

Federal Construction

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ALSO COVERING LOCAL, STATE & REGIONAL PROJECTS AND FACILITIES **SUPPLEMENT**

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Professional

So you want to be in the federal construction game?

A government contracting
officer shares his insights
on what's out there

ALSO:
U.S. Military Academy's
new cadet barracks
honors for one of its own

A special supplement to:

COMMERCIAL
Construction & Renovation

Are you optimistic about what you see ahead?

Yes. Opportunities in the federal contracting arena will continue to be available in great numbers. At the NPS, we have had the great fortune of working with some of America's best companies, large and small.

So many of the organizations we work with provide us with great products and services and are innovative in their approaches in how they provide them to us. Working in contracting gives me a wonderful insight into American innovation and how companies are able to adapt to our changing needs, in a rapidly changing world. There has been a seminal movement toward automation and any company wishing to work with us must embrace that.

From the solicitation through final payment, it is electronically performed by the click of a mouse. Small and large companies are

doing business with the government in ways we had never previously imagined. From the perspective of a contracting officer, this new approach to doing business in the digital age has been positive.

What's the most rewarding part of your job?

It's awarding contracts to small businesses that have never previously worked with the government. Presenting opportunities to these businesses and seeing them come to fruition creates a great sense of pride.

What's the best thing a contractor said to you?

It was thank you. He said that contracting with the government had made a huge difference in his business. **FC**

A day in the life

To get a feel for what a project manager does on the federal construction side, we asked J. Colter Chisum, P.E., the chief of facilities management at the Santa Monica Mountains National Recreation Area, to take us along for a day.

Are there any difference between what a project manager does on federal and commercial projects?

The fundamentals of what a project manager does on a federal project and a commercial project are the same. The two largest difference is that the procurement authority is separate from the funding authority and the type of funding for the project almost always has special reporting requirements.

To remain fully transparent all fund sources used on federal contracts have regular reporting intervals and a thorough spending close out requirements. Another thing is that almost all of the federal funds used in construction expire. Most projects must be awarded within one to two years of receiving funds.

Project managers must also provide and thorough and transparent report on a contractor's performance. The contractors always get to see their report and can protest any negative reviews.

What types of opportunities should PMs be looking for?

There will be continued opportunities for federal contractors to provide the

government with its requirements for a variety of supply, service and construction contracting and deliverables. Most opportunities are both announced and solicited electronically through FedBizOps.gov and FedConnect.net

What's the biggest issue today related to the construction side of the business on the federal side today?

The biggest issue is that soft funds or project funds are increasing while base funding or funding that can be used to hire federal staff is decreasing. Federal project managers are having to do more with less. That trend looks as if it will last at least a few more years.

Talk about sustainability. What things are the government looking at today?

All NPS projects for new buildings target a LEED silver or better rating. We also pursue Energy Savings Performance Contracts. With those we perform an energy audit then contract with a vendor to construct energy savings features (LED lights, new HVAC systems, PV systems, more efficient wastewater treatment facilities, etc.).

The vendor then receives the funds from the energy savings for a 10- or 20-year term. The ESPCs are great because private industry benefits economically, the government gets to do projects it might not have all of the funding for, and the environment and

public benefit because less energy is getting used.

What do you see as some of your biggest opportunities moving ahead in the federal construction market?

Construction will continue to grow and more federal entities will be contracting for service formerly performed by federal staff. More custodial, HVAC and other maintenance services.

What trends are you seeing?

More and more services going to contract.

What is today's consumer looking for when they visit national park sites?

People are looking for the experiences they have seen in movies, TV and social media. With 417 park sites that are all unique, people are looking for an endless amount of things. They are looking to see their first bear in Wrangell Saint Elias, connect with our country's fallen soldiers at the Korean War Memorial, show their kids the sites where the Wright Brothers constructed the first flying machines, or having an exciting adventure paddling the grand canyon.

The National Parks capture the stories of our country's history and provide protection and access to some of the most beautiful natural places on earth.





U.S. Military Academy's new cadet barracks honors for one of its own

By JoAnne Castagna

With honor

Douglas Melville of New York City was very close with his late Uncle, U.S. Air Force general officer Benjamin Oliver Davis, Jr. He smiles as he remembers the lessons he learned from West Point's first African-American graduate of the 20th Century. Davis was a military pioneer during a time of racial segregation.

"My uncle said the wheels of justice turn slowly," Melville recalls. "Things are going to take time, take generations and take lives to get changed and implemented, but you need to stay determined and dedicated toward those goals."

Front exterior of Davis Barracks under construction. U.S. Military Academy West Point. Credit: Daniel Desmet, Public Affairs, New York District.

Melville, Chief Diversity Office at TBWA North America, is witnessing this change in action this century as the U.S. Military Academy names a new Cadet barracks after Benjamin Davis, who was selected for what he stood for. "My uncle made sure to instill in me that as I go through my professional career that it was important for me to take what I learn and make the path easier for those that come after me."

Davis lived his words. He had a life-long love of flying and became the commander of the World War II Tuskegee Airmen, and soon after became one of the first African Americans to receive military aviation wings. He also helped create policies that opened doors for other African Americans in the military.

Davis Barracks was designed and constructed by the U.S. Army Corps of Engineers, New York District's contractor Walsh Construction Company of Chicago and its subcontractor, Clark Nexsen. The sprawling, six-floor structure contains enough floor space to house five football fields and sits in the Central Area of the main campus which was designated a National Historic Landmark.

When Melville was informed about the building dedication, he was invited to the Academy. "A historian showed me around. At one point, I turned around and there were gentlemen wearing hard hats and yellow vests and they said we are from the U.S. Army Corps of Engineers and they wanted to show me the building. They put a hard hat on me and told me that they wanted me to see, touch and feel the Davis Barracks."

Melville was shown every aspect of the structure from where rock was blasted to make room for the barracks to the interior of the cadet rooms.

Mathew Ludwig, New York District's Military Program Chief at the time, walked Melville around. "He was impressed with the detail and stated on numerous occasions that he was honored to be part of the event and thanked everyone who had a hand in the facility," he says.

At first glance...

Melville first observed where solid rock was cut for two years to make space for the building.



U.S. Air Force general officer Benjamin Oliver Davis Jr. Credit: USACE.

The structure is modern, but you wouldn't know it by looking at the exterior. The building was designed to maintain the look of the rest of the historic 200-year old campus.



"The barracks stands where there used to be a large rock hill," says Catherine Scott, New York District's Team leader. "To make way for the building, we blasted and removed 60 feet of solid rock from the top of the hill. This is enough material to fill a football field 32 inches high. We then hauled approximately 150,000 cubic yards of this rock to off-site locations, all done from a restricted project site surrounded by historic structures occupied by over 4000 cadets."

The first floor of the barracks consists of mechanical rooms and space for a chiller plant that will provide air-conditioning to neighboring existing barracks. Above there is a mezzanine level on the West side where there are cadet storage and trunk rooms. And above that are floors two through six, which are dedicated to the dormitories. Each dorm will house two to three cadets who will have access to restrooms and laundry rooms.

An architectural highlight is its central light well. "There is a large 17-foot square skylight on the roof and a large open area on each of the floors below," Scott says. "This central well space allows natural sunlight to illuminate the common area. The aesthetic design will provide an open feeling for cadets when they gather in the study rooms or collaboration rooms on each floor. A similar skylight is located above each of the two main stairs at each end of the building to provide similar lighting."

"The Army Corps showed me each of the barracks, and explained how the heat and air conditioned floors work," Melville says. "It is the first barracks to have air conditioning."

Scott says they are using an innovative method to control the climate in the cadet rooms through plastic tubing that was installed in the concrete floor slabs. "This tubing will provide radiant heating during the winter months as well as radiant cooling during the summer season. While radiant heating has become more widespread and popular in recent years, using the same tubing to cool the ambient space is a relatively newer technique."

It works by circulating heated water through tubing in the floor, she says, while during the cooling season the radiant system works very much the same way, except the water is chilled and circulated through the same tubing.

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This is one of several ways the building is energy efficient. Thirty percent of the building's hot water is being delivered through a solar hot water system that was built on the barrack's roof.

All of this is being done in order that the Army Corps can achieve the U.S. Army's requirement of Leadership in Energy and Environmental Design (LEED) Silver certification. These energy saving features will save taxpayers approximately \$44K annually.

The structure is modern, but you wouldn't know it by looking at the exterior. The building was designed to maintain the look of the rest of the historic 200-year old campus.

"The building was designed in the military gothic revival architectural style to blend in with the adjacent historical structures located in the Central Area of the Academy," Scott says.

The design includes granite surface covering on the exterior walls and gothic arches.

This way up...

There are also secured entryways that extend the width of the structure and allow a way out to egress from the north formation area to the south side of the building.

In addition, there are parapets, where the roof meets the walls along the roof perimeter that were designed in a defensive battlement style and include concrete crenels, open space, and cast stone lintels and cap stones.

Scott says a significant volume of granite was required for the façade and a pedestal structure below the building – 121 million pounds to be exact. This is equivalent to 10,083 elephants, each weighing 12,000 pounds.

"It's not just granite, it's not just wiring, it's not just glass and steel, it's actually a real person who lived his entire life putting it on the line and making it out in the end."

– Douglas Melville, Chief Diversity Office, TBWA\North America

Maintaining the historic look of the barracks is important. If a piece of granite breaks off it's fixed. "They showed me the computer program they have that tells them what type of piece broke off so that it can be replaced and reset," Melville says.

Melville is amazed at what was created in his uncle's name. "He has a monument in his name that stands taller than the others, in the center of the campus and is the last barracks to be built in our lifetime and maybe in our children's and grandchildren's lifetime at the U.S. Military Academy, West Point."

Melville says this is a man's life work. "It's not just granite, it's not just wiring, it's not just glass and steel, it's actually a real person who lived his entire life putting it on the line and making it out in the end." **FC**



Douglas Melville speaking at the Davis Barrack's Dedication Ceremony. Credit: USACE, New York District, Public Affairs.



Douglas Melville (Right) and New York District Commander, Col. David A. Caldwell at the Davis Barrack's Dedication Ceremony. Credit: USACE, New York District, Public Affairs.

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