

Middleton Ma Masterplan

Study Cost Estimate

48 South Main Street
Town of Middleton, Ma

Prepared by:



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Prepared for:

HKT

March 3, 2020

MAIN SUMMARY

<u>Project</u>	<u>Project Cost (2021 dollars)</u>
Phase 1 - Fire Department	\$18,535,935
Phase 1 - Sitenwork	\$7,332,749
Phase 1A - Sitenwork (includes Town Green)	\$3,855,764
Phase 2 - Community Center or Council on Aging	\$13,219,288
Phase 2 - Sitenwork	\$4,304,783
Phase 3 - Police Department Addition	\$9,304,881
Phase 4 - Town Hall Addition	\$7,296,812
Total	\$63,850,212
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<u>Combined and Other Options</u>	<u>Project Cost (2021 dollars)</u>
Combined Public Safety Building	\$27,693,216
Combined Town Hall/Community Center	\$20,743,223
Stand Alone Town Hall	\$9,566,261
Phase 1A - Sitenwork (Light Scope Option)	\$378,000

This cost estimate was produced from January/February 2020 Study documents received provided by HKT Architects. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, general contractor's overhead and profit and design contingency. Cost escalation per main summary.

Bidding conditions are expected to be public bidding utilizing chapter 149 filed sub bidding and DCAM qualified general contractors.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Land acquisition, feasibility, and financing costs
Items identified in the design as Not In Contract (NIC)
Items identified in the design as by others
Utility company back charges, including work required off-site
Work to City streets and sidewalks, (except as noted in this estimate)
Construction or occupancy phasing or off hours' work, (except as noted in this estimate)
Rock excavation; special foundations (unless indicated by design engineers)
Contaminated or unsuitable soils removal or replacement
Building Permits

Recommendations For Cost Control

TCI recommends that the Owner and Architect carefully review this document, including line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. Request for modifications of any apparent errors or omissions to this document must be made to TCI within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that TCI using bid documents produce a final update estimate, to determine overall costs changes which have occurred since the preparation of the estimate. The final update estimate will address changes and additions to the document, as well as addenda issued during bidding process. TCI cannot reconcile bid results to an estimate not produced from bid documents.

Statement Of Probable Cost

TCI has no control over the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. The opinion of construction is made on the basis of the experience, qualifications, and best judgment of the professional estimator familiar with the industry. TCI does not guarantee that bids will not vary from this estimate.

TCI staff of professional cost estimators has prepared this estimate in accordance with generally accepted principles and practices.

Acceptance of Report

With acceptance of this report, the holder shall indemnify and hold harmless Tortora Consulting from and against all claims, damages, losses and expenses, including but not limited to attorney fees and court costs arising out of or as a result of the performance of this work, including third party claims.

Item #	Phase	Current Costs (2020 dollars)					10 year escalated costs - (5% 2021, 4% average per year 2022 - 2031)										
		SF	Construction Cost	\$/SF	Total Project Cost Includes construction 30% soft costs & contingency on buildings & 20% on Sitework	\$/SF	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1	Phase 1 - Fire Department (2 story, elevator and shared spaces)	28,770	\$13,579,439	\$472	\$17,653,271	\$614	\$18,535,935	\$19,277,372	\$20,048,467	\$20,850,406	\$21,684,422	\$22,551,799	\$23,453,871	\$24,392,026	\$25,367,707	\$26,382,415	\$27,437,712
2	Phase 1 - Sitework		\$5,819,642		\$6,983,570		\$7,332,749	\$7,626,059	\$7,931,101	\$8,248,345	\$8,578,279	\$8,921,410	\$9,278,266	\$9,649,397	\$10,035,373	\$10,436,788	\$10,854,260
3	Phase 1A - Sitework (includes Town Green)		\$3,060,130		\$3,672,156		\$3,855,764	\$4,009,995	\$4,170,395	\$4,337,211	\$4,510,699	\$4,691,127	\$4,878,772	\$5,073,923	\$5,276,880	\$5,487,955	\$5,707,473
4	Phase 2 - Community Center or Council on Aging (1 story)	22,522	\$9,684,460	\$430	\$12,589,798	\$559	\$13,219,288	\$13,748,060	\$14,297,982	\$14,869,901	\$15,464,697	\$16,083,285	\$16,726,616	\$17,395,681	\$18,091,508	\$18,815,168	\$19,567,775
5	Phase 2 - Sitework		\$3,416,494		\$4,099,793		\$4,304,783	\$4,476,974	\$4,656,053	\$4,842,295	\$5,035,987	\$5,237,426	\$5,446,923	\$5,664,800	\$5,891,392	\$6,127,048	\$6,372,130
6	Phase 3 - Police Department Addition (2 story)	12,216	\$6,816,762	\$558	\$8,861,791	\$725	\$9,304,881	\$9,677,076	\$10,064,159	\$10,466,725	\$10,885,394	\$11,320,810	\$11,773,642	\$12,244,588	\$12,734,372	\$13,243,747	\$13,773,497
7	Phase 4 - Town Hall Addition (2 story, stairs, elevator)	11,254	\$5,345,650	\$475	\$6,949,345	\$618	\$7,296,812	\$7,588,684	\$7,892,231	\$8,207,920	\$8,536,237	\$8,877,686	\$9,232,793	\$9,602,105	\$9,986,189	\$10,385,637	\$10,801,062
8	Combined Public Safety Building	40,986	\$20,288,070	\$495	\$26,374,491	\$644	\$27,693,216	\$28,800,945	\$29,952,983	\$31,151,102	\$32,397,146	\$33,693,032	\$35,040,753	\$36,442,383	\$37,900,078	\$39,416,081	\$40,992,724
9	Combined Town Hall/Community Center	33,770	\$15,196,500	\$450	\$19,755,450	\$585	\$20,743,223	\$21,572,952	\$22,435,870	\$23,333,305	\$24,266,637	\$25,237,302	\$26,246,794	\$27,296,666	\$28,388,533	\$29,524,074	\$30,705,037
10	Stand Alone Town Hall (2 story, stairs, elevator)	14,450	\$7,008,250	\$485	\$9,110,725	\$631	\$9,566,261	\$9,948,911	\$10,346,867	\$10,760,742	\$11,191,172	\$11,638,819	\$12,104,372	\$12,588,547	\$13,092,089	\$13,615,773	\$14,160,404
11	Phase 1A - Sitework (Light Scope Option)		\$300,000		\$360,000		\$378,000	\$393,120	\$408,845	\$425,199	\$442,207	\$459,895	\$478,291	\$497,423	\$517,320	\$538,013	\$559,534

* Building costs do not include sitework, these would need to be paired with site 1 and 2

** Phase 1A storm drainage scope to be determined

Middleton Ma Masterplan

Study Cost Estimate

Town of Middleton, Ma



March 3, 2020

Phase 1 - Fire Department

UNIFORMAT CONSTRUCTION COST SUMMARY			
BUILDING SYSTEM		BUILDING	
A10	FOUNDATIONS AND SLABS	\$643,930	\$22.38
B10	SUPERSTRUCTURE	\$1,415,996	\$49.22
B20	EXTERIOR CLOSURE	\$1,875,762	\$65.20
B30	ROOFING	\$809,585	\$28.14
C10	INTERIOR CONSTRUCTION	\$945,466	\$32.86
C20	STAIRCASES	\$104,650	\$3.64
C30	INTERIOR FINISHES	\$601,430	\$20.90
D10	CONVEYING SYSTEMS	\$202,100	\$7.02
D20	PLUMBING	\$395,000	\$13.73
D30	HVAC	\$1,461,784	\$50.81
D40	FIRE PROTECTION	\$218,890	\$7.61
D50	ELECTRICAL	\$952,903	\$33.12
E10	EQUIPMENT	\$35,700	\$1.24
E20	FURNISHINGS	\$36,288	\$1.26
F20	DEMOLITION		
G10	SITEWORK	\$116,150	\$4.04
TOTAL DIRECT COST (Trade Costs)		\$9,815,634	\$341.18
GENERAL CONDITIONS & REQUIREMENTS		12%	\$1,177,876
GL INSURANCE		1.3%	\$127,603
BONDS		2%	\$196,313
OVERHEAD		2.5%	\$245,391
PROFIT		2.5%	\$245,391
DESIGN AND PRICING CONTINGENCY		15%	\$1,771,231
TOTAL CONSTRUCTION COST (2020 Dollars)		\$13,579,439	\$472.00

March 3, 2020

GSF 28,770

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

GROSS FLOOR AREA CALCULATION	
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First Floor	22,770
Second Floor	6,000

TOTAL GROSS FLOOR AREA (GFA)		28,770 GSF
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A10 BUILDING FOUNDATIONS	
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A1010 STANDARD FOUNDATIONS

Building Strip footings

Formwork	1,380	sf	15.00	20,700
Re-bar	4,860	lbs	2.50	12,150
Concrete material	81	cy	160.00	12,960
Placing concrete	81	cy	40.00	3,240

Building Foundation walls

Formwork	9,660	sf	15.00	144,900
Re-bar	12,220	lbs	2.50	30,550
Concrete material	188	cy	160.00	30,080
Placing concrete	188	cy	40.00	7,520
Dampproofing	4,140	sf	6.00	24,840
Insulation to foundation walls; 2" thick	4,140	sf	4.50	18,630
Form shelf	690	lf	8.00	5,520

Building Interior column footings

Formwork	640	sf	15.00	9,600
Re-bar	1,875	lbs	2.50	4,688
Concrete material	25	cy	160.00	4,000
Placing concrete	25	cy	40.00	1,000
Set anchor bolts grout plates	20	ea	135.00	2,700

Building Exterior wall column footings

Formwork	480	sf	15.00	7,200
Re-bar	980	lbs	2.50	2,450
Concrete material	14	cy	160.00	2,240
Placing concrete	14	cy	40.00	560
Set anchor bolts grout plates	20	ea	135.00	2,700

Miscellaneous

Form key in footing	560	lf	10.00	5,600
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Piers/Pilasters

Formwork	960	sf	15.00	14,400
Re-bar	3,600	lbs	2.50	9,000
Concrete material	12	cy	160.00	1,920
Placing concrete	12	cy	40.00	480

SUBTOTAL

379,628

A1030 LOWEST FLOOR CONSTRUCTION

New Slab on grade, 5" thick

Vapor barrier	11,270	sf	0.50	5,635
Mesh reinforcing 15% lap	12,961	sf	1.10	14,257
Concrete - 5" thick	219	cy	160.00	35,040
Placing concrete	219	cy	25.00	5,475
Finishing and curing concrete	11,270	sf	1.00	11,270
Control joints - saw cut	11,270	sf	0.10	1,127
Isolation joints at columns	176	lf	2.50	440

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

<u>New Slab on grade, 8" thick</u>						
Vapor barrier	11,500	sf	0.50	5,750		
Rebar	13,225	sf	2.00	26,450		
Concrete - 8" thick	309	cy	160.00	49,440		
Placing concrete	309	cy	25.00	7,725		
Finishing and curing concrete	11,500	sf	1.00	11,500		
Control joints - saw cut	11,500	sf	0.10	1,150		
Isolation joints at columns	423	lf	2.50	1,058		
<u>Elevator Pit</u>						
Elevator pit walls						
formwork	800	sf	15.00	12,000		
reinforcement	1,200	lbs	3.00	3,600		
concrete material	10	cy	16.00	160		
placing concrete	10	cy	45.00	450		
Slab						
formwork	200	sf	15.00	3,000		
reinforcement	880	lbs	3.00	2,640		
concrete material in slab	11	cy	160.00	1,760		
placing concrete	11	cy	45.00	495		
Bentonite waterstops	1	ls	1,500.00	1,500		
Cementitious waterproofing to elevator pit	1	ls	4,000.00	4,000		
<u>Miscellaneous</u>						
Rigid insulation at underslab to 4'	2,760	sf	4.50	12,420		
Thickened slabs	100	cy	165.00	16,500		
Moisture mitigation mix	549	cy	40.00	21,960		
Equipment pads and curbs	1	ls	7,500.00	7,500		
SUBTOTAL						264,302

TOTAL - FOUNDATIONS	\$643,930
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B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

Floor Structure - Steel:

W beams, tube, columns, bracing and misc framing members	64	tns	5,200.00	332,800
Floor deck - 1 1/2" deck	6,675	sf	4.50	30,038
WWF reinforcement	7,676	sf	1.50	11,514
Concrete Fill to metal deck; 4-1/2" thick; Normal Weight	135	cy	150.00	20,250
Place and finish concrete	6,675	sf	1.25	8,344
<u>Miscellaneous</u>				
Fire stopping floors	2	flrs	5,000.00	10,000
SUBTOTAL				412,946

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

W beams, joist, columns, bracing and misc framing members	171	tns	5,200.00	889,200
Roof deck - 1 1/2" 20 ga deck	22,770	sf	5.00	113,850
SUBTOTAL				1,003,050

TOTAL - SUPERSTRUCTURE	\$1,415,996
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DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

	Total Wall facade area	10,584	sf			
<u>Masonry Veneer</u>						
Interior paint	2,646	sf	1.75	4,631		
6" LGMF	2,646	sf	12.00	31,752		
GWB	2,646	sf	3.00	7,938		
CMU back-up at apparatus areas	2,646	sf	30.00	79,380		
Air/Vapor barrier	5,292	sf	6.75	35,721		
5" mineral fiber insulation	5,292	sf	5.75	30,429		
4" Brick / Precast trim	5,292	sf	48.00	254,016		
<u>Metal Panel</u>						
Interior paint	5,292	sf	1.75	9,261		
GWB	5,292	sf	3.00	15,876		
6" LGMF	5,292	sf	12.00	63,504		
GWB	5,292	sf	3.00	15,876		
Air/Vapor barrier	5,292	sf	6.75	35,721		
5" mineral fiber insulation	5,292	sf	5.75	30,429		
Metal panel system	5,292	sf	65.00	343,980		
<u>Miscellaneous</u>						
Entry canopy ceiling supports, framing and blocking	500	sf	25.00	12,500		
Canopy ceiling and fascia finish	500	sf	45.00	22,500		
Lintels/angles at masonry openings and relieving	10,584	sf	5.00	52,920		
SUBTOTAL						1,046,434

B2020 WINDOWS

	Total Window area	4,536	sf			
<u>Window systems</u>						
Storefront at entry	300	sf	90.00	27,000		
Window systems	4,236	sf	90.00	381,240		
Backer rod & double sealant	4,236	sf	5.00	21,180		
Wood blocking at openings	4,236	sf	3.00	12,708		
SUBTOTAL						442,128

B2030 EXTERIOR DOORS

Exterior door & frame 3x7	4	ea	1,350.00	5,400		
Hardware	4	ea	600.00	2,400		
Install	4	lvs	300.00	1,200		
3x7 Alum door/frame	2	ea	4,200.00	8,400		
BF 14x14	12	ea	30,000.00	360,000		
Louvres	1	ls	5,000.00	5,000		
Backer rod & double sealant	240	lf	12.00	2,880		
Wood blocking at openings	240	lf	8.00	1,920		
SUBTOTAL						387,200

TOTAL - EXTERIOR CLOSURE	\$1,875,762
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B30 ROOFING

B3010 ROOF COVERINGS

TPO Membrane roof	19,770	sf	12.00	237,240		
1/4" dens-deck protection board	19,770	sf	2.50	49,425		
6" Insulation	19,770	sf	9.00	177,930		
Reinforced vapor barrier	19,770	sf	2.85	56,345		
1/2" Sheathing	19,770	sf	3.50	69,195		
Sloped metal roof areas	2	ea	75,000.00	150,000		
<u>Flashing & Trim</u>						
Parapet cap and wall membrane/flashings	700	lf	28.00	19,600		
Misc wall and roof to roof flashings	200	lf	16.00	3,200		
<u>Accessories</u>						
Roof hatch	1	ea	4,800.00	4,800		
Roof to roof ladder	1	ea	1,850.00	1,850		
Walking pads	1	ls	5,000.00	5,000		
Skylights	10	ea	3,500.00	35,000		
SUBTOTAL						809,585

TOTAL - ROOFING	\$809,585
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DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

C10 INTERIOR CONSTRUCTION

C1010 PARTITIONS

Interior CMU partitions	6,592	sf	25.00	164,800	
Interior GWB partitions	19,180	sf	16.00	306,880	
Sealants & caulking at partitions	28,770	sf	0.30	8,631	
Rough blocking	1,500	lf	8.00	12,000	
SUBTOTAL					492,311

C1020 INTERIOR DOORS

Interior single door & frame	54	ea	1,200.00	64,800	
Interior double door & frame	2	ea	2,500.00	5,000	
Interior windows/sidelights	30	lvs	750.00	22,500	
Ratings premium	12	lvs	500.00	6,000	
Hardware	56	lvs	400.00	22,400	
Install	56	lvs	285.00	15,960	
Paint HM doors and frames	56	ea	120.00	6,720	
Glazing	603	sf	40.00	24,120	
Sealants & caulking	56	ea	125.00	7,000	
Allowance for access doors	10	ea	250.00	2,500	
SUBTOTAL					177,000

C1030 SPECIALTIES / MILLWORK

Laundry folding counter and shelf	9	lf	350.00	3,150	
Wood display case	1	ls	1,500.00	1,500	
Mail slots	1	ea	1,500.00	1,500	
5 rows adjustable shelves	12	lf	225.00	2,700	
Janitor closet shelving	5	lf	110.00	550	
Kitchen base, wall cabinets and quartz counter	30	lf	450.00	13,500	
Kitchen full ht Plum cabinets	10	lf	400.00	4,000	
Kitchenette base, wall cabinets and quartz counter	14	lf	450.00	6,300	
Decon metal base and wall cabinet and quartz counter	4	lf	650.00	2,600	
Dorm cubbies	20	ea	650.00	13,000	
Allow for shelving and counters	100	lf	150.00	15,000	
Mirrors at fitness	300	sf	30.00	9,000	
<i>Restrooms and Lockers</i>					
Toilet partitions	3	ea	850.00	2,550	
Soap disp	12	ea	20.00	240	
Mirror	9	ea	265.00	2,385	
Robe hook	10	ea	25.00	250	
Grab bar	8	ea	125.00	1,000	
Towel dispenser/disposal	6	ea	275.00	1,650	
Napkin dispenser/disposal	4	ea	200.00	800	
TP holder	9	ea	60.00	540	
Shower curtain rod	4	ea	220.00	880	
Lockers/Gear storage	90	ea	550.00	49,500	
<i>Misc</i>					
Backer panels in electrical closets	1	ls	2,500.00	2,500	
Window sill/aprons	500	lf	45.00	22,500	
Interior and Exterior Signage	1	ls	15,000.00	15,000	
Fire extinguisher cabinets	10	ea	275.00	2,750	
Misc glass and glazing	1	ls	7,500.00	7,500	
Int bollards	14	ea	500.00	7,000	
Miscellaneous metals throughout building	28,770	sf	2.00	57,540	
Miscellaneous sealants throughout building	28,770	sf	1.00	28,770	
SUBTOTAL					276,155

TOTAL - INTERIOR CONSTRUCTION

\$945,466

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

Stair 1 - monumental	2	ft	15,000.00	30,000
Stair 2 - egress	2	ft	12,500.00	25,000
Mezzanine stair	1	ft	8,500.00	8,500
Mezzanine railings	90	lf	165.00	14,850
Concrete material in pan infill	5	ft	500.00	2,500
SUBTOTAL				80,850

C2020 STAIR FINISHES

Stair 1 - Porcelain treads/landings	2	flts	5,000.00	10,000
Stair 2 - Rubber treads/landings	2	flts	2,500.00	5,000
Paint to staircases	4	flt	2,200.00	8,800
SUBTOTAL				23,800

TOTAL - STAIRCASES

\$104,650

C30 INTERIOR FINISHES

C3010 WALL FINISHES

Paint to GWB	31,554	sf	2.00	63,108
Tile to walls	2,250	sf	24.00	54,000
FRP wall panels	800	sf	10.00	8,000
SS wall panels at decon sink	50	sf	50.00	2,500
SUBTOTAL				127,608

C3020 FLOOR FINISHES

Linoleum	3,755	sf	10.00	37,550
Athletic flooring	730	sf	15.00	10,950
Walk-off mat/frame	100	sf	35.00	3,500
Carpet	4,850	sf	5.00	24,250
Porcelain and base	1,550	sf	26.00	40,300
Ceramic Tile and base	600	sf	24.00	14,400
Sealed concrete	2,885	sf	2.00	5,770
Resinous floor and base	11,800	sf	15.00	177,000
Rubber base	2,850	lf	4.00	11,400
SUBTOTAL				325,120

C3030 CEILING FINISHES

ACT ceilings	12,947	sf	5.50	71,209
GWB ceiling	1,500	sf	12.00	18,000
MR GWB ceiling	600	sf	13.00	7,800
1 hr rated GWB ceilings	600	sf	15.00	9,000
L GWB soffits	20	lf	75.00	1,500
Drop gwb soffits	60	lf	65.00	3,900
Paint exposed structure	12,803	sf	2.50	32,008
Paint to GWB ceilings and soffits	3,020	sf	1.75	5,285
SUBTOTAL				148,702

TOTAL - INTERIOR FINISHES

601,430

D10 CONVEYING SYSTEMS

D1010 ELEVATOR

Passenger elevator	2	stp	95,000.00	190,000
Pit ladders	1	ea	1,500.00	1,500
Rail supports and hoist beam	1	ls	10,000.00	10,000
Sill angles	24	lf	25.00	600
SUBTOTAL				202,100

TOTAL - CONVEYING SYSTEMS

\$202,100

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

D20 PLUMBING

D20 PLUMBING, GENERALLY

Equipment

Gas, Oil, & Sand Interceptor	1	ea	\$15,000.00	\$15,000
Water Meter	1	ea	\$2,000.00	\$2,000
Domestic Water Heater	1	ea	\$9,500.00	\$9,500
Main Backflow Preventor	1	ea	\$3,500.00	\$3,500
Zone Backflow Preventor	3	ea	\$800.00	\$2,400
Thermostatic Mixing Valve	1	ea	\$2,000.00	\$2,000
Circulation Pump	1	ea	\$1,600.00	\$1,600
Fixture and Equipment Hook Ups	37	ea	\$500.00	\$18,500

Plumbing Fixtures including all supply, drain and venting

Water Closets	9	ea	4,800.00	\$43,200
Urinal	4	ea	4,500.00	\$18,000
Lavatories - wall hung	12	ea	4,000.00	\$48,000
Janitors Sinks	2	ea	3,200.00	\$6,400
Kitchen Sinks	2	ea	3,000.00	\$6,000
Shower	3	ea	5,500.00	\$16,500
Decon SS floor sink	1	ea	6,500.00	\$6,500
Decon Deluge Shower	1	ea	6,800.00	\$6,800
Emergency Eye Wash/Shower	1	ea	5,000.00	\$5,000
Drinking Fountains	2	ea	5,500.00	\$11,000
Roof Drains	8	ea	\$3,000.00	\$24,000
Floor Drains	10	ea	\$3,000.00	\$30,000
Hose Bibbs	8	ea	\$1,200.00	\$9,600

Misc

Laundry room connections	1	ls	5,000.00	5,000
Decon room connections	1	ls	5,000.00	5,000
SCBA room connections	1	ls	5,000.00	5,000
Compressed Air and misc apparatus utilities	1	ls	45,000.00	45,000
Gas	600	lf	70.00	42,000
Coordination	1	ls	7,500.00	7,500

SUBTOTAL

395,000

TOTAL - PLUMBING

\$395,000

D30 HVAC

D30 HVAC, GENERALLY

Systems

Boilers, pumps, VFDs and distribution	22,300	sf	\$5.00	111,500
HVAC system	22,300	sf	\$40.00	892,000
Central exhaust and make-up air	22,300	sf	\$5.00	111,500
Split system AC units	1	ea	\$7,500.00	7,500
Decon room exhaust	1	ls	\$15,000.00	15,000
Vehicle exhaust	12	ea	\$6,500.00	78,000
Kitchen exhaust	1	ea	\$7,500.00	7,500

Controls

ATC	28,770	sf	\$5.00	143,850
Alarming, Scheduling, Trending & Logging	28,770	sf	\$1.00	28,770

Commissioning

Start up	28,770	sf	\$0.75	21,578
Balancing	28,770	sf	\$0.65	18,701
3rd Party Assist	28,770	sf	\$0.50	14,385

Miscellaneous

Coordination	1	ls	\$10,000.00	10,000
Crane and Rigging	1	ls	\$1,500.00	1,500
SUBTOTAL				1,461,784

TOTAL - HVAC

\$1,461,784

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Sprinkler system piping and heads	28,770	sf	7.00	201,390
Service Equipment	1	ls	17,500.00	17,500
Fire pump				NIC
SUBTOTAL				218,890

TOTAL - FIRE PROTECTION

\$218,890

D50 ELECTRICAL

D5010 SERVICE & DISTRIBUTION

<i>Power Circuitry & Equipment</i>				
1200 amp service, main switchboard and panels	28,770	sf	6.50	187,005
Feeders	28,770	sf	2.50	71,925
SUBTOTAL				258,930

D5020 LIGHTING & POWER

LED lighting and branch circuitry	28,770	sf	9.00	258,930
Power and branch circuitry	28,770	sf	4.00	115,080
SUBTOTAL				374,010

D5030 COMMUNICATION & SECURITY SYSTEMS

<i>Telecommunications System</i>				
Full telecommunications	28,770	sf	2.75	79,118
PA system	28,770	sf	1.50	43,155
<i>Fire Alarm</i>				
Fire Alarm system	28,770	sf	4.00	115,080
<i>Special Systems</i>				
Security roughin allowance	28,770	sf	1.00	28,770
SUBTOTAL				266,123

D5040 OTHER ELECTRICAL SYSTEMS

<i>Lightning protection</i>				
UL Master label lightning protection	28,770	sf	0.75	21,578
<i>Miscellaneous</i>				
Temp services	28,770	sf	0.60	17,262
Seismic restraints	1	ls	7,500.00	7,500
Coring & firestopping	1	ls	7,500.00	7,500
SUBTOTAL				53,840

TOTAL - ELECTRICAL

\$952,903

E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

<i>Kitchenette Appliances</i>				
Refrigerator	1	ea	1,800.00	1,800
Microwave	1	ea	600.00	600
<i>Dayroom kitchen Appliances</i>				
Refrigerator	2	ea	1,800.00	3,600
Dishwasher	1	ea	1,000.00	1,000
Microwave	2	ea	600.00	1,200
Gas range	1	ea	4,500.00	4,500
Hood	1	ea	3,000.00	3,000
<i>Laundry</i>				
Commercial washer	2	ea	5,000.00	10,000
Commercial dryer	2	ea	5,000.00	10,000
SUBTOTAL				35,700

TOTAL - EQUIPMENT

\$35,700

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 1 - Fire Department

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

Window Treatment

Roller shades	3,536	sf	8.00	28,288	
Training - elec room darkening shades	200	sf	15.00	3,000	
Bunk rooms - room darkening shades	500	sf	10.00	5,000	
SUBTOTAL					36,288

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by owner	NIC
SUBTOTAL	

TOTAL - FURNISHINGS

\$36,288

G10 SITEWORK

G1010 SITEWORK

<u>Structural excavation and backfill</u>				
Trench excavate and backfill foundation walls	1,227	cy	45.00	55,215
Excavate and backfill column footings	40	ea	350.00	14,000
Excavate and backfill elevator pit	300	cy	30.00	9,000
Import underslab base for slabs	843	cy	45.00	37,935
SUBTOTAL				116,150

TOTAL - FURNISHINGS

\$116,150

Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma



March 3, 2020

Phase 1 - Sitework

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G10 SITEWORK

Earthwork

Site Demolition

Building 1 - clubhouse	7,000	sf	10.00	70,000
Hazamat	7,000	sf	4.00	28,000
Remove paving and walks	7,000	sf	1.00	7,000

Site Prep

Compost filter / Silt fence	2,800	lf	15.00	42,000
Tracking pads	2	ea	6,500.00	13,000
Tree removals, clear and grub	5.9	acre	10,000.00	59,000
Topsoil strip and stock	6,500	cy	8.00	52,000

Earthwork

Site Cuts and Fills	35,000	cy	10.00	350,000
15% Import/Export - TBD	5,250	cy	40.00	210,000
Shape & Compact Subgrade for new grades and basins	35	dy	3,000.00	105,000

Paving and walks prep

Bitum. Paving 12" Dense Grade	3,704	cy	35.00	129,640
Pedestrian Paving 12" Dense Grade	889	cy	35.00	31,115

Paving & Curbing

Paving and curbing

Asphalt Parking Lots	80,000	sf	3.89	311,200
Asphalt Roadways	20,000	sf	3.89	77,800
Granite curbs	6,500	lf	45.00	292,500
4' Concrete sidewalks	7,000	sf	8.00	56,000
12" Concrete Apron	12,000	sf	12.00	144,000
Decorative pavers	5,000	sf	15.00	75,000
SUBTOTAL				2,053,255

Utilities

Drainage

12" HDPE Drain Line	1,000	lf	65.00	65,000
24" HDPE Drain Line	1,000	lf	75.00	75,000
Manholes / OCS	24	ea	7,500.00	180,000
Catch basins	24	ea	5,000.00	120,000
Water Quality Units	4	sf	15,000.00	60,000
Underground Infiltration (MC-3500)	8,000	sf	22.00	176,000
Bioretention Area	4,500	sf	15.00	67,500
Headwalls	2	ea	4,000.00	8,000

Phase 1 - Sitework

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Water

8" CLDI Water Line	1,500	lf	95.00	142,500
Hydrants	2	ea	5,000.00	10,000
Street connections	1	ls	5,000.00	5,000

Gas

4" Plastic Gas Line	450	lf	75.00	33,750
Street connections	1	ls	5,000.00	5,000

Sewer

Septic Field - 450 sf trenched	1,450	sf	40.00	58,000
6" SDR-35 PVC Sewer Line	800	lf	80.00	64,000
Manholes	4	ea	5,500.00	22,000

Electrical

Primary and secondary services	1	ls	100,000.00	100,000
Roadway and parking fixtures and circuitry	17	ea	6,500.00	110,500
Walkway fixtures and circuitry	8	ea	4,000.00	32,000
E&B Elec/communication duct banks	800	lf	150.00	120,000
Encase duct banks in concrete	237	cy	400.00	94,800

SUBTOTAL 1,549,050

Site Improvements

Site Improvements

Flagpole	1	ea	4,000.00	4,000
Benches	2	ea	2,800.00	5,600
Trash receptacles	1	ea	2,500.00	2,500
Bike racks	6	ea	400.00	2,400
Signs	20	ea	200.00	4,000
Parking space lines/symbols	1	ls	15,000.00	15,000
Bollards	30	ea	575.00	17,250
Dumpster pad and enclosure	2	ea	5,000.00	10,000
Stone retaining walls at rt 114	390	lf	300.00	117,000
Misc site improvements	1	ls	50,000.00	50,000

SUBTOTAL 227,750

Landscaping

Landscaping

Remove exist trees/shrubs	1	ls	12,000.00	12,000
Pruning exist trees to remain	1	ls	5,000.00	5,000
Screen and respread loam	2,500	cy	5.00	12,500
Trees	13	ea	1,100.00	14,300
Shrubs	40	ea	210.00	8,400
Hydroseeded Lawn	60,000	sf	0.35	21,000
Mulch	500	cy	60.00	30,000

SUBTOTAL 103,200

TOTAL - SITWORK **3,933,255**

GENERAL CONDITIONS & REQUIREMENTS	15%	\$589,988
GL INSURANCE	1.3%	\$51,132
BONDS	2%	\$78,665
OVERHEAD	2.5%	\$98,331
PROFIT	2.5%	\$98,331
DESIGN AND PRICING CONTINGENCY	20%	\$969,940

TOTAL CONSTRUCTION COST (2020 Dollars) **\$5,819,642**

Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma

March 3, 2020

**Phase 1A - Sitework (includes Town Green)**

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G10 SITEWORK**Earthwork****Site Prep**

Compost filter / Silt fence	2,200	lf	15.00	33,000
Tracking pads	1	ea	6,500.00	6,500
Tree removals, clear and grub	6.2	acre	10,000.00	62,000
Topsoil strip and stock	6,500	cy	8.00	52,000
Remove golf course elements	1	ls	15,000.00	15,000

Earthwork

Site Cuts and Fills	25,000	cy	10.00	250,000
Shape & Compact Subgrade for new grades and basins	40	dy	3,000.00	120,000

Paving and walks prep

Pedestrian Paving 12" Dense Grade	119	cy	35.00	4,165
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Paving & Curbing**Paving and curbing**

Granite curbs	390	lf	45.00	17,550
Concrete sidewalks at Rt114	3,200	sf	8.00	25,600
SUBTOTAL				585,815

Utilities**Drainage - Town Green**

Allowance for drainage systems	1	ls	750,000.00	750,000
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Electrical - Town Green

Primary and secondary services	1	ls	25,000.00	25,000
Walkway fixtures and circuitry	15	ea	4,000.00	60,000
SUBTOTAL				835,000

Site Improvements**Site Improvements**

Stone retaining walls at rt 114	390	lf	300.00	117,000
Misc site improvements	1	ls	10,000.00	10,000
Site Improvements - Town Green				
Benches	1	ea	2,800.00	2,800
Tables/4 seats	4	ea	4,500.00	18,000
Trash receptacles	2	ea	2,500.00	5,000
Bike racks	15	ea	400.00	6,000
BBQ grills	12	ea	450.00	5,400
Water fountain	4	ea	4,500.00	18,000
Bocce court	1	ea	5,000.00	5,000
Tot Lot	1	ls	200,000.00	200,000
SUBTOTAL				387,200

Landscaping**Landscaping - Town Green**

Remove exist trees/shrubs	1	ls	5,000.00	5,000
Pruning exist trees to remain	1	ls	2,500.00	2,500
Screen and respread loam	7,500	cy	5.00	37,500
Trees	50	ea	1,100.00	55,000
Shrubs	120	ea	210.00	25,200
Hydroseeded Lawn	300,000	sf	0.35	105,000
Mulch	500	cy	60.00	30,000
SUBTOTAL				260,200

TOTAL - SITEWORK	2,068,215
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GENERAL CONDITIONS & REQUIREMENTS	15%	\$310,232
GL INSURANCE	1.3%	\$26,887
BONDS	2%	\$41,364
OVERHEAD	2.5%	\$51,705
PROFIT	2.5%	\$51,705
DESIGN AND PRICING CONTINGENCY	20%	\$510,022

TOTAL CONSTRUCTION COST (2020 Dollars)	\$3,060,130
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Middleton Ma Masterplan

Study Cost Estimate

Town of Middleton, Ma



March 3, 2020

Phase 2 - Sitework

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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G10 SITWORK**Earthwork****Site Demolition**

Building 2	1,700	sf	10.00	17,000
Hazamat	1,700	sf	4.00	6,800
Remove paving and walks	7,900	sf	1.00	7,900

Site Prep

Compost filter / Silt fence	2,700	lf	15.00	40,500
Tracking pads	1	ea	6,500.00	6,500
Tree removals, clear and grub	3.2	acre	10,000.00	32,000
Topsoil strip and stock	3,600	cy	8.00	28,800

Earthwork

Site Cuts and Fills	20,000	cy	10.00	200,000
15% Import/Export - TBD	3,000	cy	40.00	120,000
Shape & Compact Subgrade for new grades and basins	28	dy	3,000.00	84,000

Paving and walks prep

Bitum. Paving 12" Dense Grade	1,296	cy	35.00	45,360
Pedestrian Paving 12" Dense Grade	463	cy	35.00	16,205

Paving & Curbing**Paving and curbing**

Asphalt Parking Lots	22,000	sf	3.89	85,580
Asphalt Roadways	13,000	sf	3.89	50,570
Granite curbs	3,400	lf	45.00	153,000
Concrete sidewalks	7,500	sf	8.00	60,000
Decorative pavers	5,000	sf	15.00	75,000
SUBTOTAL				1,029,215

Utilities**Drainage**

12" HDPE Drain Line	200	lf	65.00	13,000
24" HDPE Drain Line	200	lf	75.00	15,000
Manholes / OCS	5	ea	7,500.00	37,500
Catch basins	5	ea	5,000.00	25,000
Water Quality Units	1	sf	15,000.00	15,000
Underground Infiltration (MC-3500)	3,500	sf	22.00	77,000
Bioretention Area	3,000	sf	15.00	45,000
Headwalls	1	ea	4,000.00	4,000

Water

8" CLDI Water Line	600	lf	100.00	60,000
Hydrants - 1	1	ea	5,000.00	5,000
Street connections	1	ls	5,000.00	5,000

Gas

4" Plastic Gas Line	450	lf	75.00	33,750
Street connections	1	ls	5,000.00	5,000

Phase 2 - Sitework

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
<u>Sewer</u>						
Septic Field - 500 sf trenched	1,500	sf	40.00	60,000		
6" SDR-35 PVC Sewer Line	350	lf	80.00	28,000		
Manholes	3	ea	5,500.00	16,500		
<u>Electrical</u>						
Primary and secondary services	1	ls	150,000.00	150,000		
Roadway and parking fixtures and circuitry	13	ea	6,500.00	84,500		
Walkway fixtures and circuitry	10	ea	4,000.00	40,000		
E&B Elec/communication duct banks	1,000	lf	150.00	150,000		
Encase duct banks in concrete	296	cy	400.00	118,400		
SUBTOTAL						987,650
Site Improvements						
<u>Site Improvements</u>						
Flagpole	1	ea	4,000.00	4,000		
Benches	4	ea	2,800.00	11,200		
Trash receptacles	2	ea	2,500.00	5,000		
Bike racks	15	ea	400.00	6,000		
Signs	12	ea	200.00	2,400		
Parking space lines/symbols	1	ls	7,500.00	7,500		
Bollards	24	ea	575.00	13,800		
Dumpster pad and enclosure	2	ea	5,000.00	10,000		
Stone retaining walls at rt 114	390	lf	300.00	117,000		
Misc site improvements	1	ls	30,000.00	30,000		
SUBTOTAL						206,900
Landscaping						
<u>Landscaping</u>						
Remove exist trees/shrubs	1	ls	12,000.00	12,000		
Pruning exist trees to remain	1	ls	4,000.00	4,000		
Screen and respread loam	1,500	cy	5.00	7,500		
Trees	15	ea	1,100.00	16,500		
Shrubs	75	ea	210.00	15,750		
Hydroseeded Lawn	33,000	sf	0.35	11,550		
Mulch	300	cy	60.00	18,000		
SUBTOTAL						85,300
TOTAL - SITWORK						2,309,065
GENERAL CONDITIONS & REQUIREMENTS						15% \$346,360
GL INSURANCE						1.3% \$30,018
BONDS						2% \$46,181
OVERHEAD						2.5% \$57,727
PROFIT						2.5% \$57,727
DESIGN AND PRICING CONTINGENCY						20% \$569,416
TOTAL CONSTRUCTION COST (2020 Dollars)						\$3,416,494

Middleton Ma Masterplan

Study Cost Estimate

Town of Middleton, Ma

March 3, 2010



Phase 3 - Police Department Addition

UNIFORMAT CONSTRUCTION COST SUMMARY		
BUILDING SYSTEM		12,216 sf BUILDING
A10 FOUNDATIONS AND SLABS	\$387,811	\$31.75
B10 SUPERSTRUCTURE	\$631,224	\$51.67
B20 EXTERIOR CLOSURE	\$1,041,857	\$85.29
B30 ROOFING	\$299,738	\$24.54
C10 INTERIOR CONSTRUCTION	\$756,132	\$61.90
C20 STAIRCASES	\$35,400	\$2.90
C30 INTERIOR FINISHES	\$273,438	\$22.38
D10 CONVEYING SYSTEMS	\$0	\$0.00
D20 PLUMBING	\$233,600	\$19.12
D30 HVAC	\$648,078	\$53.05
D40 FIRE PROTECTION	\$85,512	\$7.00
D50 ELECTRICAL	\$431,566	\$35.33
E10 EQUIPMENT	\$2,400	\$0.20
E20 FURNISHINGS	\$24,248	\$1.98
F20 DEMOLITION	\$15,000	\$1.23
G10 SITWORK	\$61,360	\$5.02
TOTAL DIRECT COST (Trade Costs)	\$4,927,364	\$403.35
GENERAL CONDITIONS & REQUIREMENTS	12%	\$591,284
GL INSURANCE	1.3%	\$64,056
BONDS	2%	\$98,547
OVERHEAD	2.5%	\$123,184
PROFIT	2.5%	\$123,184
DESIGN AND PRICING CONTINGENCY	15%	\$889,143
TOTAL CONSTRUCTION COST (2020 Dollars)	\$6,816,762	\$558.02

March 3, 2020

GSF 12,216

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

GROSS FLOOR AREA CALCULATION

First Floor	8,116
Second Floor	4,100
TOTAL GROSS FLOOR AREA (GFA)	

A10 BUILDING FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Building Strip footings

Formwork	1,014	sf	15.00	15,210
Re-bar	3,540	lbs	2.50	8,850
Concrete material	59	cy	160.00	9,440
Placing concrete	59	cy	40.00	2,360

Building Foundation walls

Formwork	7,098	sf	15.00	106,470
Re-bar	8,970	lbs	2.50	22,425
Concrete material	138	cy	160.00	22,080
Placing concrete	138	cy	40.00	5,520
Dampproofing	3,042	sf	6.00	18,252
Insulation to foundation walls; 2" thick	3,042	sf	4.50	13,689
Form shelf	507	lf	8.00	4,056

Building Interior column footings

Formwork	480	sf	15.00	7,200
Re-bar	1,425	lbs	2.50	3,563
Concrete material	19	cy	160.00	3,040
Placing concrete	19	cy	40.00	760
Set anchor bolts grout plates	15	ea	135.00	2,025

Building Exterior wall column footings

Formwork	360	sf	15.00	5,400
Re-bar	770	lbs	2.50	1,925
Concrete material	11	cy	160.00	1,760
Placing concrete	11	cy	40.00	440
Set anchor bolts grout plates	15	ea	135.00	2,025

Miscellaneous

Form key in footing	560	lf	10.00	5,600
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Piers/Pilasters

Formwork	720	sf	15.00	10,800
Re-bar	2,700	lbs	2.50	6,750
Concrete material	9	cy	160.00	1,440
Placing concrete	9	cy	40.00	360

SUBTOTAL

281,440

A1030 LOWEST FLOOR CONSTRUCTION

New Slab on grade, 5" thick

Vapor barrier	6,116	sf	0.50	3,058
Mesh reinforcing 15% lap	7,033	sf	1.10	7,736
Concrete - 5" thick	119	cy	160.00	19,040
Placing concrete	119	cy	25.00	2,975
Finishing and curing concrete	6,116	sf	1.00	6,116
Control joints - saw cut	6,116	sf	0.10	612
Isolation joints at columns	176	lf	2.50	440

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

<u>New Slab on grade, 8" thick</u>						
Vapor barrier	2,000	sf	0.50	1,000		
Rebar	2,300	sf	2.00	4,600		
Concrete - 8" thick	54	cy	160.00	8,640		
Placing concrete	54	cy	25.00	1,350		
Finishing and curing concrete	2,000	sf	1.00	2,000		
Control joints - saw cut	2,000	sf	0.10	200		
Isolation joints at columns	423	lf	2.50	1,058		
<u>Miscellaneous</u>						
Rigid insulation at underslab to 4'	2,028	sf	4.50	9,126		
Thickened slabs	100	cy	165.00	16,500		
Detention beds	5	ea	1,500.00	7,500		
Moisture mitigation mix	173	cy	40.00	6,920		
Equipment pads and curbs	1	ls	7,500.00	7,500		
SUBTOTAL						106,371

TOTAL - FOUNDATIONS

\$387,811

B10 SUPERSTRUCTURE

B1010 FLOOR CONSTRUCTION

Floor Structure - Steel:

W beams, tube, columns, bracing and misc framing members	41	tns	5,200.00	213,200
Floor deck - 1 1/2" deck	4,775	sf	4.50	21,488
WWF reinforcement	5,491	sf	1.50	8,237
Concrete Fill to metal deck; 4-1/2" thick; Normal Weight	97	cy	150.00	14,550
Place and finish concrete	4,775	sf	1.25	5,969
<u>Miscellaneous</u>				
Fire stopping floors	2	flrs	5,000.00	10,000
SUBTOTAL				273,444

B1020 ROOF CONSTRUCTION

Roof Structure - Steel:

W beams, joist, columns, bracing and misc framing members	61	tns	5,200.00	317,200
Roof deck - 1 1/2" 20 ga deck	8,116	sf	5.00	40,580
SUBTOTAL				357,780

TOTAL - SUPERSTRUCTURE

\$631,224

B20 EXTERIOR CLOSURE

B2010 EXTERIOR WALLS

	Total Wall facade area	7,071	sf		
<u>Masonry Veneer</u>					
Interior paint	2,283	sf	1.75	3,995	
6" LGMF	2,283	sf	12.00	27,396	
GWB	2,283	sf	3.00	6,849	
CMU back-up at detention/sally port/garage areas	2,590	sf	30.00	77,700	
Air/Vapor barrier	4,873	sf	6.75	32,893	
5" mineral fiber insulation	4,873	sf	5.75	28,020	
4" Brick / Precast trim	4,873	sf	48.00	233,904	

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

Metal Panel

Interior paint	2,198	sf	1.75	3,847	
GWB	2,198	sf	3.00	6,594	
6" LGMF	2,198	sf	12.00	26,376	
GWB	2,198	sf	3.00	6,594	
Air/Vapor barrier	2,198	sf	6.75	14,837	
5" mineral fiber insulation	2,198	sf	5.75	12,639	
Metal panel system	2,198	sf	65.00	142,870	
<u>Miscellaneous</u>					
Entry canopy ceiling supports, framing and blocking	500	sf	25.00	12,500	
Canopy ceiling and fascia finish	500	sf	45.00	22,500	
Lintels/angles at masonry openings and relieving	7,071	sf	5.00	35,355	
SUBTOTAL					694,869

B2020 WINDOWS

	Total Window area	3,031	sf		
<u>Window systems</u>					
Window systems	3,031	sf	90.00	272,790	
Backer rod & double sealant	3,031	sf	5.00	15,155	
Wood blocking at openings	3,031	sf	3.00	9,093	
SUBTOTAL					297,038

B2030 EXTERIOR DOORS

Exterior door & frame 3x7	1	ea	1,350.00	1,350
Hardware	1	ea	600.00	600
Install	1	lvs	300.00	300
OH 12x12	4	ea	10,800.00	43,200
Louvers	1	ls	2,500.00	2,500
Backer rod & double sealant	100	lf	12.00	1,200
Wood blocking at openings	100	lf	8.00	800
SUBTOTAL				49,950

TOTAL - EXTERIOR CLOSURE

\$1,041,857

B30 ROOFING

B3010 ROOF COVERINGS

TPO Membrane roof	6,616	sf	12.00	79,392
1/4" dens-deck protection board	6,616	sf	2.50	16,540
6" Insulation	6,616	sf	9.00	59,544
Reinforced vapor barrier	6,616	sf	2.85	18,856
1/2" Sheathing	6,616	sf	3.50	23,156
Sloped metal roof areas	1	ea	75,000.00	75,000
<u>Flashing & Trim</u>				
Parapet cap and wall membrane/flashings	500	lf	28.00	14,000
Misc wall and roof to roof flashings	100	lf	16.00	1,600
<u>Accessories</u>				
Roof hatch	1	ea	4,800.00	4,800
Roof to roof ladder	1	ea	1,850.00	1,850
Walking pads	1	ls	5,000.00	5,000
SUBTOTAL				299,738

TOTAL - ROOFING

\$299,738

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Phase 3 - Police Department Addition						
C10 INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
Interior CMU partitions	5,096	sf	25.00	127,400		
Interior GWB partitions	11,984	sf	16.00	191,744		
Sealants & caulking at partitions	12,216	sf	0.30	3,665		
Rough blocking	1,000	lf	8.00	8,000		
SUBTOTAL						330,809
C1020 INTERIOR DOORS						
Interior single door & frame	51	ea	1,200.00	61,200		
Detention door units	6	ea	15,000.00	90,000		
Detention two way window	1	ea	2,500.00	2,500		
Interior windows/sidelights	15	lvs	750.00	11,250		
Ratings premium	12	lvs	500.00	6,000		
Hardware	51	lvs	400.00	20,400		
Install	51	lvs	285.00	14,535		
Paint HM doors and frames	51	ea	120.00	6,120		
Glazing	200	sf	40.00	8,000		
Sealants & caulking	51	ea	125.00	6,375		
Allowance for access doors	10	ea	250.00	2,500		
SUBTOTAL						228,880
C1030 SPECIALTIES / MILLWORK						
Evidence cabinets and counters	40	lf	600.00	24,000		
Detention cabinets and counters	40	lf	600.00	24,000		
Kitchenette base, wall cabinets and quartz counter	8	lf	450.00	3,600		
Evidence passthroughs	1	ls	5,000.00	5,000		
Kitchen full ht Plam cabinets	10	lf	400.00	4,000		
Kitchenette base, wall cabinets and quartz counter	14	lf	450.00	6,300		
Allow for shelving and counters	100	lf	150.00	15,000		
<i>Restrooms and Lockers</i>						
Toilet partitions	3	ea	850.00	2,550		
Soap disp	5	ea	20.00	100		
Mirror	5	ea	265.00	1,325		
Robe hook	8	ea	25.00	200		
Grab bar	8	ea	125.00	1,000		
Towel dispenser/disposal	4	ea	275.00	1,100		
Napkin dispenser/disposal	4	ea	200.00	800		
TP holder	9	ea	60.00	540		
Shower curtain rod	4	ea	220.00	880		
Lockers/benches	45	ea	650.00	29,250		
<i>Misc</i>						
Backer panels in electrical closets	1	ls	2,500.00	2,500		
Window sill/aprons	300	lf	45.00	13,500		
Interior and Exterior Signage	1	ls	10,000.00	10,000		
Fire extinguisher cabinets	6	ea	275.00	1,650		
Misc glass and glazing	1	ls	7,500.00	7,500		
Int bollards	10	ea	500.00	5,000		
Miscellaneous metals throughout building	12,216	sf	2.00	24,432		
Miscellaneous sealants throughout building	12,216	sf	1.00	12,216		
SUBTOTAL						196,443
TOTAL - INTERIOR CONSTRUCTION						\$756,132

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

C20 STAIRCASES

C2010 STAIR CONSTRUCTION

Stair - egress	2	flt	12,500.00	25,000
Concrete material in pan infill	2	flt	500.00	1,000
SUBTOTAL				26,000

C2020 STAIR FINISHES

Stair - Rubber treads/landings	2	flts	2,500.00	5,000
Paint to staircases	2	flt	2,200.00	4,400
SUBTOTAL				9,400

TOTAL - STAIRCASES	\$35,400
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C30 INTERIOR FINISHES

C3010 WALL FINISHES

Paint to GWB	12,717	sf	2.00	25,434
Tile to walls	1,250	sf	24.00	30,000
SUBTOTAL				55,434

C3020 FLOOR FINISHES

Linoleum	3,600	sf	10.00	36,000
Carpet	3,500	sf	5.00	17,500
Ceramic Tile and base	160	sf	24.00	3,840
Sealed concrete	1,756	sf	2.00	3,512
Resinous floor and base	3,200	sf	15.00	48,000
Rubber base	1,250	lf	4.00	5,000
SUBTOTAL				113,852

C3030 CEILING FINISHES

ACT ceilings	5,497	sf	5.50	30,234
GWB ceiling	1,000	sf	12.00	12,000
MR GWB ceiling	400	sf	13.00	5,200
1 hr rated GWB ceilings	400	sf	15.00	6,000
Steel plate ceilings at holding areas	825	sf	38.00	31,350
L GWB soffits	20	lf	75.00	1,500
Drop gwb soffits	40	lf	65.00	2,600
Paint exposed structure	4,679	sf	2.50	11,698
Paint to GWB ceilings and soffits	2,040	sf	1.75	3,570
SUBTOTAL				104,152

TOTAL - INTERIOR FINISHES	273,438
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DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

D20 PLUMBING

D20 PLUMBING, GENERALLY

Equipment

Water Meter

In phase 1

Domestic Water Heater

In phase 1

Main Backflow Preventor

In phase 1

Zone Backflow Preventor

2 ea

\$800.00

\$1,600

Thermostatic Mixing Valve

1 ea

\$2,000.00

\$2,000

Circulation Pump

1 ea

\$1,600.00

\$1,600

Fixture and Equipment Hook Ups

25 ea

\$500.00

\$12,500

Plumbing Fixtures including all supply, drain and venting

Water Closets

4 ea

4,800.00

\$19,200

Urinal

2 ea

4,500.00

\$9,000

Lavatories

5 ea

4,000.00

\$20,000

Janitors Sinks

1 ea

3,200.00

\$3,200

Kitchen Sinks

1 ea

3,000.00

\$3,000

Shower

3 ea

5,500.00

\$16,500

Detention sink/WC combo

5 ea

7,500.00

\$37,500

Detention Shower

1 ea

6,800.00

\$6,800

Emergency Eye Wash/Shower

1 ea

5,000.00

\$5,000

Drinking Fountains

2 ea

5,500.00

\$11,000

Roof Drains

6 ea

\$3,000.00

\$18,000

Floor Drains

8 ea

\$3,000.00

\$24,000

Hose Bibbs

6 ea

\$1,200.00

\$7,200

Misc

Gas

400 lf

70.00

28,000

Coordination

1 ls

7,500.00

7,500

SUBTOTAL

233,600

TOTAL - PLUMBING

\$233,600

D30 HVAC

D30 HVAC, GENERALLY

Systems

Boilers, pumps, VFDs and misc equipment

In phase 1

HVAC system

12,216 sf

\$38.00

464,208

Central exhaust and make-up air

12,216 sf

\$4.00

48,864

Vehicle exhaust

3 ea

\$6,500.00

19,500

Kitchen exhaust

1 ea

\$7,500.00

7,500

Controls

ATC

12,216 sf

\$5.00

61,080

Alarming, Scheduling, Trending & Logging

12,216 sf

\$1.00

12,216

Commissioning

Start up

12,216 sf

\$0.75

9,162

Balancing

12,216 sf

\$0.65

7,940

3rd Party Assist

12,216 sf

\$0.50

6,108

Miscellaneous

Coordination

1 ls

\$10,000.00

10,000

Crane and Rigging

1 ls

\$1,500.00

1,500

SUBTOTAL

648,078

TOTAL - HVAC

\$648,078

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

D40 FIRE PROTECTION

D40 FIRE PROTECTION, GENERALLY

Sprinkler system piping and heads	12,216	sf	7.00	85,512
Service Equipment				In phase 1
Fire pump				NIC
SUBTOTAL				85,512

TOTAL - FIRE PROTECTION	\$85,512
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D50 ELECTRICAL

D5010 SERVICE & DISTRIBUTION

<i>Power Circuitry & Equipment</i>				
Subpanels	12,216	sf	5.00	61,080
Feeders	12,216	sf	2.00	24,432
SUBTOTAL				85,512

D5020 LIGHTING & POWER

LED lighting and branch circuitry	12,216	sf	9.00	109,944
Power and branch circuitry	12,216	sf	4.00	48,864
SUBTOTAL				158,808

D5030 COMMUNICATION & SECURITY SYSTEMS

<i>Telecommunications System</i>				
Full telecommunications	12,216	sf	2.75	33,594
PA and special system	12,216	sf	5.00	61,080
<i>Fire Alarm</i>				
Fire Alarm system	12,216	sf	4.00	48,864
<i>Special Systems</i>				
Security roughin allowance	12,216	sf	1.00	12,216
SUBTOTAL				155,754

D5040 OTHER ELECTRICAL SYSTEMS

<i>Lightning protection</i>				
UL Master label lightning protection	12,216	sf	0.75	9,162
<i>Miscellaneous</i>				
Temp services	12,216	sf	0.60	7,330
Seismic restraints	1	ls	7,500.00	7,500
Coring & firestopping	1	ls	7,500.00	7,500
SUBTOTAL				31,492

TOTAL - ELECTRICAL	\$431,566
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E10 EQUIPMENT

E10 EQUIPMENT, GENERALLY

<i>Kitchenette Appliances</i>				
Refrigerator	1	ea	1,800.00	1,800
Microwave	1	ea	600.00	600
SUBTOTAL				2,400

TOTAL - EQUIPMENT	\$2,400
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DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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Phase 3 - Police Department Addition

E20 FURNISHINGS

E2010 FIXED FURNISHINGS

Window Treatment

Roller shades

3,031 sf

8.00

24,248

SUBTOTAL

24,248

E2020 MOVABLE FURNISHINGS

All movable furnishings to be provided and installed by

owner

NIC

SUBTOTAL

TOTAL - FURNISHINGS

\$24,248

G10 SITEWORK

G1010 DEMOLITION

Demolition

Facade removals at Phase 1 FD

1,000 sf

15.00

15,000

SUBTOTAL

15,000

G1010 SITEWORK

Structural excavation and backfill

Trench excavate and backfill foundation walls

907 cy

45.00

40,815

Excavate and backfill column footings

20 ea

350.00

7,000

Import underslab base for slabs

301 cy

45.00

13,545

SUBTOTAL

61,360

TOTAL - SITEWORK

\$76,360