphers, P.E. Director, Facilities Planning and Construction

### Facilities Planning and Construction

### Overview

This 2016-2017 Annual Report for the Facilities Planning and Construction Department highlights many accomplishments including:

- Completed and occupied several new major facilities. These are highlighted in the Division sections of this report and total \$66,767,796.
- Awarded 84 construction contracts totaling \$355,965,342.
- Processed 476 professional service contracts and service orders totaling \$37,010,355.
- Put in place construction with a value of \$165,000,000.
- Design and construction continues on major new facilities. These are highlighted in the Division sections of this report and total \$986,079,200. Additionally see each Division section for a summary of major projects.

# **Academic Division:**

The Academic Division had a total workload of 23 capital projects. The HECOM threshold is \$2M for a Capital Outlay project. These active projects included:

- 7 capital projects in design for a total of \$94,872,179.
- 12 capital projects in construction for a total of \$400,710,000.
- 4 capital projects completed for a total of \$25,062,154.

Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
Brandon Ave. Greenstreet &	35 kV Ductbank Project	1515 University Avenue Student
Utilities		Center
Brandon Ave. Upperclass Housing	Baseball Stadium Expansion	Hotel A Renovation
Contemplative Sciences Center	Gilmer Hall & Chemistry Renovation	*Leake Building Lower Level
		Renovation
East Range Stormwater	Gooch Dillard Phase III	Newcomb Road Chiller Plant
Improvements		
*Ivy Stacks Expansion	Gooch Dillard Phase IV	
Memorial to Enslaved Laborers	IRC Renovation Phase I	
Student Health Center	Materials Science HVAC	
	McCormick Road Houses	
	Men's Basketball Locker Room	
	Renovation	
	Old Cabell Hall MEP Upgrades	
	Olsson Hall (Link Lab)	×
	Total Advising Center	

The Academic Division also had a significant non-capital project workload.

Non-Capital Projects in Design	Non-Capital Projects in Construction	Non-Capital Projects Completed
Runk Dining Emergency Generator	AFC Pool Systems Improvements	Blandy Farm Cottages
Runk Dining HVAC Upgrades	Cauthen 1 <sup>st</sup> Floor Renovations	Blandy Farm Greenhouse
	IRC Utility Upgrades	Clemmons Roof and Solar PV
	Mem Gym Slate Roof Replacement	Pavilion III Renovation
	*Pavilion VII Porch Repairs	Pavilion V to Pavilion VII Roof & Railing
	Tunnel C Repair	
	Wilson Plaza Landscape Improvements	

\*Indicates projects designed by FP&C's Design Group

The following pages provide project details for many of these projects along with staff contact information.

## **Academic Division Major Commissions**

## **1515 University Avenue Student Center**

James Zehmer

The University recently completed a renovation of 1515 University Avenue as a new student center on The Corner. Guided by the design of Nalls Architecture, and with construction performed by FM's Project Services Department, the project created a student-centered space with the vibrancy of a commercial environment, offering a safe and inclusive late-night atmosphere without alcohol. The project planning committee included engaged students who helped make important decisions regarding programming, finishes, and furnishings throughout the process. The basement houses a sports lounge, with billiards, ping-pong, and arcade games as well as TV monitors for watching UVA sports events. The first floor, featuring a large open space with a 14-ft-high tin panel ceiling, provides multiple seating areas in a flexible format along with a small performance stage and a café offering bistro-quality desserts. The second floor provides meeting and rehearsal spaces of various sizes to meet the needs of student groups. This \$4.9M renovation project held its Grand Opening at the end of March and has proven to be a favorite location for students to gather.



### 35kV Ductbank Project

Dave Fiero / Caitlin Murtaugh / Sathish Anabathula

The 35kV Ductbank project will install 2.75 miles of 35kV ductbank to provide a dedicated underground power feed to the University of Virginia. The new ductbank will connect the existing Sherwood, Alderman, and Cavalier substations through underground ductbanks consisting of two, four, or six 8" PVC conduits encased in concrete. Large concrete electrical vaults will be provided at approximately 500-foot intervals to permit Dominion Virginia Power to install new electrical cables.

Overhead distribution lines currently supply the majority of electrical power to the University grounds through the three existing substations. Over the years, the University has experienced temporary power outages caused by severe weather and short term "blips" that cause significant disruption to research, the hospital, and facilities operations. In an effort to minimize disruption to "mission critical" functions, the overhead lines within the city will be relocated into an underground concrete ductbank that will be nearly immune to weather related outages.

Engineering services are being provided by Dewberry Engineers of Richmond VA. The general contractor is Faulconer Construction Co. of Charlottesville VA. Construction began in August 2016, and will be completed in August 2017. The project budget is \$14.6 million. Under a separate project, Dominion Virginia Power will install new electric cable within the ductbank that will be energized in October of 2017.







### **Baseball Stadium Expansion**

Taryn Spence Harrison / Keith Payne

Expansion of the existing baseball stadium at Davenport Field, home of the Virginia Cavaliers baseball team, began in June 2017. The expansion will enhance the game-day experience for devoted fans through the addition of permanent grandstand and field level seating, expansion of the concourse along right field and center field, new concessions and restrooms, and a new club space. Space will be created but left unfinished for a future home for the coaching staff and a future center for pitching development. The current project features extensive safety improvements including a paved lower lot near Copeley Road, a new crosswalk and sidewalk from the U-Hall parking lot to the stadium, and a paved upper lot.

The design architect is DLR Group of Omaha NE. Construction management services are by Martin Horn of Charlottesville VA. The project budget is \$16.1 million. The expansion is scheduled to be completed by the start of the baseball season in February 2018.





#### **Gilmer Hall and Chemistry Renovation**

Craig Hilten / Jim Klapmust / Charlotte Dickerson

Renovation is underway for Gilmer Hall and the Chemistry Building. Gilmer Hall was built in 1963 with a major addition in 1987, for a combined area of 221,980 square feet, providing research and teaching facilities for the Biology and Psychology Departments. The 208,392-square-foot Chemistry Building, completed in 1968, provides research and teaching laboratories and general-use classrooms. The Chemistry Addition was completed in 1995 and is not within the scope of this project, but will provide swing space.

Today these buildings house the majority of teaching in the sciences, and are workhorse facilities for the College of Arts and Sciences. Most of the classrooms and labs, little altered from their original designs, are inefficient and out of step with current teaching and interdisciplinary research practices. These issues will be exacerbated by the projected growth in student enrollment in the sciences and will hinder the College's efforts to attract students and faculty.

Architectural services are being provided by Perkins + Will of Washington DC. Construction management services are being provided by the Whiting-Turner Contracting Company of Richmond VA. The project budget is \$186.8 million. The phased construction began in April 2017 and will continue through 2021.



### **Gooch Dillard Phase IV**

Kate Meyer / Charles Durrer

The nine buildings that comprise Gooch Dillard Residence Halls were designed by Edward Larrabee Barnes. The complex was built on challenging terrain without radically altering the natural topography. The buildings, which form two arms around a gully cutting through the sloping landscape, are artfully arranged to preserve the forested terrain. Previous residents felt the woods were too dark, and that the uneven grade wasn't conducive to outdoor gathering. These elements have been improved by opening up the front area and creating sight lines through the woods. In the final phase, outdoor lighting, handrails, gates and a bell tower are being painted, upgraded or replaced. Code compliant access will be ensured within the complex. Landscape enhancements will include a fire pit, hammock posts, and open lawn for gathering.

Architectural services are being provided by VMDO Architects of Charlottesville VA, with Rhodeside & Harwell Landscape Architects. Construction Management services are being provided by New Atlantic Contracting of Winston-Salem NC. The project budget for all four phases is \$26 million. The renovation of the residence halls and the enhancements to the landscape started in 2014; this final phase will be completed in August 2017.



# Ivy Stacks Expansion

Kate Meyer / Richard Sergi

Ivy Stacks was built in 1994 to hold 750,000 volumes, providing off-site storage for the University of Virginia Library system. High density shelving was added in 2009 increasing capacity to 2 million volumes. Although it is only 60% full, the University is doubling the current capacity so that books can be stored at the Ivy Stacks during the upcoming renovation of Alderman Library with its more than 2.5 million volumes. Other branch and specialty locations, such as the Harrison Small Special Collections Library, are beyond capacity and may need the space at Ivy Stacks during future renovations. The Ivy Stacks Expansion will include archival quality HVAC systems, supported by solar energy cells, to provide optimum humidity and temperature control for book and document storage. The book processing area will be reconstructed to create a better flow at every step, from receiving, cataloging and shelving new items, to checking out and shipping items that have been requested. The expansion will add 11,000 gsf of book storage, and 2,000 gsf to the staff work area. A scholar's reading room is also included.

Architectural services are being provided by Facilities Management Design Group. Nielsen Builders, Inc. has been awarded the construction contract. Construction started in summer 2017 and will be completed in spring of 2018.



### **McCormick Road Houses**

Steve Dempsey / Richard Sergi / Caitlin Murtaugh

The McCormick Road Houses are a first year residential complex and include ten dorms totaling nearly 400,000 sf. The neo-colonial structures were built in the 1950's with concrete frames, brick exterior, and wood windows and trim, and have generally been well maintained. However, they are not air conditioned and lack many of the amenities now expected in newer dorms at the University. The Department of Housing and Residence Life envisions a multi-phase project to modernize the dorms by adding air conditioning, fire protection, bed capacity, new common spaces, elevators, and accessibility improvements.

All electrical, mechanical, and plumbing components will be replaced. Student rooms, common areas and bathrooms will be completely renovated. New elevators will be installed in each building, and sprinklers will be installed for fire protection. All exterior windows will be replaced with modern, aluminum-clad wood windows; doors will be upgraded in similar fashion. The Castle dining facility will be completely renovated.

The McCormick Road Housing Renovation project will be completed in three phases, each lasting 14 months. The total project duration is expected to be approximately 38 months. The entire project is expected to be completed in August, 2020.

The project budget is \$104 million. The project architect is Clark Nexsen of Raleigh NC. Construction management services are being provided by Barton Malow of Charlottesville VA.



#### Men's Basketball Locker Room Renovation

Taryn Spence Harrison / Keith Payne

The Men's Varsity Basketball Locker Room renovation at JPJ Arena will modernize the existing locker room in order to provide a fresh and home-like feel to attract a high-caliber recruiting class for the Virginia basketball team. The existing compartmentalized layout was re-envisioned to provide a fluid layout with updated interior finishes, including the use of reclaimed U-Hall flooring for a feature wall to showcase Coach Bennett's five pillars of leadership. The renovation will provide a large open team lounge, a new Gatorade Fuel Station and Grab & Go Station, a new rest and recovery room with sound insulation, sleep pods and bunk beds. In addition, a tiered film room and new locker rooms for the team and coaching staff are planned. An extensive graphics package has been designed to create a cohesive, branded home for the team.

The design architect is Populous of Kansas City MO, with engineering services by 2rw of Charlottesville VA. General Contracting services are provided by Canterbury Enterprises, Chester VA. The project budget is \$3.0 million. The project is scheduled to be complete in September 2017.





## **Memorial to Enslaved Laborers**

Sarita Herman

Design is underway for a University Memorial to Enslaved Laborers. The memorial will recognize the contributions of enslaved laborers who built the Academical Village and supported the operations of the University during the antebellum era. This project originated from a student initiative to recognize the University's history of slavery and has been fostered by the President's Commission on Slavery and the University.

The memorial will be located in the open lawn area between University Avenue and the Long Walk. It will be an 80ft diameter circular granite ring wall, matching the diameter of the Rotunda. The names of enslaved laborers will be carved on the inside wall of the memorial. A timeline of slavery at the University will be integrated into a bench/water feature.

The design is an interdisciplinary collaboration between Howeler + Yoon Architects of Cambridge Massachusetts, with landscape architect Gregg Bleam, historian Mabel O. Wilson, and community outreach facilitator Frank Dukes. The project has a budget of \$6 million. It will be funded by private donations. Construction start is tentatively planned for summer 2018, pending a successful fundraising campaign.



# **Health System:**

The Health System Division responded to 35 new requests for services, contributing to a total workload of \$567,037,461 active projects, including projects that have reached Construction Completion in the last year. Using the HECOM threshold of \$2,000,000 for a Capital Outlay project, these active projects included:

- 27 projects in startup / request phase, budget / scope not yet developed.
- 60 small non-capital projects with an average size of \$149,796 for a total of \$8,987.738.
- 23 large non-capital projects with an average size of \$1,001,760 for a total of \$23,040,521.
- 3 small capital projects with an average size of \$3,200,000 for a total of \$9,600,000.
- 9 large capital projects with an average size of \$16,229,740 for a total of \$146,067,663.
- 1 very large capital project of \$376,500,000.
- 3 capital projects in design for a total of \$44,595,000.
- 7 capital projects in construction for a total of \$445,902,021.
- 3 capital projects completed for a total of \$41,705,642.

Capital Projects In Design	Capital Projects In Construction	Capital Projects Completed
Pinn Hall Center for Human	500 Ray C. Hunt Renovation	Education Resource Center
Therapeutics		
Pinn Hall Phased Laboratory	Outpatient Procedure Center	Primary Care Center 4thFloor –
Renovations, Phase I	Renovation	Neurology Clinic
University Hospital Emergency	Pinn Hall 4 <sup>th</sup> Floor Renovation	University Hospital HVAC
Power Phase III		Replacement Phase III
	University Hospital 7 <sup>th</sup> and 8 <sup>th</sup> Floors	
	Renovation	
	University Hospital East Cafeteria	
	Renovation	
	University Hospital Expansion	
	University Hospital HVAC	
	Replacement Phase IV	

## **Health System Major Commissions**

### 500 Ray C. Hunt Drive Renovation

Kevin Silson / Keith Schrimp

The 500 Ray C. Hunt Drive Renovation is a 62,000 sf office building located in Fontaine Research Park that was purchased from the University Physician's Group. The building is being converted into an ambulatory health care facility for cardiology diagnostics, cardiology clinics, cardiology rehabilitation, and the pelvic surgery and urology clinics.

The building is over 25 years old. The renovation replaces all of the building infrastructure components including the mechanical, electrical, plumbing, and fire alarm systems. The third floor is being renovated for the urology and pelvic surgery clinics which are moving from the West Complex and Northridge. The second floor is being renovated for a cardiology clinic, which is being created by moving and consolidating clinics from Northridge, Primary Care Center and University Hospital Second Floor West. The first floor will house the cardiology diagnostic functions, which are moving from University Hospital. The lower level will house the cardiology fitness and wellness clinic, which is moving from Northridge.

The architect is Hammel, Green and Abrahamson of Alexandria, VA. The construction manager is Gilbane Building Company of Richmond, VA. As of May 1, 2017, the project was 80% complete, and construction is scheduled for completion in the third quarter of 2017. The projected project cost is under the project budget of \$19.2 million.



### **Education Resource Center**

Joe Rainwater / Keith Schrimp

The Education Resource Center project provides approximately 45,200 gsf for graduate medical and patient education, a relocated outpatient pharmacy, and a new outpatient imaging center. These functions will help achieve the Health System's goals of excellence and innovation in patient care, the training of health professionals and the creation and sharing of health knowledge.

The project provides new conference space for resident and patient education and much-needed resident work areas. The project site is adjacent to the Emily Couric Clinical Cancer Center (ECCCC) and the Lee Street Garage elevator, with convenient access to the pharmacy and main Hospital bus stops. In addition, this project provides space for a new Outpatient Imaging Center (OIC) that significantly improves patient access and fills the need for diagnostic imaging services convenient to the Cancer Center and the Battle Building at UVA Children's Hospital. This OIC, located in the lower level, connects directly with the ECCCC radiation oncology area.

The architect is CO Architects of Los Angeles CA, and the construction manager is Donley's/McCarthy of Collinsville IL. The project was approved for occupancy in March of 2017. The project budget was \$30.05 million.



### **Outpatient Procedure Center Renovation**

Kristine Vey / Blythe Shannon

The Outpatient Procedure Center will be created in the building formerly known as the Outpatient Surgery Center, where the surgery and procedure services have been relocated to the first floor of the Battle Building at UVA Children's Hospital. This allows space for several outpatient procedure suites to be relocated from the University Hospital. The first floor contains 25,000 sf of procedure rooms, patient preparation and recovery bays, and ancillary support areas; the second floor includes 7,000 sf of administrative space, for a total of 32,000 sf.

This project completely renovates the first floor to provide a five-room endoscopy suite with a 20-bed preparation and recovery unit, decontamination and sterilization room, a two-room motility suite, new waiting and registration areas and staff ancillary space. The building's infrastructure systems (HVAC, electrical, plumbing, life safety, and roof) will be replaced or upgraded. The second floor administrative offices will remain occupied and functional throughout the renovation with no architectural modifications. The existing entrance will be redesigned, including a new canopy.

The architect is Hord Coplan Macht of Alexandria VA. The construction manager is Whiting-Turner of Richmond VA. Construction is scheduled to be completed in July of 2017 with the first patient scheduled for July 17. The project budget is \$12.4 million.



### Pinn Hall Center for Human Therapeutics

Dana Hodges / Blythe Shannon

The Center for Human Therapeutics at the University of Virginia will be a place of national leadership for cellular therapy research and treatment. Portions of the second floor of Pinn Hall will be renovated to create a series of clinical and research laboratories meeting the current federal standards for Good Manufacturing Practices. The design will provide flexibility as technology evolves and as the patient and subject populations change.

The Center will encompass approximately 9,000 sf laboratory space containing the following elements:

- A six-laboratory suite with appropriate airlock separation and common corridors.
- Clean-room support space for product handling, quality control, and equipment storage.
- A clinical cytotherapy lab serving the Medical Center's Stem Cell Transplant department.
- Liquid-nitrogen-based freezer storage.
- Shared office and administrative spaces.

The project will require a dedicated air-handling unit on the ground floor of Pinn Hall, new mechanical distribution systems with local pressurization controls and alarms, and replacement of the existing electrical distribution system within the project footprint.

The project architect is Perkins + Will and the design engineer is Affiliated Engineers, Inc. Whiting Turner has been selected as the Construction Manager and will solicit mechanical and electrical trade packages, including design assistance, with the completion of schematic phase documents in July 2017. Construction will start in early Fall 2017 with substantial completion in fall 2018, followed by commissioning and validation. The facility opening is scheduled for December 2018.



## Pinn Hall Phased Laboratory Renovations, Phase I

Dana Hodges / Brenda Loewen / Blythe Shannon

The Pinn Hall Phased Laboratory Renovations will address the research floors (3<sup>rd</sup> through 7<sup>th</sup>) in the North Wing of Pinn Hall in a phased program. These projects will advance the UVa Health System's Integrated Space Plan (ISP), which form the basis for the planning concepts of the project. Space needs were based on research growth targets for the next 10 years, with the overall goals of:

- Increasing the total number of research groups within the existing building footprint
- Increasing the size and associated funding of each research group
- Accommodating this increase in 20% less assignable space overall

The renovations will include laboratory and related support spaces. All the new spaces will promote cross-disciplinary collaborations while enhancing existing research synergies and shared campus resources. Each floor will include approximately 19,000 sf of assignable space within an existing footprint of 26,000 gsf.

Phase 1A will include the 3<sup>rd</sup> floor of Pinn Hall and portions of the Pinn Annex (South Wing) to create a series of open layout research and support labs, as well as write-up spaces and offices, and shared conference spaces. Improved circulation between these lab components is a design goal. The project will also increase the amount of daylight by replacing windows, and will explore other improvements to the exterior envelope such as upgraded thermal performance. Phase 1B will address the 5<sup>th</sup> floor in a similar manner.

The project architect is Cooper Carry Architects of Atlanta, GA, and the design engineer is Affiliated Engineers, Inc. Whiting-Turner has been selected as Construction Manager and will assist with design as part of their services. Phase 1A of the project is anticipated to begin construction in late Fall 2017 with completion in Fall/Winter 2018. Design of Phase 1B will be concurrent with Phase 1A design, with construction schedule dependent upon identification of swing space to relocate current building occupants. The project budget for the 3<sup>rd</sup> and 5<sup>th</sup> floors, including moves and relocations, is \$31.95 million.

	Subscription Language Series 1-6  Subscription Language Serie
Manager and Andread I and Andread I and Andread I	Pinn Hall frd Floor Laboratory Renovation

## University Hospital 7<sup>th</sup> and 8<sup>th</sup> Floor Renovations

Jim Loman / Carolyn Chionchio

The University Hospital 7<sup>th</sup> and 8<sup>th</sup> Floor Renovations project involves renovations to patient care units, including the 37,500-sf Children's Hospital on the seventh floor, and the 23,100-sf Women's Health area on the eighth floor.

On the seventh floor, the pediatric intensive care unit (PICU) patient rooms will be renovated, including new family-friendly and ADA compliant amenities; learning spaces for children; a new 4-bed pediatric bone marrow transplant unit; and new nurse stations.

Eighth floor renovations include conversion of all women's patient rooms to private, a new (replacement) continuing care nursery, an expanded and modernized triage area, refurbished and upgraded labor and delivery rooms including an ADA-compliant room, and new nurse-team stations.

Mechanical, electrical, and plumbing systems will be upgraded throughout both floors.

The architect is HKS Architects of Richmond, VA. The construction manager is DPR Construction of Richmond, VA. Construction is currently in the third of five primary phases, and is approximately 50% complete. The entire project is currently scheduled to be complete in the fourth quarter of 2018. The project budget is \$15.8 million.





7 West PICU



8 East Labor & Delivery



# University Hospital East Cafeteria Renovation

Mike Vanderweide / Nate Brown

The University Hospital East Cafeteria Renovation involves the complete renovation of the servery and grill areas, totaling just over 4,000 sf. The renovation will provide for better customer flow, allow Dining Services to reorganize their menu, and include cosmetic upgrades to the seating area. The first phase, which renovated the servery, was completed on March 15, 2017. The second phase, which will renovate the grill area, is underway. The grill renovation emphasizes a healthful menu.

The architect is Baskervill of Richmond, VA with design support from VisionBuilders of Charlotte, NC. The general contractor is Virtexco of Norfolk, VA. Construction will be completed in the third quarter of 2017. The project budget is \$3.1 million.

# **Finished Servery**



# **Finished Servery**



# **Grill Rendering**



#### **University Hospital Expansion**

Chris Pouncey / Chris Hoy

The University Hospital Expansion Project will allow for expanded services to better serve the community. The project consists of an 11-story addition directly east of the existing hospital. The expansion includes a four-story base, a six-story tower, and a roof penthouse, with approximately 440,000 sf of new construction and nearly 95,000 sf of renovations to the existing hospital.

The new addition will include an expanded Emergency Department on the first floor, an interventional area on the second floor for surgery and procedures, a six-story patient bed tower, with three floors completed and three floors left unfinished, expansion of ancillary support spaces on the lower level, and a roof-top helipad.

The Emergency Department will have a new entrance and will consist of 77 exam rooms and three resuscitation rooms. The interventional area will add four new operating rooms. The patient tower will consist of three finished floors, each with 28 ICU rooms, along with the three unfinished floors.

Utility projects to support the new Expansion Project were completed in late 2016. Groundbreaking for the project itself occurred in June of 2016. As of Summer 2017, five floors of steel were in place on the East side of the site, all foundation work was complete, and brick demolition from the façade of the existing hospital had finished, allowing for the structural connection of the new addition to the existing building.

The Hospital will take occupancy when the first phase, from the bottom level through the second floor mechanical space, is completed in May 2019. The remainder of the tower will be finished in early 2020, with the renovated areas in the existing hospital scheduled for completion in 2021.

The architect is Perkins + Will of Washington, DC. Skanska USA Building, Inc. of Durham, NC. is the construction manager. The project budget is \$376.5 million.





## **University Hospital HVAC Replacement Phase IV**

Dana Hodges / Bill Shirey

The HVAC Replacement projects represent a phased approach to replacement of air handling units (AHUs) and ancillary HVAC systems nearing the end of their projected lifespans in the main Hospital. During Phase 1 the Hospital evaluated AHUs, exhaust fans and hydronic systems for criticality, condition and age and developed a program for replacements or upgrades. This program is being carried out in the following phases, with Phase IV currently in progress:

	Project Scope	Completion Date
Phase I (\$6.4M)	Replacement of 6 AHUs	Winter 2013
	Replacement of 6 AHUs	Summer 2015
Phase II (\$12.8M)	Provisions for Standby AHU systems	
	Glycol System upgrades	
Phase III (\$8.6M)	Replacement of 7 AHUs	Winter 2016
	Chilled Water System upgrades	
Phase IV (\$10.2M)	Replacement of 6 AHUs	Winter 2018
	Continued Chilled Water System upgrades	
Phase V (\$8M)	Replacement of up to 9 AHUs	TBD

In addition to developing a proactive replacement program for aging HVAC systems, this project has accomplished organizational goals including a process for early engagement of the CM firm, maintenance/operations staff, and commissioning agents. This integrative approach has been the basis of improved protocols on several major projects at the University.

A contract for the contracting partner for construction for Phase IV was awarded in Spring 2017. The team is currently in the planning and review period with field construction expected to begin this summer. The project contractor, Atlantic Constructors, is working hand in hand with the engineer, Leach Wallace; the commissioning agent, Burns and McDonnell; and the testing and balancing firm, Mechanical Balancing, as well as with key maintenance representatives and the project team, to optimize the construction schedule in an active hospital environment. AHU's are being provided by Air Enterprises, a company specializing in onsite fabrication.



# **Contract Administration**

The Office of Contract Administration managed the procurement processes for and made awards on a total of 560 contracts in the 2016-2017 fiscal year (FY17) compared to 509 the previous year. The dollar value of the construction contracts increased significantly, as the economy improved.

Professional services contracts (architectural, engineering, and consulting), and service orders on consulting term contracts, numbered 476 for a total of \$37,010,355 compared to 427 contracts the previous year totaling \$42,136,601. There were 53 change orders processed with a net additive value of \$5,025,409.

The construction side of the office handled 84 procurements for a total of \$355,965,342 in a tight bid market, compared to 82 procurements the previous year totaling \$161,620,385. There were 145 associated construction change orders processed with a net value of \$8,959,533 compared to 158 change orders the previous year totaling \$12,110,587. There were four change orders over \$500,000: 1) Gooch-Dillard Renovation Phase III – handicapped bathrooms and landscape extension for \$1,351,143; 2) Gilmer/ Chemistry Renovation – interior lab renovations in Chemistry Addition and renovation of labs 241 and 253 in Gilmer Hall for \$774,865; 3) UH Emergency Department/ Interventional Program/ Bed Tower Expansion – Crispell Drive utilities for \$789,592; and 4) Materials Science & Engineering HVAC Replacement – fume hoods and various other work for \$637,957.

During the year the office, issued 19 Requests for Proposals (RFPs) compared to 16 RFPs the previous year. The number of professional services RFPs executed this year was 12, and construction RFPs totaled seven.

After more than 10 years of exceptional service as Professional Services Contract Administrator Kathy Yarmey retired June 25, 2017 and Bruce Jackson was hired to fill her position.

Significant efforts were made in reviewing and providing input on new state construction procurement legislation prior to it becoming effective July 1, 2017 and to limit its impact on UVA's prior autonomy. The Office Director and Office Manager attended the Capital Outlay and Facility Management Forum in Richmond April 2017 and the Richmond June 2017 DGS Construction Management and Design/ Build Session concerning new procurement processes.

We continue to team with Procurement & Supplier Diversity Services to strategize and plan for diversity in Prime and Subcontractor spending through recruitment of small, women-owned, and minority-owned (SWaM) firms. On August 29, 2016, members of our office participated in a Near Term Projects Outreach Event primarily for SWaM firms. We also participated in a Skanska Hospital Expansion Outreach meeting on August 10, 2016. In addition the following SWaM initiatives continued in FY17:

1) An emphasis on SWaM participation in Facilities Management's procurements continues with an overall aspirational goal of 43% for SWaM spending for the University's 207 and 209 agencies. Special efforts are made for women-owned and minority-owned firms to improve their representation in the overall total spending.

2) Our Office Manager continues to take the lead in promoting SWaM participation in our procurements and had numerous meetings with SWaM firms.

3) Our Office Manager and a Construction Contract Administrator attended SWaMFest XII in Newport News in October 2016. Members also participated in various SWaM outreach meetings.

4) Our Office Manager attended Blue Book in Richmond during May of 2017 and SWaM Business Enterprise Day at UVA June 2017.

The Office continues to update both the new public and Contract Administration web sites. Existing web pages and templates including the UVA HECO/CO/DGS Forms page continue to be updated.

A large ongoing effort of the office is to support the new University Hospital Expansion Project team. This is a \$377M construction project comprised of approximately 87,000 GSF of renovation and approximately 444,000 GSF of new construction. Significant time has been spent in helping to assemble the subcontractor team, to negotiate, and to get all firms under contract.

As part of ongoing improvements to the capital project execution process, we continue to use Building Information Modeling (BIM) as a design collaboration tool with key Subcontractors early in the design process as part of a Design-Assist methodology. The new University Hospital Expansion Project is being executed with BIM, Design-Assist, and Colocation of major stakeholders contributing to the design. The Gilmer/ Chemistry Renovation and McCormick Road Housing Renovation Projects are also using BIM and Design-Assist.

The Office consistently promotes and encourages professional involvement, certification, and training. Members of the Office and FP&C attend the Virginia COAA semi-annual workshops. In addition the Office Director served as the COAA Virginia Chapter Treasurer again this past year and UVA is hosting the September 2017 Virginia COAA Workshop which usually attracts approximately 90 facility owners, contractors, and A/E's from Virginia and beyond. The workshop will include a session on Construction Conflict Resolution and a tour of the Education Resource Center or the new UH Tower Expansion.

Contract Administration staff also participated in FP&C training sessions that were held for staff and participated in numerous other training opportunities. Our Office Manager attended the DGS Public Procurement Forum in November 2016. Our Records and Office Coordinator attended the annual ISPRO conference in October 2016 and a Record Management class in March 2017. Our Office Manager, and Records and Office Coordinator, also attended a class concerning a new on-line expense management system for P-Card holders in April 2017.

Appendix A



## Appendix B

Facilities construction completed during the year represented a contract construction work in place volume of \$165 million.





Neilson's view of the Rotunda with Pavilions IX and X, Special Collections, University of Virginia Library

We are about to establish a College near Charlottesville on the lands formerly Col. Monroe's, a mile above the town. we do not propose to erect a single grand building, but to form a square of perhaps 200 yards, and to arrange around that pavilions of about 24. by 36. f. [feet] one for every professorship & his school. they are to be of various forms, models of chaste architecture, as examples for the school of architecture to be formed on. we shall build one only in the latter end of this year, and go on with the others year after year,..."

> Thomas Jefferson Letter to John Dinsmore April 13, 1817