

AB Tech FY18 Capital Plan Maintenance Phase 1

CMAR Justification

Construction Manager at Risk (CMAR) is an authorized delivery method for construction under G.S. 143-128.1 and has been used successfully on several projects for Buncombe County. Many advantages make the CMAR delivery method the best choice for certain construction projects. The main advantage is the professional services of (architect, engineers, and contractors) consulting that comes to the table during the design development and construction drawing phases. Savings occur with the probability of changes orders decreasing once construction begins. Acting in the owner's interest, the CMAR manages and controls costs to stay within the agreed upon Guaranteed Maximum Price (GMP).

Analyzing the needs for extensive repair of prolonged deferred maintenance on the buildings at the AB Technical Community College campus, has developed into a multi-year strategy. Phase 1 for funding received in 2017, includes HVAC repairs, roof replacements, and fire alarm repairs associated with twelve of the twenty-five buildings on the Asheville Campus. These repair projects consists of approximately 385,390 square feet of classroom space; 49% of the total square footage of the campus.

During the strategy planning stage the first construction delivery method considered was single prime. This could potentially require each building to be broken out into separate project depending upon the abilities and interest of single prime contractors. This option was quickly ruled out due to many challenges that would be faced to include:

- Possibility of having a different GC on each building/project
- Scheduling construction in occupied higher-education classroom space
- Keeping the project on schedule
- Cost estimation from an architect that is a range instead of estimates based on current industry trends and knowledge of construction methods
- Administrative cost and limited internal resources to monitor that many construction projects/contracts
- Limited resources to consult on development of multiple sets of drawings and specs to ensure document clarity
- Probability of change orders extremely high due to lack of intimate knowledge of the existing condition of the buildings
- Adequate contingency to cover probable change orders for unforeseen conditions
- Cost control
- Construction industry stress from high market demand yields diminished contractor availability in the current economy.
- The ability to evaluate repair options and value engineer project design for maximum efficiency and budget control.

From this list of challenges, CMAR was the next delivery method evaluated. No direct challenges could be listed for this method. The next step was to analyze the CMAR method to the challenges listed under the Single Prime method.

- One CM and one contract for the County
- Scheduling responsibilities would become the responsibility of the CM and included as part of the GMP package
- Liquidated damages could be enforced if project extends over schedule
- Fully qualified cost estimators on CM staff with current industry trend knowledge
- CM responsibility to oversee project and subcontractors. Administrative cost and resources are adequate to monitor contract and relationship with CM.
- Highly qualified construction personnel on CM staff to consult on development of clear and concise construction documents, drawings, and specs to ensure best means and methods for the project.
- Probability of change orders significantly decrease with the inclusion of highly qualified construction personnel in the design development phases.
- Owner and CM agree on and set the contingency amount at the beginning of the CMAR project. Knowing the contingency amount up front helps control cost and scope creep. Any unused contingency is returned to the County.
- CM keeps cost in control and will not exceed the GMP. Any costs in excess of the GMP is the responsibility of the CM.
- CM has working and ongoing relationship with subcontractors that do not exist for the County. CM can break work out into manageable packages ideal for the bidding climate. Minority business outreach and participation greatly increases with the CMAR method.
- Project is value engineered from the beginning of the design phase allowing the most work possible to be included. This is extremely important on the AB Tech Capital Plan Maintenance with an ever-growing list of needed repairs that have been prioritized and can be addressed in quickest and most efficient method.

Based on this analysis and the relationship developed with the AB Tech staff and Board, it is recommended the project proceed using the CMAR delivery method.