

## **EXECUTIVE SUMMARY**

The construction of the Arts & Humanities Instructional Building (AHIB) will be an interesting project to study. The new building is located on the relatively small campus of Howard Community College, which is the owner. The project is being delivered by a construction manager, Riparius Construction, Inc., as a design-bid-build with a GMP.

This seems appropriate since the owner, Howard Community College, is inexperienced with the construction process. A major concern with construction is having the building occupied by the start of the 2006 academic school year. The time frame for construction of the building is September 2004 to August 2006. A milestone of construction will be the enclosure the building which occurs by the end of September 2005.

The twenty-million-dollar job consists of new offices, classrooms, and most interesting, a 100-seat auditorium and a 3000-square-foot black box theater. The building is two stories above grade with partial basement housing mechanical equipment. A new curtain wall entrance lobby will connect the AHIB with an existing building, the Smith Theater. A curtain wall as well as a masonry façade makes up the building's skin. The building's structural steel frame is supported by cast-in-place spread footings. Steel open-web joists support the 4-ply built-up roof and standing-seam metal roof. Four air handling units sit on the roof serving four zones of the building. Two gas-fired boilers are housed in the partial basement serving the entire building.

A D4 cost estimate returned an approximate estimate of \$16.8 M. This estimate is based on similar jobs. A square foot estimate returned an estimate of only \$9.5 M. A possible cause for the discrepancy is the level of technology in the building. The complex stage lighting and telecomm system could account for a small portion of the difference as well as the electric kilns and the system required to support them. These are a few issues that need to be investigated more in depth in the future.