

BRANDON C. McKEE
CONSTRUCTION MANAGEMENT
AMBRIDGE AREA HIGH SCHOOL
AMBRIDGE, PENNSYLVANIA
ADVISOR: DR. JOHN MESSNER
TECHNICAL ASSIGNMENT 2



EXECUTIVE SUMMARY

This technical report provides an introductory analysis to the execution of construction at Ambridge Area High School (AAHS), in Ambridge, Pennsylvania. This assignment will analyze a detailed project schedule, site layout planning for a critical phase of construction, assemblies estimate, structural system estimate and a general conditions estimate. These items all have a dramatic affect on the execution of the project.

The AAHS used a traditional Design-Bid-Build delivery system with multiple prime contracts with a construction manager. The first analysis is the detailed project schedule. The new AAHS will replace the existing building on the project campus and must be completed on time to allow for occupancy and demolition of the existing school. Contracts for the project were awarded on August 17, 2005 with substantial completion set for August 23, 2007. The important milestone events are noted which are crucial to timely completion of construction.

The site layout plan illustrates the superstructure erection phase of the project. A 165 Ton crawler crane, in several locations, erected structural steel members except the sizable plate girder which used a 200 Ton mobile crane. Because the school had no typical bay or module an estimate of the structural system in its entirety was performed. Next an estimate of the exterior façade was performed for the East elevation of the building below the parapet line. Lastly a detailed general conditions estimate was performed for the 24 month duration of the project.

