

TECHNICAL ASSIGNMENT #1
CONSTRUCTION PROJECT MANAGEMENT

Fairfax High School Renovation & Addition
3500 Old Lee Highway
Fairfax, VA 22030



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Construction Management Option

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A. SITE PLAN OF EXISTING CONDITIONS

Site Plan is included in Appendix A.

B. LOCAL CONDITIONS

a. Preferred Regional Methods

The national monuments in the Washington D.C. area are the prominent features, and there are building height restrictions imposed in the District in order to not take away from these structures. Concrete construction has been the most practical form of construction, and the labor force in the area truly reflects that trend. In recent years, there are more qualified steel contractors in the area, trying to increase the use of steel as a structural system.

b. Availability for Construction Parking

At the Fairfax High School site, the construction team was provided roughly 60 parking spaces located behind the gymnasium. Throughout the school year, the parking situation does not impact the project due to minimal work being conducted while school is in session. During the school year, the man power counts are between fifty and sixty. During the summer, the man power counts is up around 150, however parking is available anywhere onsite other than a few teacher's parking spaces, which work year round.

c. Recycling and Tipping Fees

There are no requirements for recycling, or use of recycled material on this project. However, most trash is separated by Concrete/CMU, and Steel, as opposed to normal construction debris.

d. Soil/Subsurface Water Conditions

They have yet to incur any impacts from bad soil aside from minimal spots in the front parking where they were directed to undercut portions of the existing soil and fill with 21A aggregate. Most of the soil being uncovered has been beneath the existing building for over thirty years, which is thirty years of compaction from the building, and there has not been a problem achieving 95 - 100 % bearing.

C. CLIENT INFORMATION

a. Owner Description

The Fairfax City School Board, represented by George Stepp, is a governing body of the Fairfax, VA school district. They are devoted to completing this project which is designed to modernize the school architecturally, mechanically

and electrically. The renovation will get the school up to date and ahead of the game for years to come. The new addition will accommodate the tremendous growth in the area and eliminate local students having to travel longer distances, as well as the need for classroom trailers being used.

b. Why building this facility?

The Primary Reason for the renovation was due to the drastic increase in class sizes and the school was forced to rent classroom trailers and place them in the back parking lot to accommodate for the sudden growth. The renovation will add more updated classrooms. As Phase 3 is completed, the remainder of the trailers will be removed.

c. Cost, quality, schedule, and safety expectations

The two major factors on the project are schedule and cost. The project is working around an occupied, operational school, and every September the kids return to school. There is no other building for the kids to attend, so the site must be ready for them. Cost is also a big issue. The contract for this project is \$45 million, which included \$ 1.2 million in contingency allowance for change order work. To date, almost \$650,000 in changes have been settled. Once the allowance runs out, the school board has to somehow come up with more money. This makes changes a constant struggle. Safety is also a big issue with all the students occupying the school during construction. The contract requires building a floor to deck, drywall partition between all work areas, and occupied school areas. Area G will have a construction fence surrounding the area, and there is a full partition with no entrance into the school up between the school and Area G.

d. Sequencing issues of interest to owner

The project is being completed in phases so that the school can remain occupied at all times throughout the school year. The schedule is outlined in the phasing documents, and is part of the contract, so the CPM has to mirror the contract phasing. It would be very detrimental to miss a date for the turnover of any spaces. They continue to work with the school administrators to coordinate all work activities and turnover dates, and in most cases work areas are being released earlier than expected to help facilitate the completion dates. The schedule is the main key to satisfying the owner.

D. PROJECT DELIVERY SYSTEM

a. System Description

With Design-Bid-Build the owner has the option to get a fair value for the work at a low price while still being selective about the general contractor. With Design-Bid-Build the contractors achieve the lowest competitive pricing from the subs and can pass that value on to the owner. However, this project was value engineered at contract time, to remove various items of scope, and the overall value of the project was reduced from \$56 million to \$45 million. The architect was contracted with a lump sum. All of the subcontractor hold lump sum contracts as well.

b. Organizational Chart

For the Fairfax High School project, the Architect is acting as the Construction Manager, resulting in only three parties being involved:

1. Owner – Fairfax City School Board - George Stepp
2. Architect / Engineer - BeeryRio
3. General Contractor - Grunley Construction – Greg McHugh

BeeryRio has a contract with the owner and has a subordinate contract with the Engineers, Ehlert/Bryant (Structural Engineer) and Strickler & Associates (MEP Engineer). BeeryRio also has a contract with Grunley Construction through the Owner.

BeeryRio has one onsite representative who is at the job day to day for immediate coordination and to act as the owner's quality control. They also have one Architect in their main office who is also the owner's representative for approving payment and negotiating change orders in addition to normal Architect duties. Grunley Construction has superintendent staff onsite everyday as well as the project manager.

Grunley Construction was the low bid on the job and had to select the Lowest Responsible Bid. For the big sub-contractors such as Mechanical, Electrical, Structural, and Sprinkler, the sub-contractor whose number was used on bid day was bought. However, for other subs the bid day number was used as a budget and they bought the sub-contractor they felt comfortable doing the job with.

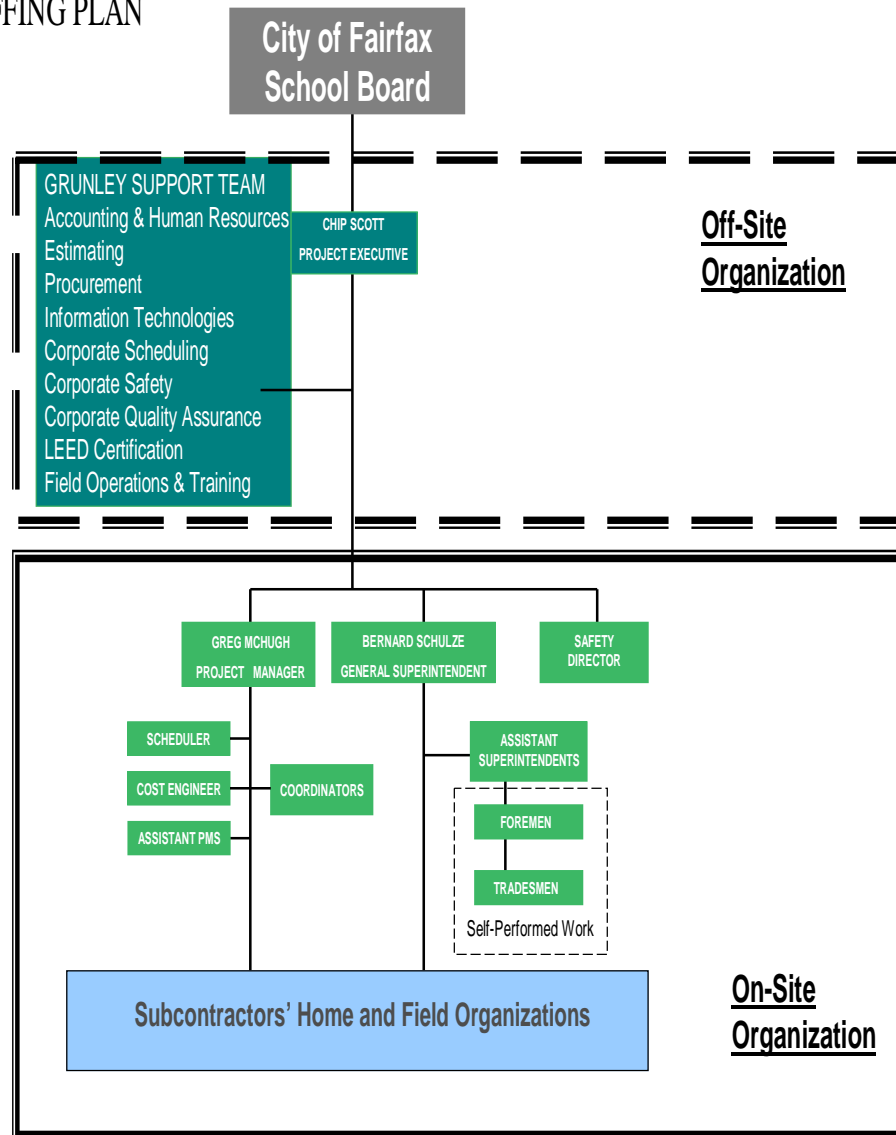
Both a Bid Bond and Performance Bond were required on this project. Grunley Construction has insurance on the project, and requires a certificate of insurance on all sub-contractors working on the project, which must be up to date. As an extra, Grunley Construction keeps an insurance policy for their sub-contractors company wide, called "Sub Guard," which has a \$500K deductible on any sub-contractor.

E. STAFFING PLAN

PROJECT ORGANIZATIONAL CHART

FAIRFAX HIGH SCHOOL

STAFFING PLAN



F. APPENDIX A

