

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

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MAIN SUMMARY

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

Middleton Ma Masterplan

Study Cost Estimate
Town of Middleton, Ma

March 3, 2020



| Current Costs (2020 dollars) | | | | | | | 10 year escalated costs - (5% 2021, 4% avgerage per year 2022 - 2031) | | | | | | | | | | |
|---|---|--------|-------------------|-------|--|-------|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Item # | Phase | 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****28,770 sf****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 |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

Phase 1 - Fire Department

GROSS FLOOR AREA CALCULATION

| | |
|--------------|--------|
| First Floor | 22,770 |
| Second Floor | 6,000 |

| | |
|-------------------------------------|-------------------|
| TOTAL GROSS FLOOR AREA (GFA) | 28,770 GSF |
|-------------------------------------|-------------------|

A10 BUILDING FOUNDATIONS

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 |
|---------------------|-----|----|-------|-------|

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 |
|--|--------|------|--------------|---------------|--------------|------------------|
| 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 |

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

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

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 | | |
| Louvers | 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

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/flashing | 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

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|--|--------|------|-----------|------------|-----------|------------------|
| 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 Plam 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 | | |
| <u>Restrooms and Lockers</u> | | | | | | |
| 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 | | |
| <u>Misc</u> | | | | | | |
| 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 |
|-------------------------------------|--------|------|-----------|------------|-----------|------------------|
| Phase 1 - Fire Department | | | | | | |
| C20 STAIRCASES | | | | | | |
| C2010 STAIR CONSTRUCTION | | | | | | |
| Stair 1 - monumental | 2 | flt | 15,000.00 | 30,000 | | |
| Stair 2 - egress | 2 | flt | 12,500.00 | 25,000 | | |
| Mezzanine stair | 1 | flt | 8,500.00 | 8,500 | | |
| Mezzanine railings | 90 | lf | 165.00 | 14,850 | | |
| Concrete material in pan infill | 5 | flt | 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 |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

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 |
|---|--------|------|-----------|------------|-----------|------------------|
| 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 | | | | | | |
| <u>Power Circuitry & Equipment</u> | | | | | | |
| 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 | | | | | | |
| <u>Telecommunications System</u> | | | | | | |
| Full telecommunications | 28,770 | sf | 2.75 | 79,118 | | |
| PA system | 28,770 | sf | 1.50 | 43,155 | | |
| <u>Fire Alarm</u> | | | | | | |
| Fire Alarm system | 28,770 | sf | 4.00 | 115,080 | | |
| <u>Special Systems</u> | | | | | | |
| Security roughin allowance | 28,770 | sf | 1.00 | 28,770 | | |
| SUBTOTAL | | | | | 266,123 | |
| D5040 OTHER ELECTRICAL SYSTEMS | | | | | | |
| <u>Lightning protection</u> | | | | | | |
| UL Master label lightning protection | 28,770 | sf | 0.75 | 21,578 | | |
| <u>Miscellaneous</u> | | | | | | |
| 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 | | | | | | |
| <u>Kitchenette Appliances</u> | | | | | | |
| Refrigerator | 1 | ea | 1,800.00 | 1,800 | | |
| Microwave | 1 | ea | 600.00 | 600 | | |
| <u>Dayroom kitchen Appliances</u> | | | | | | |
| 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 | | |
| <u>Laundry</u> | | | | | | |
| 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 |
|---|-------|------|--------------|---------------|--------------|------------------|
| Phase 1 - Fire Department | | | | | | |
| E20 FURNISHINGS | | | | | | |
| E2010 FIXED FURNISHINGS | | | | | | |
| <u>Window Treatment</u> | | | | | | |
| 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 MasterplanStudy Cost Estimate
Town of Middleton, Ma

March 3, 2020

Phase 1 - Sitework

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|-------------|-----|------|-----------|------------|-----------|------------|
|-------------|-----|------|-----------|------------|-----------|------------|

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 |
|--|-------|------|------------|------------|-----------|------------|
| <u>Water</u> | | | | | | |
| 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 | | |
| <u>Gas</u> | | | | | | |
| 4" Plastic Gas Line | 450 | lf | 75.00 | 33,750 | | |
| Street connections | 1 | ls | 5,000.00 | 5,000 | | |
| <u>Sewer</u> | | | | | | |
| 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 | | |
| <u>Electrical</u> | | | | | | |
| 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 - SITEWORK | | | 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 |
|--|---------|------|------------|------------|--------------------|------------|
| G10 SITEWORK | | | | | | |
| Earthwork | | | | | | |
| <u>Site Prep</u> | | | | | | |
| 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 | | |
| <u>Earthwork</u> | | | | | | |
| 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 | | |
| <u>Paving and walks prep</u> | | | | | | |
| Pedestrian Paving 12" Dense Grade | 119 | cy | 35.00 | 4,165 | | |
| Paving & Curbing | | | | | | |
| <u>Paving and curbing</u> | | | | | | |
| Granite curbs | 390 | lf | 45.00 | 17,550 | | |
| Concrete sidewalks at Rt114 | 3,200 | sf | 8.00 | 25,600 | | |
| SUBTOTAL | | | | | 585,815 | |
| Utilities | | | | | | |
| <u>Drainage - Town Green</u> | | | | | | |
| Allowance for drainage systems | 1 | ls | 750,000.00 | 750,000 | | |
| <u>Electrical - Town Green</u> | | | | | | |
| 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 | | | | | | |
| <u>Site Improvements</u> | | | | | | |
| Stone retaining walls at rt 114 | 390 | lf | 300.00 | 117,000 | | |
| Misc site improvements | 1 | ls | 10,000.00 | 10,000 | | |
| <u>Site Improvements - Town Green</u> | | | | | | |
| 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 | | | | | | |
| <u>Landscaping - Town Green</u> | | | | | | |
| 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 | |
| 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 | |

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 |
|-------------|-----|------|-----------|------------|-----------|------------|
|-------------|-----|------|-----------|------------|-----------|------------|

G10 SITEWORK**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 - SITEWORK | | | | | | 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 | | BUILDING | |
| | | 12,216 sf | |
| 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 | SITEWORK | \$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 |
|-------------|-----|------|-----------|------------|-----------|------------|
|-------------|-----|------|-----------|------------|-----------|------------|

Phase 3 - Police Department Addition

GROSS FLOOR AREA CALCULATION

| | |
|--------------|-------|
| First Floor | 8,116 |
| Second Floor | 4,100 |

| | |
|-------------------------------------|-------------------|
| TOTAL GROSS FLOOR AREA (GFA) | 12,216 GSF |
|-------------------------------------|-------------------|

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 |
|---------------------|-----|----|-------|-------|

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 |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

Phase 3 - Police Department Addition

| | | | | | | |
|-------------------------------------|-------|----|----------|--------|---------|--|
| New Slab on grade, 8" thick | | | | | | |
| 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 | | |
| Miscellaneous | | | | | | |
| 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 | | |
| Miscellaneous | | | | | | |
| 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 | | | | |
| Masonry Veneer | | | | | | |
| 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 |
|---|-------|------|--------------|---------------|--------------|--------------------|
| Phase 3 - Police Department Addition | | | | | | |
| <u>Metal Panel</u> | | | | | | |
| 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/flashing | 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 | | |
| <u>Restrooms and Lockers</u> | | | | | | |
| 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 | | |
| <u>Misc</u> | | | | | | |
| 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 |
|---|--------|------|--------------|---------------|--------------|-----------------|
| 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 |
| 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 |

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|-------------|-----|------|--------------|---------------|--------------|---------------|
|-------------|-----|------|--------------|---------------|--------------|---------------|

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 |
|---|--------|------|--------------|---------------|--------------|------------------|
| 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 |
| D50 ELECTRICAL | | | | | | |
| D5010 SERVICE & DISTRIBUTION | | | | | | |
| <u>Power Circuitry & Equipment</u> | | | | | | |
| 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 | | | | | | |
| <u>Telecommunications System</u> | | | | | | |
| Full telecommunications | 12,216 | sf | 2.75 | 33,594 | | |
| PA and special system | 12,216 | sf | 5.00 | 61,080 | | |
| <u>Fire Alarm</u> | | | | | | |
| Fire Alarm system | 12,216 | sf | 4.00 | 48,864 | | |
| <u>Special Systems</u> | | | | | | |
| Security roughin allowance | 12,216 | sf | 1.00 | 12,216 | | |
| SUBTOTAL | | | | | 155,754 | |
| D5040 OTHER ELECTRICAL SYSTEMS | | | | | | |
| <u>Lightning protection</u> | | | | | | |
| UL Master label lightning protection | 12,216 | sf | 0.75 | 9,162 | | |
| <u>Miscellaneous</u> | | | | | | |
| 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 |
| E10 EQUIPMENT | | | | | | |
| E10 EQUIPMENT, GENERALLY | | | | | | |
| <u>Kitchenette Appliances</u> | | | | | | |
| Refrigerator | 1 | ea | 1,800.00 | 1,800 | | |
| Microwave | 1 | ea | 600.00 | 600 | | |
| SUBTOTAL | | | | | 2,400 | |
| TOTAL - EQUIPMENT | | | | | | \$2,400 |

| DESCRIPTION | QTY | UNIT | UNIT COST | EST'D COST | SUB TOTAL | TOTAL COST |
|---|-------|------|--------------|---------------|--------------|-----------------|
| Phase 3 - Police Department Addition | | | | | | |
| E20 FURNISHINGS | | | | | | |
| E2010 FIXED FURNISHINGS | | | | | | |
| <u>Window Treatment</u> | | | | | | |
| 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 | | | | | | |
| <u>Demolition</u> | | | | | | |
| Facade removals at Phase 1 FD | 1,000 | sf | 15.00 | 15,000 | | |
| SUBTOTAL | | | | | 15,000 | |
| G1010 SITEWORK | | | | | | |
| <u>Structural excavation and backfill</u> | | | | | | |
| 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 |