



# NC STATE UNIVERSITY

## Wolf Works

Volume II, Issue II

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**Spotlight: Local HUB Design Firm — Pages 7 and 8**

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#### Message from Steven Arndt, Associate Vice Chancellor Capital Project Management



As the new Associate Vice Chancellor for NC STATE Facilities Division, I have been busy getting up to speed on many facets of this dynamic organization. One fact I find particularly impressive is that NC STATE has always been the preeminent leader of the HUB program since its inception in 2001. Marvin Williams took strong leadership of the program from the start and with the assistance of our active HUB Advisory Committee created an extremely successful program that brought HUB owners face-to-face with major building contractors. When Marvin retired last year, Facilities was fortunate to find Henry Hardy to build on Marvin's work.

We can be proud of our HUB efforts once again this past fiscal year that included:

- 35% HUB utilization rate for Design and Construction Services (DCS)- Highest utilization to date in the history of DCS
- 18.9% Hub contractor utilization for Capital Project Management
- 20 one-on-one meetings with minority design and construction firms
- 10 meetings with non-minority firms & 3 meetings with other HUB organizations
- HUB collaborations with 7 other UNC Campuses

#### Message from Henry Hardy, Capital Projects Program Manager Capital Project Management (CPM)

Welcome to the Fall 2014 edition of Wolf Works, we have had a busy and wet summer this year. In spite of more than normal wet conditions, CPM have continued to progress on many projects. The Centennial Campus Student Housing project was completed at the beginning of the summer and tremendous progress has been made on the Talley Student Center. I attended and presented at North Carolina Contractors College at North Carolina Central University sponsored by North Carolina Department of Administration office of Historically Underutilized Businesses (HUB) - (May 13, 2014—How to do Business with Universities Campuses within UNC System). There were over 15 HUB firms in attendance at the Contractor's College—the firms were from Central and Western North Carolina.

North Carolina State University launched its first Design-Build project since the new legislation was past - T. A. Loving Company was selected as Construction Manager at Risk and Corely Redfoot Architects was selected as designers for the construction of the Indoor Practice Facility. Please enjoy this edition of Wolf Works and the next edition will be available Spring 2015.

## LOOK AHEAD PROJECTS

**Energy Conservation Project 4:** This project is to be executed as part of Self-Perform Energy Contract per NC G.S. 143-64.17. The project shall include, but not be limited to, design for connection of selected buildings to the campus district energy chilled water and steam loops and Energy Conservation Measures (ECM's) related to lighting, controls, water conservation/plumbing, building envelope, steam, mechanical/HVAC/fume hoods, and electrical. This effort will include a review of the current design, utility requirements, and process requirements; development of cost options and life cycle analysis along with energy modeling and development of an IGA. This project will evaluate energy usage of and identify ECM's for nine campus buildings, including cogeneration on Centennial Campus. Energy modeling and an ASHRAE Level II Energy Audit will be included. The total project cost is approximately \$22,000,000.

### **Reynolds Coliseum-Renovation & Walk of Fame**

The primary goal for the renovation project is to modernize Reynolds Coliseum with specific changes meant to enhance the way the building is being used today, while respecting the character and heritage of this important "hallowed space" on NC State's campus. Introducing an energy-efficient air conditioning system will allow the building to be used in new ways. Life safety enhancements will include new sprinkler, fire alarm, and smoke evacuation systems. Reducing the size of the seating bowl will result in an intimate seating venue appropriately scaled for the sports that call Reynolds their home, and all seats will now have good sightlines. Improvements to the home of Women's Basketball, Volleyball, Gymnastics and Wrestling will enhance recruiting opportunities for these programs. And finally, woven throughout the facility will be the Walk of Fame & History experience, with a focal point in the newly created Grand Hall showcasing the storied history of NC State Athletics. The total project cost (construction, design, and miscellaneous project cost) is approximately \$35,000,000.

**Centennial Campus Substation Expansion:** This project is located at 1765 Varsity Drive on the Centennial Campus near the Keystone Science Center and the Wildlife Resources Building. The project will develop a design for increasing the capacity and reliability of the University's 22.9/13.2 kV medium-voltage power distribution system on Centennial Campus. New feeder and substation additions will be required to allow for future load growth outlined in the University Master Planning. The project will be constructed in phases installing the required electrical infrastructure as the campus grows. The total project cost is approximately 3,334,000.

**Re-Use Water Line Extension:** This project will extend the reuse water from the new pumping station near Achievement Drive on NC State's Centennial Campus Precinct to the Centennial Campus Utility Plant (CCUP) by way of Main Campus Drive. The total project cost is approximately \$1,200,000.

**Gregg Museum:** The Gregg Museum consists of a new 21,000 gsf building addition to the original 6,400 gsf Chancellor's Residence. The addition will provide gallery and back of house space. It is modern, but reflects the proportions and scale of the residence. The residence's interior will be renovated. The project is located at 1903 Hillsborough Street and is now in the Construction Documents Phase. If funding for this project is (construction, design, and miscellaneous project cost) available total project cost will be approximately \$9,500,000.

## LOOK AHEAD PROJECTS cont'd.

**Ricks Hall 3rd Floor and Utilities Upgrades Project:** This project is Phase 2 of a two phase project to renovate the 3rd floor of Ricks Hall for the Bioinformatics staff. The project includes architectural and mechanical renovations. The architectural renovations involve selective demolition and hazardous materials removal within the 3rd floor with the installation of new offices with new walls, painting, lighting, floor coverings, and doors. The mechanical renovations involve the installation of new subsurface areaways to serve a new basement mechanical room with new mechanical equipment and a future mechanical room. The project will also install new supply and return ductwork from the basement up to the 3rd floor and new VAV terminal units. The mechanical work also includes new fire alarm devices, new standpipes, and new fire protection sprinklers on the 3rd floor. The old windows that date back to 1922 when the building was constructed will be removed and new aluminum framed, energy efficient windows will be installed. The building will also get new waterproofing around approximately 75% of the subsurface wall faces." The total project cost (construction, design, and miscellaneous project cost) is approximately \$3,640,000.

**Carmichael Gymnasium Men's and Women's Locker Rooms:** This project will renovate existing locker rooms and support spaces to modernize and update these facilities. The renovation includes the adaptive reuse of some excess men's locker room areas to expand the fitness space created during the 2012-2013 renovation. Sustainable design elements will be incorporated, but the project will not be seeking LEED certification. The total project budget (construction, design, and miscellaneous project cost) is approximately \$7,600,000.

**HVAC Renovations to Partners I, Research II-Package B:** This project will replace aging HVAC equipment in the Research II Building, including floor level air handlers, VAV boxes, makeup air handler, and building boiler. A new fire alarm controller and central exhaust fan set will be listed as add alternates. The total project budget (construction, design, and miscellaneous project cost) is approximately \$6,000,000.

**Monteith Engineering Research Center:** This project will improve the controllability of space conditions in the cleanrooms located on the first and second floors of the Monteith Engineering Research Center (MRC) to meet cleanroom requirements for the HVAC systems and equipment with regard to reliability, temperature and humidity control, and capacity. The total project budget (construction, design, and miscellaneous project cost) is approximately \$2,000,000.

# CAMPUS PROJECTS SPOTLIGHT:

## Centennial Campus Wolf Ridge Parking Lot



# CAMPUS PROJECTS SPOTLIGHT:

## Talley Student Center Addition and Renovation



# CAMPUS PROJECTS SPOTLIGHT:

## Indoor Practice Facility



TA LOVING

cra

360°

NC STATE UNIVERSITY  
INDOOR PRACTICE FACILITY

Aerial View / Main Entry  
2014 - 03 - 18



TA LOVING

cra

360°

NC STATE UNIVERSITY  
INDOOR PRACTICE FACILITY

Eye Level View / NE Player Entry  
2014 - 03 - 18





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**Ashley J. Freeland – Principle**  
**Gen. 2 Design, LLC**

[Gen. 2 Design \(G2D\)](#) - Mechanical, Electrical, Plumbing Design; Construction Administration

G2D is a NC HUB MEP firm that specializes in mechanical, plumbing, electrical design and construction administration for engineering, architectural firms and construction management companies that concentrate in the building industry for multiple markets. For the past two years our work load has been concentrated in complex research laboratory and healthcare facilities. These projects have included office fit ups, clinical, laboratory and biomedical research spaces.

We have distinguished ourselves from our competitors by combining small firm responsiveness with our experience while targeting high-technology project expertise. This is ordinarily found only in larger national firms. As a small firm we focus on clinical research and support facilities planning, design, and construction administration. G2D takes pride in ensuring that every customer receives principal level involvement and assignment of

qualified professionals from start to finish.

G2D has teamed up with other creditable engineering firms in the Maryland D.C area to successfully complete the development and design for over 80 various projects for clients such as, National Institute of Health (NIH) and Medical Faculty Associates (MFA), among others. Our team, first and foremost, offers our clients a seasoned planning and design team with exceptionally broad experience in a multitude of disciplines.

We pride ourselves in our attention to detail regarding load calculations and existing conditions for projects. G2D has always employed sustainable design practices whenever possible and to the extent allowed by the project and owner's budget.



**MFA – Midwifery**  
**Washington DC**



**G2D's Personnel Commitment** - We take pride in having an experienced team that has successfully collaborated with owners, developers, architects, and engineers. G2D is committed to providing experienced team members to satisfy technical and management needs for each project we have received. G2D selects personnel based on their individual qualifications and experience with planning and designing infrastructure, multi-family residential, commercial office, retail, hospitality, research, and healthcare facility projects. Each member of our team has relevant experience that complements each project team as a whole.

**NIH – Bldg 31B – NHGRI**

**Director's Suite**

**Bethesda, MD**

# North Carolina State University

[www.ncsu.edu/facilities/advertisements/](http://www.ncsu.edu/facilities/advertisements/)

## The University of North Carolina System

<http://www.northcarolina.edu/apps/finance/vendors/opportunities.htm>



If you are interested in strengthening your business, listed below is information about companies interested in helping minority, women and small businesses to grow their business.

### Self-Help

301 West Main Street  
Durham, NC 27701  
(919) 956-4400  
[www.self-help.org](http://www.self-help.org)

### Hispanic Contractors Association of the Carolinas

226 Westinghouse Blvd.  
Charlotte, NC 29708  
(704) 583-4184  
[www.hccarolinas.org](http://www.hccarolinas.org)

Henry J. Hardy  
Capital Projects Program Mgr.  
Capital Project Management  
Campus Box 7520  
Administrative Services III  
2701 Sullivan Drive, Suite 331  
Raleigh, NC 27695-7520

### United Minority Contractors of NC

5 West Hargett Street, Suite 309  
Raleigh, NC 27601  
(919) 834-1211  
[www.umcnc.org](http://www.umcnc.org)

### NC Indian Economic Development Initiative, Inc.

5800 Farrington Place  
Raleigh, NC 27609  
(919) 232-9414  
[www.ncindian.com](http://www.ncindian.com)

Phone: [919-513-0223](tel:919-513-0223)  
Fax: [919-515-4253](tel:919-515-4253)  
Email: [hjhardy@ncsu.edu](mailto:hjhardy@ncsu.edu)  
<http://facilities.ofb.ncsu.edu/historically-underutilized->

### The North Carolina Institute of Minority Economic Development

114 W. Parrish St.  
Durham, NC 27701  
(919) 956-8889  
[www.ncimed.com](http://www.ncimed.com)

### Office for Historically Underutilized Businesses (HUB)

116 West Jones Street  
Raleigh, NC 27699-1336  
(919) 807-2330  
[www.doa.nc.gov/hub](http://www.doa.nc.gov/hub)