



## **Executive Summary**

The National Museum of the Marine Corps was designed using the LEED rating as a framework for sustainable design. The architects have incorporated several sustainable design features to improve load reduction, enhance renewable energy strategies, and high efficiency mechanical and electrical systems. Some of the design features are the large skylight system located above the Central Gallery space, retained earth on the exterior of the façade, and high performance glazing throughout. The project contains both cast-in-place and steel structural systems.

A traditional design-bid-build delivery approach has been undertaken for the project. The owner utilized a best value procurement method to obtain a contractor for the project. This method allowed for the best possible value delivery, which is important considering the high-level of quality expectations. The contractor was announced and given notice to proceed on April 12, 2004. The project is scheduled to be completed on April 12, 2006. A brief summary of the construction schedule shows the key activities durations, and time frame within the project as a whole.

A unique shear key footing system has been designed to carry the load imposed by the cast-in-place concrete walls and the earth berm backfill. The skylight consists of structural steel trusses, plate girders, and beams. The exterior ring of the building consists of structural steel columns and beams with a slab-on-metal deck floor system. Two large architectural concrete walls will funnel visitors to the main entrance of the museum.

The overall project cost is approximately \$42,000,000 with the actual building cost around \$35,000,000. Multiple estimating methods were developed to verify the cost and determine the reason for any potential difference in actual costs versus the estimated cost. The building is located on a formerly wooded area with mostly clayey soils. Site utilization and accessibility will not be a major concern due to the vast size of the project site, as the museum is only the first phase of an overall Marine Corps campus facility.