

TECHNICAL ASSIGNMENT #2
COST AND METHODS ANALYSIS

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



Table of Contents

A. Executive Summary.....2

B. Detailed Project Schedule.....2-3

C. Site Layout Planning.....3

D. Assemblies Estimate.....3

E. Detailed Structural Systems Estimate.....3

F. General Conditions Estimate.....3-4

G. Appendix A.....4-25

H. Appendix B.....26

I. Appendix C.....27-28

J. Appendix D.....29-32

K. Appendix E.....33-34

A. EXECUTIVE SUMMARY

This technical assignment provides an introduction to the cost and methods analysis for the Fairfax High School renovation and addition project in Fairfax, Virginia. In this assignment, the project is analyzed in terms of a detailed project schedule, site layout planning, assemblies estimating, structural system estimate, and general conditions estimating all which affect the project's execution.

The detailed schedule is provided that reflects the phasing and sequencing of major activities. The site layout plan depicts the phases of construction as well as all temporary facilities and objects. A cost estimation of the building envelope, structural system and general conditions is included.

The Fairfax High School project is a traditional design-bid-build project delivery system. The first item analyzed in this assignment is a detailed construction schedule for the project. The project was awarded on March 23, 2005 and is scheduled to be completed in September 2007. There are also important milestone dates highlighted throughout the schedule that are important to achieving the project substantial completion on time.

The site layout plan following the schedule is analyzed during the steel / concrete phase of the project. A 100 ton crawler crane will be used to erect steel with multiple mobilizations and a concrete pump is used to place concrete throughout the site. Fairfax High School contains a lot of specialty equipment and furnishings, which are summarized in an assemblies estimate. This includes food service equipment, aluminum stadium seating, chalkboards, and classroom furniture. Lastly, a detailed structural system estimate and general conditions estimate were calculated. The general conditions estimate included staff costs with an integrated fee value.

B. DETAILED PROJECT SCHEDULE

The schedule for the Fairfax High School project is very complex and there is little room for error due to the need for the school to stay open throughout the entire job. Notice to proceed was on April 6th, 2005 and is scheduled to be completed in September of 2007. There are a total of four Phases, each divided into its own respective Areas.

Key dates, milestones, and activity durations:

- 4/06/05 – Phase 1 Notice to Proceed
- 4/21/05 - Mobilization
- 12/16/05 – Phase 1 Finish milestone
- 1/04/06 – Phase 2 Start milestone
- 9/11/06 – Phase 2 Finish milestone
- 6/27/07 – Phase 3 Start milestone
- 9/04/07 – Phase 3 Finish milestone
- 6/27/07 – Phase 4 Start milestone

- 9/04/07 – Phase 4 Finish milestone

The detailed project schedule is located in Appendix A.

C. SITE LAYOUT PLANNING

The following site plan is an overall site plan for the excavation/demolition construction phase at Fairfax High School. At this point, the main entrance and exit for the site is off Lee Highway (Route 29). The temporary trailers and offices are located east of the school.

Since the entrance/exit location is the same, there is ample space for trucks to turn around for delivery. The steel lay down area is located over the parking lot that is being demolished and re-laid. This provides easy access for both the delivery trucks and the crane.

The full detailed site plan is located in Appendix B.

D. ASSEMBLIES ESTIMATE

Fairfax High School contains a lot of specialty equipment and furnishings, which are summarized in an assemblies estimate. Some of the items included are lockers, shelving (metal and wooden), and benches. The costs of the specialty equipment fixtures in the Fairfax High School project were estimated using RS Means Assemblies Cost Data.

The calculated values can be found on the table shown in Appendix C.

E. DETAILED STRUCTURAL SYSTEMS ESTIMATE

A detailed structural systems estimate was done using R.S. Means Cost Works 2005. The main structural system for the project, typical to all construction in the D.C. metro area is cast-in-place concrete.

The calculated values can be found on the table shown in Appendix D.

F. GENERAL CONDITIONS ESTIMATE

The following is a summary of the general conditions estimate performed for the Fairfax High School project. Included in the summary are total prices for the bonding and insurance, project staff, and site office supplies. Hourly, weekly, and monthly costs were based on a 40 hour work week, with the project duration at 116 weeks and 29 months. Unit

prices were based on R.S. Means Building Construction Costs 2005. A location factor of 0.93 was taken into consideration for the project's Lancaster, PA locality.

Unit prices taken from R.S. Means Building Construction Costs 2005 include:

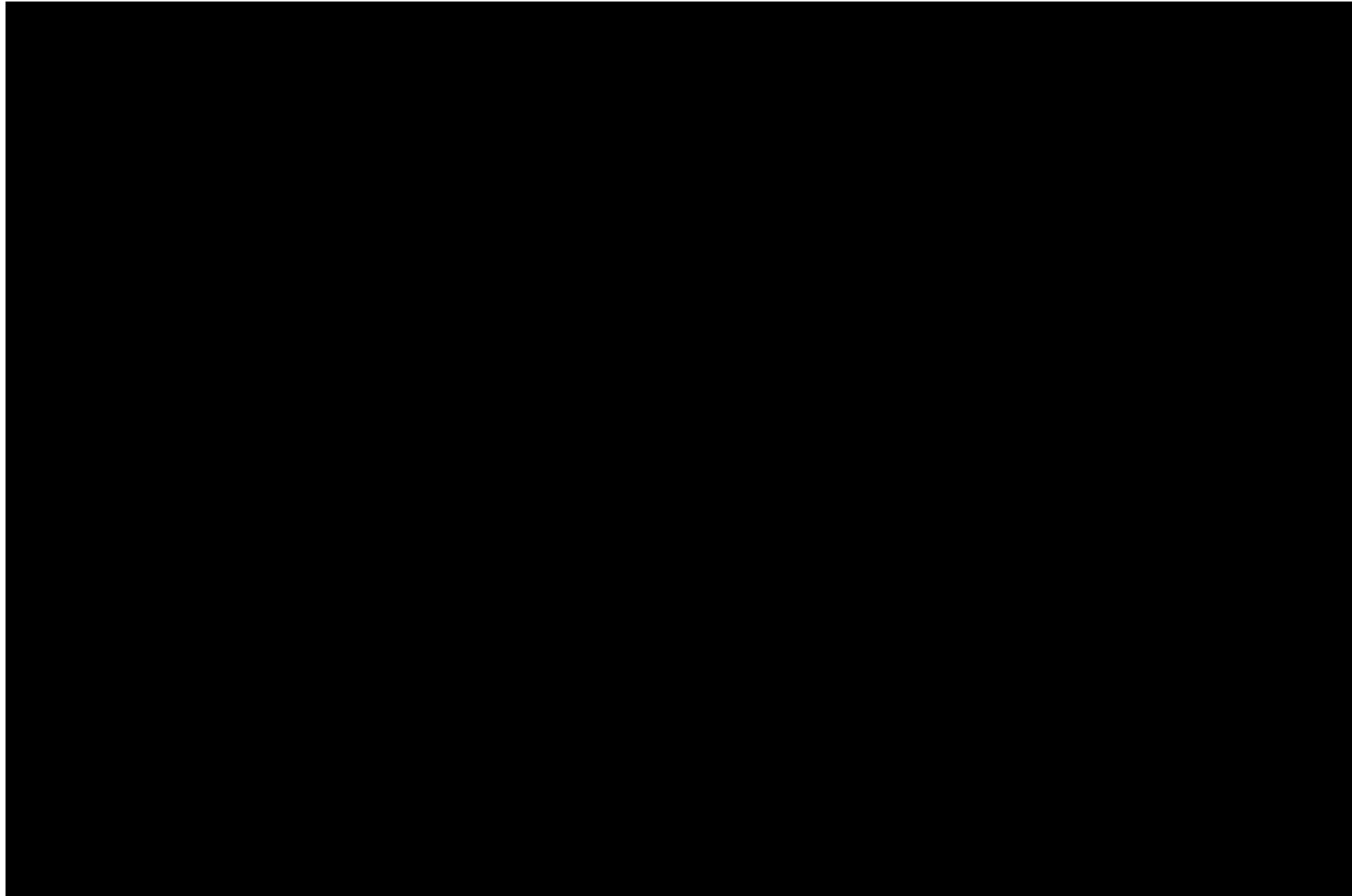
- Final Clean-up
- Office Trailers
- Miscellaneous Office Supplies
- Office Equipment
- Project Staff
- Bonds
- Insurance

The total General Conditions Estimate is \$2,949,501. A detailed general conditions estimate is located in Appendix E.

G. APPENDIX A

The detailed project schedule is included on the following pages.

H. APPENDIX B



I. APPENDIX C

Specialty Equipment Assemblies Estimate for Fairfax High School from RS Means 2005						
CATEGORY	RS MEANS ITEM #	DESCRIPTION	QTY.	MAT. \$	INST. \$	TOTAL COST
Locker						
Type G19	0110	Single tier box locker, 12"x15"x72"	975 ea.	157	40	192,075
Type G23	0110	Single tier box locker, 12"x15"x72"	83 ea.	157	40	16,351
Type G24	0110	Single tier box locker, 12"x15"x72"	78 ea.	157	40	15,366
Type G25	0110	Single tier box locker, 12"x15"x72"	163 ea.	157	40	32,111
Type G26	0110	Single tier box locker, 12"x15"x72"	1,020 ea.	157	40	200,940
Type K36	0110	Single tier box locker, 12"x15"x72"	54 ea.	157	40	10,638
Total Cost for Lockers:						\$467,481
Bench						
Type K37	2100	Free standing benches at team rooms	1,520 l.f.	12.55	3.22	23,970
Total Cost for Bench:						\$23,970
Metal Shelving						
Type E10 Center	2010	Modular shelving, closed upright sections	26 ea.			2,680
Type E10 End	2010		32 ea.			3,298
Type E50 Center	2010		56 ea.			5,772
Type E50 End	2010		77 ea.			7,936
Type E51 Center	2010		116 ea.			11,956
Total Cost for Metal Shelving:						\$31,642
Sub-total of Specialty Equipment:						\$523,094

Michael Funk
Construction Management Option

Dr. Horman
Fairfax High School

			Location Factor Adjustment (%): 92.9
			Total Cost of Specialty Equipment: \$485,954

Michael Funk
Construction Management Option
J. APPENDIX D

Dr. Horman
Fairfax High School

CONCRETE

DESCRIPTION	LOC	TYPE	DETAIL	NO	LENGTH	WIDTH	DEPTH/HGHT	QNTY	UNIT	TOTAL QNTY	REMARKS
WING-"A"											
FOUNDATION	S101									12.7	
WALL FOUND			9,10/S-202	1	28	2	1	2.1	CY		DRILL&GROUT-8x#5
			5/S-202	4	13	1.67	2	6.4	CY		DRILL&GROUT
			6/S-202	4	10	2	1	3.0	CY		
			11/S-2102	1	16	2	1	1.2	CY		
	CHECK		N3/A-101A					0.0	CY		
S.O.G.										28.4	
	TYP.RECESS	03300.B	16/S-202,F7&10/A-303,A7/A-303A	6	24	2	0.33	3.5	CY		
				1	31.67	2	0.33	0.8	CY		
	CORR.A144A		10/S-202,13/S-201	1	20	8	0.5	3.0	CY		WIRECESSED SLAB
	A/M-INFIL		5,6/S-202	1	63	4	0.33	3.1	CY		
			11/S-202	1	17	6	0.33	1.2	CY		
TYP.UTILITY TRENCH	INFILL		3/S-202	1	128	6	0.33	9.4	CY		
				1	87	5	0.33	5.3	CY		
	A101			1	29	4	0.33	1.4	CY		
				1	6	3	0.33	0.2	CY		
				4	3	3	0.33	0.4	CY		
MSC.- OTHER										5.5	
LOCKER BASE	A-101,A-501		A9/A-500B	1	454	1	0.33	5.5	CY		
WING-"B"											
FOUNDATION	S-103									2.1	
COLUMN		F2	1/S-202	1	3	3	1	0.3	CY		
		F3		2	4	4	1	1.2	CY		
WALL			17/S-202	1	8	2	1	0.6	CY		
S.O.G.										25.3	
	TYP.RECESS	03300.B	16/S-202,F7&10/A-303,A7/A-303A	2	24	2	0.33	1.2	CY		
	N/B INFILL		12/S202	1	16	3	0.33	0.6	CY		
	B121		18/S-202, 13/S-201	1	8	6	0.5	0.9	CY		WIRECESSED SLAB
				1	8	1	2	0.6	CY		TURNDOWN
	B103			1	13	6	0.5	1.4	CY		WIRECESSED SLAB
				1	13	1	2	1.0	CY		TURNDOWN
	INFILL		17/S-202	1	12	3	0.42	0.6	CY		
			1/S-202	3	10	10	0.42	4.7	CY		AT COLUMNS
			4/S-202	1	27	1	0.67	0.7	CY		
TYP.UTILITY TRENCH	INFILL			1	5	5	0.33	0.3	CY		AT MASON. PIER
	A102,D-102		3/S-202	1	82	5	0.33	5.0	CY		
				1	60	5	0.33	3.7	CY		
				1	8	8	0.33	0.8	CY		
				1	109	3	0.33	4.0	CY		
MSC.- OTHER										2.0	
LOCKER BASE	A-102, A-502		A9/A-500B	1	160	1	0.33	2.0	CY		
WING-"C"											
FOUNDATION	S-105									2.1	
WALL		03300.A	11/S-202	1	12	2	1	0.9	CY		
			A4&L6/A-324	1	10	1.67	2	1.2	CY		
S.O.G.										38.4	
S.O.G.	COURT PIT	03300.B1	AS 9	1	40	30	0.33	14.7	CY		SEE AS.9 FOR GRAVEL
				1	128	3	0.17	2.4	CY		INFILL
		03300.B2	16/S-202,E1/AS.9,E7&A10/A324	1	30	3	0.5	1.7	CY		ADD EDGE
			16/S-202,A4&7/A-324	2	24	2	0.42	1.5	CY		ON "F" SIDE
	AT BENCH		A12,E13/AS.9,E7&J14/A-324	1	80	2	0.42	2.5	CY		
	C/M INFILL	03300.B2	11/S-202	1	24	6	0.42	2.2	CY		
TYP.UTILITY TRENCH	INFILL		3/S-202	1	143	6	0.33	10.5	CY		
	A-103,D-103			1	34	4	0.33	1.7	CY		
				1	23	3	0.33	0.8	CY		
	A-103,D-101			4	3	3	0.33	0.4	CY		
MSC.- OTHER										7.3	
LOCKER BASE	A-103,A-503		A9/A-500B	1	599	1	0.33	7.3	CY		
WING-"D"											
FOUNDATION	S-107									0.9	
WALL			16/S-202	1	12	2	1	0.9	CY		
S.O.G.										14.0	
S.O.G.	D/G INFILL			3	10	3	0.33	1.1	CY		
	D119		13&16/S-202	1	12	6	0.5	1.3	CY		WIRECESSED SLAB
	D145		18/S-202, 13/S-201	1	8	6	0.5	0.9	CY		WIRECESSED SLAB
				1	8	1	2	0.6	CY		TURNDOWN
TYP.UTILITY TRENCH	INFILL		3/S-202	1	28	5	0.33	1.7	CY		
	A-104,D-104			1	79	4	0.33	3.9	CY		
				1	85	3	0.33	3.1	CY		
				1	12	2	0.33	0.3	CY		

Michael Funk
Construction Management Option

Dr. Horman
Fairfax High School

WING-"F"												
S.O.G.												7.0
RAMP	F125&129			2	17	4	0.5	2.5	CY			
TYP.UTILITY TRENCH	A-106,D-106			1	18	8	0.33	1.8	CY			
				2	56	2	0.33	2.7	CY			
MSC.- OTHER												3.3
LOCKER BASE	A-106,F-106		A9/A-500B	1	271	1	0.33	3.3	CY			
WING-"G"												301.7
FOUNDATION	S-113											
COLUMN	F2		12/S-203	4	3	3	1	1.3	CY			
	F3		4/S-203	4	4	4	1	2.4	CY			
	F4		4/S-203	2	5	5	1	1.9	CY			
	F5		2/S-201,4/S-203	9	6	6	1	12.0	CY			
	F5A		10/S-203	2	6	6	1	2.7	CY		ALLOWANCE #32/ADD# 6	
	F6		3/S-201	1	7	7	1.33	2.4	CY			
	F7		2/S-201,4/S-203	6	8	8	1.3	18.5	CY			
	F8		2/S-201,11/S-203	8	9	9	1.67	40.1	CY			
	F9		2/S-201	5	10	10	1.67	30.9	CY			
	F10		2/S-201	3	11	11	2	26.9	CY			
	F11		13/S-203	3	9	9	2.5	22.5	CY			
	F12		13/S-203	2	11	11	2.5	22.4	CY			
	F13		13/S-203	2	7	7	2	7.3	CY			
	F14		13/S-203	2	9	9	2	12.0	CY			
	F15		13/S-203	1	10	10	2.5	9.3	CY			
	F16		14/S-203	2	16	4	1.33	6.3	CY			
	F17		SIM.14/S-203	1	11	4	1.33	2.2	CY			
WALL			1,2&7/S-203,9/S-201	1	438.24	2	1	32.5	CY			
WALL			3/S-203	1	52	2.33	1	4.5	CY			
WALL	ADD FOR STEP FOOT		4/S-201	19	2	1.5	1.5	3.2	CY			
			2/S-202	1	152	2.5	2	28.1	CY			
			DEDUCT	-1	60	1.67	1	-3.7	CY			
			6/S-202	3	8	2	1	1.8	CY			
			5A/S-202	1	74	1.67	2	9.2	CY			
MAT	ELEV. PIT		5/S-201,A-601	1	10.42	11.46	1	4.4	CY			
	ADD FOR SUMP PIT			1	3.5	3.5	1	0.5	CY			
ADA BOLLARDS		03300.A	SKA 2-033	1	3.14	1	3	0.3	CY			
	INFILL			1	0.19625	1	5	0.04	CY			
MSC.- OTHER												39.1
STRAP BEAMS	SB-1			1	27	2	2.5	5.0	CY			
	SB-2			1	32	2	2	4.7	CY			
	SB-3			1	18	2	2.5	3.3	CY			
PIERS	P-1			1	2	2	1.33	0.2	CY			
				1	2	2	3.33	0.5	CY			
	P-2			3	1.67	1.67	4	1.2	CY			
				1	1.67	1.67	8	0.8	CY			
				1	1.67	1.67	2	0.2	CY		AT WING FIG	
	P-3			6	2.33	2.33	1.33	1.6	CY			
				2	2.33	2.3	2	0.8	CY			
				1	2.33	2.33	6	1.2	CY			
				1	1.67	3.83	4	0.9	CY			
WALLS	ELEV. PIT	03300.A2	5/S-201,A-601	1	35.76	1	3.33	4.4	CY			
METAL STAIRS FILL	TREADS		A-601, A-601A,B&C	9	7	1	0.17	0.4	CY		STAIR# 1	
				15	7.5	1	0.17	0.7	CY			
	LANDINGS			1	7	7	0.29	0.5	CY			
				1	7.5	7	0.29	0.6	CY			
	TREADS		A-602,A-602A	24	5	1	0.17	0.8	CY		STAIR# 2	
	LANDINGS			1	11	14	0.29	1.7	CY			
				1	9	5	0.29	0.5	CY			
	TREADS		A-603	19	7.3	1	0.17	0.9	CY		STAIR# 3	
				1	89.68	1	0.75	2.5	CY		CONCRETE OR MTL. PAN	
	LANDINGS			1	7.33	7.33	0.29	0.6	CY		?	
				1	14	9.5	0.29	1.4	CY			
				1	8	8	0.29	0.7	CY			
				1	22.75	2.75	0.5	1.2	CY		CONCRETE OR MTL. PAN	
											?	
COLUMN WRAP	CANOPY	03300A.1	A6&11/A-012, 10-S-203	2	0.58875	1	13.67	0.6	CY		ALLOWANCE #32/ADD# 6	
FILL	BENCH-G172	03300.B1	G4/A-318A	1	71.44	0.67	0.33	0.6	CY		W/GRAVEL FILL	
		03300.B1	G8/A-318A	1	14	3.5	0.33	0.6	CY		W/GRAVEL FILL	
S.O.G.												272.4
	S113			1	4000	1	0.42	62.2	CY			
SLAB OVER METAL DECK				1	17200	1	0.33	210.2	CY			
												191.3

**Michael Funk
Construction Management Option**

**Dr. Horman
Fairfax High School**

WING-"I"										
FOUNDATION	S-118									2.4
COLUMN	F3	03300.A	1/S-202	1	4	4	1	0.6	CY	
	F4	03300.A	1/S-202	2	5	5	1	1.9	CY	
S.O.G.										
INFILL		03300.B	1/S202	2	11	11	0.33	3.0	CY	17.2
			4/S-202	1	8	8	0.3	0.7	CY	
				1	94	1	0.67	2.3	CY	
	A-110			1	12	12	0.5	2.7	CY	
TYP.UTILITY TRENCH	A-110,D-109,D-111A		3/S-202	1	24	8	0.33	2.3	CY	
				1	93	4	0.33	4.5	CY	
				1	32	2	0.33	0.8	CY	
				8	3	3	0.33	0.9	CY	
MISC.- OTHER										
LOCKER BASE	A-110,A-510		A14/A-523	1	319	0.5	1.33	7.9	CY	18.8
			F14/A-523	1	212	1	1.33	10.4	CY	
CURB BASE	SHOWER STALL		SKA2-020	22	3	0.5	0.42	0.5	CY	
WING-"J"										
S.O.G.										
INFILL	S-120			1	2250	1	0.33	27.5	CY	32.7
	J145		4/S-202	1	27	1	0.67	0.7	CY	
				1	16	4	1	2.4	CY	
TYP.UTILITY TRENCH	A-111, RM#J161,J151			1	40	4	0.33	2.0	CY	
	A-111		3/S-202	2	4	2	0.33	0.2	CY	
MISC.- OTHER										
RAMPS	J165			1	8	4	0.67	0.8	CY	27.0
				1	16	4	0.67	1.6	CY	
				1	32	4	1	4.7	CY	
CURB BASE	SHOWER STALL, A-111		SKA2-020	10	3	0.5	0.42	0.2	CY	
LOCKER BASE	A-511,A-111		A14/A-523	1	325	0.5	1.33	8.0	CY	
			F14/A-523	1	185	1	1.33	9.1	CY	
			CORRIDOR LOCKERS-G19	1	104	0.5	1.33	2.6	CY	
WING-"L"										
S.O.G.										
TYP.UTILITY TRENCH	A-113,D-111		3/S-202	1	84	2	0.33	2.1	CY	2.7
				1	14	4	0.33	0.7	CY	
WING-"M"										
FOUNDATION										
WALL	S-126		9/S-201,1&2/S-203	1	1276.74	2	1	94.6	CY	115.1
			5,5A/S-202	1	110	1.67	2	13.6	CY	
			ADD STEP FOOT	26	2	1.5	1.5	4.3	CY	
COLUMN	F1			1	2	2	1	0.1	CY	
	F2		2/S-201,4A/S-203	3	3	3	1	1.0	CY	
	F3		2/S-201	5	2	4	1	1.5	CY	
S.O.G.										
NEW				1	22750	1	0.33	278.1	CY	279.8
	ADD FOR RECESSED		13/S-201	1	107	1	0.33	1.3	CY	
INFILL			4/S-202	1	16	1	0.67	0.4	CY	
MISC.- OTHER										
PIER	P1			2	2	2	3.33	1.0	CY	7.8
	P2			1	1.67	1.67	4.33	0.4	CY	
LOCKER BASE	A-114,A-514		A9/A-500B	1	428	1	0.33	5.2	CY	
			A5/A-500B	1	46	2	0.33	1.1	CY	
SLAB OVER METAL DECK										1.8
OVER MTL DECK	M126	03300.B1	A1&L11/A-305	1	16	4	0.5	1.2	CY	
		03300.B1	A1&F13/A-306	1	7.67	4	0.5	0.6	CY	
WING-"N"										
FOUNDATION										
WALL	S-128		9/S-201,1&2/S-203	1	575.01	2	1	42.6	CY	69.4
			5,5A,6/S-202	1	198	1.67	2	24.5	CY	
			ADD STEP FOOT	6	2	1.5	1.5	1.0	CY	
COLUMN	F2		2/S-201,4A/S-203	4	3	3	1	1.3	CY	
S.O.G.										
NEW				1	7900	1	0.33	96.6	CY	108.0
	ADD FOR RECESSED		13/S-201	1	28	1	0.33	0.3	CY	
INFILL				1	96	4	0.67	9.5	CY	
TYP.UTILITY TRENCH	TYP.RECESS	03300.B	6/S-202,F7&10/A-303,A7/A-303A	1	24	2	0.33	0.6	CY	
	A-115		3/S-202	1	14	5	0.33	0.9	CY	
				1	3	3	0.33	0.1	CY	
MISC.- OTHER										
PIER	P1			1	2	2	1.33	0.2	CY	2.4
LOCKER BASE	A-115,A-515		A9/A-500B	1	182	1	0.33	2.2	CY	
SLAB OVER METAL DECK										1.0
OVER MTL DECK		03300.B1	B,10/S-401	1	10	3	0.5	0.6	CY	
		03300.B1		1	8	3	0.5	0.4	CY	

**Michael Funk
Construction Management Option**

**Dr. Horman
Fairfax High School**

SUMMARY

FOUNDATION	528.1	CY	325	171,644
S.O.G.	859.2	CY	325	279,254
SLAB OVER MTL DECK	194.0	CY	325	63,060
MISC.-OTHER	132.4	CY	750	99,296
MISC.-SITE	61.8	CY	325	20,096
WASTE	177.6	CY	100	17,756
G/TOTAL	1953.2	CY		651,107

U/COST 367

WING	A	46.6	CY
	B	29.4	CY
	C	47.9	CY
	D	16.6	CY
	E	61.0	CY
	F	10.3	CY
	G	804.5	CY
	H	11.4	CY
	I	38.5	CY
	J	59.7	CY
	L	2.7	CY
	M	404.4	CY
	N	180.8	CY
	SITE	61.8	CY
WASTE	177.6	CY	
GRAND TOTAL	1953.2	CY	

General Conditions Estimate					
Description	Labor/Material	Qty.	Units	Unit Price	Amount
As-built Drawings	M	1	LS	\$2,000	\$2,000
Assistant Superintendent P/D	M	95	WK	\$0	\$0
Building Information Modeling Services	M	1	LS	\$40,000	\$40,000
Communications Equipment	M	1	LS	\$2,000	\$2,000
Contractors Fee	P	3.25	%	\$442,859	\$1,439,292
Copier	M	29	MO	\$500	\$14,500
Courier	M	29	MO	\$150	\$4,350
Daily Photos	M	28	MO	\$30	\$840
Fax Machine	M	1	LS	\$500	\$500
Field Office Processor	M	107	WK	\$0	\$0
Field Office Setup	M	120	MH	\$28	\$3,360
Field Office Setup	M	1	LS	\$4,000	\$4,000
Field Office Trailer	M	29	MO	\$750	\$21,750
First Aid	M	28	MO	\$100	\$2,800
Job Signs	M	60	MH	\$28	\$1,680
Job Signs	M	1	LS	\$2,500	\$2,500
Management Substance Abuse Testing	M	28	EA	\$65	\$1,820
Meeting Expense / M&E	M	28	MO	\$250	\$7,000
Monthly Photos	M	28	MO	\$350	\$9,800
Network Connection Fees	M	29	MO	\$200	\$5,800
Office Furniture	M	1	LS	\$1,500	\$1,500
Office Security	M	1	LS	\$2,000	\$2,000
Office Supplies	M	29	MO	\$650	\$18,850
Offsite Parking (5 Spaces)	M	-	MO	-	-
Operations Manager	M	630	MH	\$0	\$0
PC's / Modems	M	10	MO	\$175	\$1,750
Postage / Expressage	M	29	MO	\$650	\$18,850
Project Auditor	M	1	EA	\$1,500	\$1,500
Project Engineer #2	M	100	WK	\$0	\$0
Project Engineer P/D	M	100	WK	\$0	\$0
Project Manager	M	116	WK	\$0	\$0
Project Manager Car	M	-	MO	-	-
Salary Accrual Code	M	1	LS	\$1,264,570	\$1,264,570
Secretary	M	95	WK	\$0	\$0
Software	M	29	MO	\$141	\$4,089
Sr. Project Engineer	M	100	WK	\$0	\$0
Superintendent	M	100	WK	\$0	\$0
Superintendent Truck	M	28	MO	\$1,150	\$32,200
Telephone	M	29	MO	\$900	\$26,100
Telephone Set-up	M	1	LS	\$2,500	\$2,500
Temporary Power (Trailer)	M	29	MO	\$300	\$8,700
Temporary Water (Trailer)	M	29	MO	\$100	\$2,900
Travel Expenses	M	-	MO	-	-
Total					\$2,949,501

Michael Funk
Construction Management Option

Dr. Horman
Fairfax High School

Description	Amount
Builders Risk Insurance	\$76,495
Building Permit	\$200,671
Demolition Permit	\$0
Equipment Floater Insurance	\$7,500
General Liability Insurance	\$0
Gross Receipts Taxes	\$914
Licensed Survey	\$5,000
Performance Bond	\$0
Warranty	\$20,000
Total	\$310,580