Overall Analysis Conclusions

In the case that project teams had adequate planning time before VE began, they may have been able to produce a larger pool of valuable items from which to choose. With additional time and increased communication between participants, foundation work and other interior building system costs could have been revised.

Considering the altered fiberglass reinforced polymer catwalk system provided by E.T. Techtonics, around $14,800 could have been saved. In addition to money, a decrease of 2 weeks in lead time and close to 3 weeks of construction time is expected.

Looking at alternative mechanical systems to replace two boilers, implementing electric resistance heat coils to the already existing air handling units is a viable option. An estimated $48,000 decrease and a reduction of 8-10 weeks for separate boiler installation time can be expected.

The final shoring and foundation re-sequencing analysis also provides valuable results. With an understanding of general conditions costs and $1,000 in liquidated damages for late building turnover, implementing additional raker installation and disassembly is still beneficial. Overall, a reduction of $34,100 in general conditions from a 23 work day cutback is projected.

After this investigation, DAVIS and Capital One could have saved an approximate $96,000 with the utilization of the value engineering options analyzed above. Not only would they have been able to save money, but cumulatively 4-6 weeks in schedule reduction was possible.