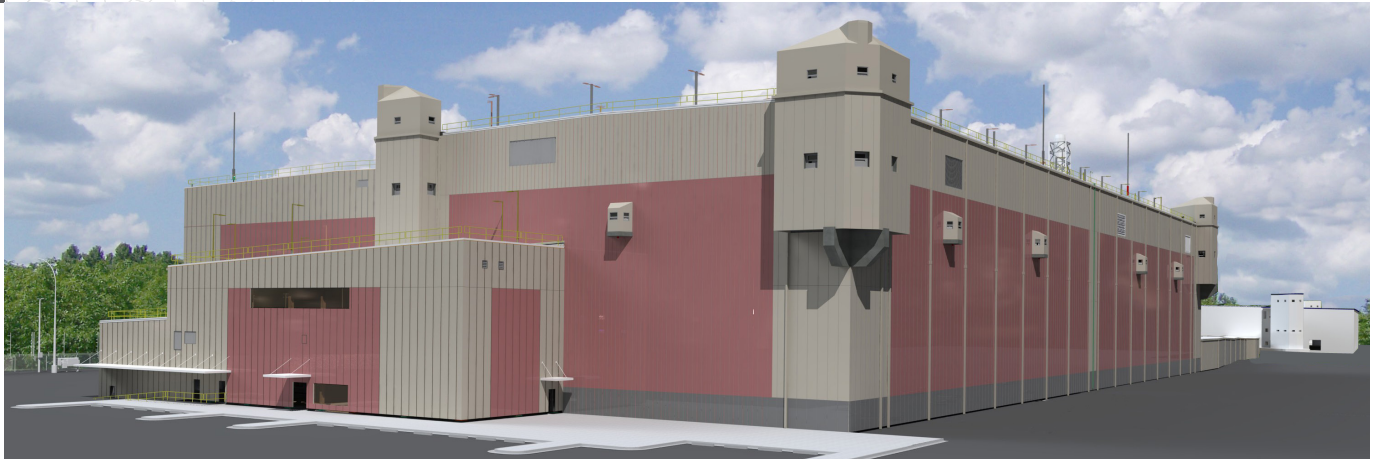


# Main Process Building Subproject



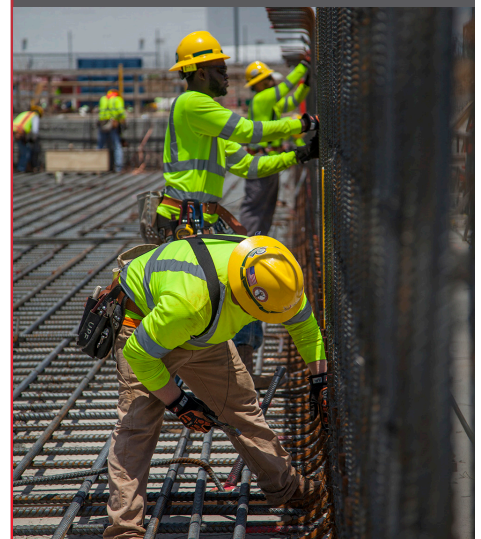
The Main Process Building (MPB) is the last of seven Uranium Processing Facility (UPF) subprojects. It began in 2018 and will be completed in 2025, for a total cost of \$4,732M.



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.

The MPB Subproject includes:

- Site preparation
  - Excavating the soil at the future site of UPF's three primary buildings and replacing it with concrete
- Long-lead procurements
  - Procuring items with long lead times, such as tower cranes and rebar
- MPB construction and equipment installation
- Installation of MPB yard and tie-ins
- Perimeter intrusion detection and assessment system installation
- Construction of the connector to the Highly Enriched Uranium Materials Facility (HEUMF)





The MPB will be a 242,000-square-foot building with three levels housing casting, special oxide and some chemical recovery processes. Main processing work takes place on the first two levels with the third floor containing support utilities.

The MPB will include a connector to the HEUMF to allow for the safe transfer of special nuclear material to UPF.

A canopy and pad supporting bottled process gases will also be installed.

MPB Fast Facts

MPB Building Footprint	90,000 square feet	Approximately the size of 2 football fields
Cable	1,550,000 feet	Nearly 300 miles, the distance from Oak Ridge to Cincinnati
Concrete	64,000 cubic yards	Enough to cover a football field 36 feet deep, or as tall as a 3-story building
Pipe	130,000 feet	Almost 25 miles
Rebar	7,760 tons	The weight of almost 195 loaded semi-trucks

