## Site Infrastructure and Services Subproject





Site Infrastructure and Services (SIS) was the second of seven Uranium Processing Facility (UPF) subprojects. It began in March 2015 and was completed in February 2018, for a total cost of \$61M.

SIS further prepared the Y-12 National Security Complex for UPF's future subprojects.

To ensure the best use of taxpayer dollars, an integrated acquisition and project management strategy was implemented, creating a partnership among the National Nuclear Security Administration (NNSA), the U.S. Army Corps of Engineers, and Consolidated Nuclear Security, LLC.

The SIS Subproject included:

- Building 9107 demolition
- · Asphalt removal and site grading
- Hillside excavation
- Environmental protection feature design and construction
- Concrete Batch Plant construction
- Construction Support Building (CSB) construction
- Installation of new security feature upgrades, including site access at Portal 19, and a vehicle arresting system gate



## **Construction Support Building**

The CSB is a three-story, 65,000-square-foot facility that currently serves as the UPF project command and construction operations center. Construction began in August 2016 and was completed in November 2017.

The first permanent building on the UPF project, the CSB contains offices, a break room for craft personnel, and warehouse space.

The Y-12 National Security Complex has three primary national security missions that protect the U.S. and its allies around the world: maintaining the U.S. nuclear deterrent, reducing global nuclear threats, and fueling the U.S. nuclear Navy. Currently, key operations that support these missions are conducted in buildings that originated in the 1940's and are costly to operate and maintain. UPF is one of the Department of Energy's largest investments in Tennessee since the Manhattan Project and one of the National Nuclear Security Administration's largest construction projects. UPF will support Y-12's key missions and will ensure the long-term viability, safety, and security of enriched uranium capabilities in the United States.













## Concrete Batch Plant

The fully automated batch plant is capable of producing 600 cubic yards of concrete per hour. The plant and five concrete trucks are onsite and dedicated solely to UPF, providing enhanced quality assurance and operational flexibility.



## Sustainability and Cost Savings

The CSB is the first Y-12 building to earn Leadership in Energy and Environmental Design, or LEED, Gold certification. The CSB design not only saved \$2M in construction and life-cycle costs, but earned several awards for environmental sustainability.

The UPF Project Office SIS Integrated Project Team received an award for Strategic Partnerships for Sustainability: Y-12 Building Partnerships for a Sustainable Future. The award recognized the team and the partnership between the U.S. Army Corps of Engineers Nashville District, UPF Project Office, and CNS that resulted in the successful on-time and under-budget completion of the CSB's LEED Gold certification.

The project recycled or reused 64 million pounds of asphalt, 11 million pounds of concrete, 4 million pounds of wood, and more than 1 million pounds of mixed scrap metal. Since 2015, more than 97 percent of material has been diverted from landfills.

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Asphalt	63 million pounds	Enough to pave a single lane road 4 miles long
Mixed scrap metal	227,000 pounds	The weight of almost 60 average sized cars
Wood	4.2 million pounds	About 750 cords of firewood

