

Coronado USD HVAC Installation

Coronado, California

Estimate Summary by Campus

Rough Order of Magnitude

02/10/16

| Element | A Coronado High School 166,187 sf | | | B Coronado Middle School 73,846 sf | | | C Village Elementary School 91,901 sf | | | D Strand Elementary School 42,019 sf | | |
|---|---|---------------------|----------------|--|--------------------|----------------|---|--------------------|----------------|--|--------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$455,047 | \$2.74 | | \$162,278 | \$2.20 | | \$192,670 | \$2.10 | | \$218,282 | \$5.19 |
| 1 Foundations | | | | | | | | | | | | |
| 2 Vertical Structure | | | | | | | | | | | | |
| 3 Floor & Roof Structures | \$290,218 | | | \$97,236 | | | \$127,474 | | | \$142,214 | | |
| 4 Exterior Cladding | | | | | | | | | | | | |
| 5 Roofing and Waterproofing | \$164,829 | | | \$65,042 | | | \$65,196 | | | \$76,068 | | |
| B) Interiors (6-7) | | \$1,262,039 | \$7.59 | | \$609,229 | \$8.25 | | \$758,183 | \$8.25 | | \$346,659 | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | | | | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$1,262,039 | | | \$609,229 | | | \$758,183 | | | \$346,659 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | | | | | | | |
| 8 Function Equipment and Specialties | | | | | | | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$6,038,742 | \$36.34 | | \$2,789,893 | \$37.78 | | \$3,570,863 | \$38.86 | | \$1,583,272 | \$37.68 |
| 10 Plumbing Systems | \$188,138 | | | \$77,156 | | | \$91,901 | | | \$48,322 | | |
| 11 Heating, Ventilation and Air Conditioning | \$4,337,319 | | | \$1,926,319 | | | \$2,500,216 | | | \$1,146,271 | | |
| 12 Electrical Lighting, Power and Communications | \$1,308,788 | | | \$694,110 | | | \$863,869 | | | \$336,155 | | |
| 13 Fire Protection Systems | \$204,498 | | | \$92,307 | | | \$114,876 | | | \$52,524 | | |
| E) Site Construction (14-16) | | \$286,074 | \$1.72 | | \$113,501 | \$1.54 | | \$133,514 | \$1.45 | | \$97,932 | \$2.33 |
| 14 Site Preparation and Demolition | \$286,074 | | | \$113,501 | | | \$133,514 | | | \$97,932 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | | | | | | | |
| 16 Utilities on Site | | | | | | | | | | | | |
| Subtotal Cost | | \$8,041,902 | \$48.39 | | \$3,674,901 | \$49.76 | | \$4,655,230 | \$50.65 | | \$2,246,145 | \$53.46 |
| General Conditions 6.0% | | \$482,514 | \$2.90 | | \$220,494 | \$2.99 | | \$279,314 | \$3.04 | | \$134,769 | \$3.21 |
| Bonds & Insurance 2.0% | | \$170,488 | \$1.03 | | \$77,908 | \$1.06 | | \$98,691 | \$1.07 | | \$47,618 | \$1.13 |
| General Contractor Fee 5.0% | | \$434,745 | \$2.62 | | \$198,665 | \$2.69 | | \$251,662 | \$2.74 | | \$121,427 | \$2.89 |
| Design Contingency 15.0% | | \$1,369,447 | \$8.24 | | \$625,795 | \$8.47 | | \$792,735 | \$8.63 | | \$382,494 | \$9.10 |
| Escalation to MOC, Excluded N/A | | | | | | | | | | | | |
| Total Construction Cost (1st Qtr. 2016 \$\$) | | <u>\$10,499,097</u> | \$63.18 | | <u>\$4,797,764</u> | \$64.97 | | <u>\$6,077,631</u> | \$66.13 | | <u>\$2,932,452</u> | \$69.79 |

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Coronado, California

Estimate Summary by Campus

Rough Order of Magnitude

02/10/16

| Element | E Palm Academy 2,560 sf | | | F Early Childhood Dev Center 8,682 sf | | | G District Office 10,815 sf | | | H Maintenance & Operations 5,842 sf | | |
|---|-------------------------------|------------------|----------------|---|--------------------|-----------------|-----------------------------------|------------------|----------------|---|------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$10,774 | \$4.21 | | \$98,359 | \$11.33 | | \$52,476 | \$4.85 | | \$22,521 | \$3.86 |
| 1 Foundations | | | | | | | | | | | | |
| 2 Vertical Structure | | | | | | | | | | | | |
| 3 Floor & Roof Structures | \$6,432 | | | \$67,369 | | | \$33,318 | | | \$13,591 | | |
| 4 Exterior Cladding | | | | | | | | | | | | |
| 5 Roofing and Waterproofing | \$4,342 | | | \$30,990 | | | \$19,158 | | | \$8,931 | | |
| B) Interiors (6-7) | | \$21,117 | \$8.25 | | \$188,188 | \$21.68 | | \$89,222 | \$8.25 | | \$48,193 | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | | | | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$21,117 | | | \$188,188 | | | \$89,222 | | | \$48,193 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | | | | | | | |
| 8 Function Equipment and Specialties | | | | | | | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$94,840 | \$37.05 | | \$725,651 | \$83.58 | | \$398,678 | \$36.86 | | \$197,949 | \$33.88 |
| 10 Plumbing Systems | \$2,944 | | | \$26,232 | | | \$12,437 | | | \$5,842 | | |
| 11 Heating, Ventilation and Air Conditioning | \$68,220 | | | \$488,419 | | | \$286,205 | | | \$138,073 | | |
| 12 Electrical Lighting, Power and Communications | \$20,477 | | | \$182,486 | | | \$86,518 | | | \$46,733 | | |
| 13 Fire Protection Systems | \$3,199 | | | \$28,513 | | | \$13,518 | | | \$7,302 | | |
| E) Site Construction (14-16) | | \$6,160 | \$2.41 | | \$46,443 | \$5.35 | | \$23,265 | \$2.15 | | \$12,542 | \$2.15 |
| 14 Site Preparation and Demolition | \$6,160 | | | \$46,443 | | | \$23,265 | | | \$12,542 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | | | | | | | |
| 16 Utilities on Site | | | | | | | | | | | | |
| Subtotal Cost | | \$132,889 | \$51.91 | | \$1,058,641 | \$121.94 | | \$563,641 | \$52.12 | | \$281,206 | \$48.14 |
| General Conditions 6.0% | | \$7,973 | \$3.11 | | \$63,518 | \$7.32 | | \$33,818 | \$3.13 | | \$16,872 | \$2.89 |
| Bonds & Insurance 2.0% | | \$2,817 | \$1.10 | | \$22,443 | \$2.59 | | \$11,949 | \$1.10 | | \$5,962 | \$1.02 |
| General Contractor Fee 5.0% | | \$7,184 | \$2.81 | | \$57,230 | \$6.59 | | \$30,470 | \$2.82 | | \$15,202 | \$2.60 |
| Design Contingency 15.0% | | \$22,630 | \$8.84 | | \$180,275 | \$20.76 | | \$95,982 | \$8.87 | | \$47,886 | \$8.20 |
| Escalation to MOC, Excluded N/A | | | | | | | | | | | | |
| Total Construction Cost (1st Qtr. 2016 \$\$) | | <u>\$173,494</u> | <u>\$67.77</u> | | <u>\$1,382,107</u> | <u>\$159.19</u> | | <u>\$735,861</u> | <u>\$68.04</u> | | <u>\$367,128</u> | <u>\$62.84</u> |

Coronado USD HVAC Installation

Coronado, California

Estimate Summary by Campus

Rough Order of Magnitude

| Element | TOTAL 401,852 sf | | |
|---|---------------------|---------------------|----------------|
| | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$1,212,406 | \$3.02 |
| 1 Foundations | | | |
| 2 Vertical Structure | | | |
| 3 Floor & Roof Structures | \$777,852 | | |
| 4 Exterior Cladding | | | |
| 5 Roofing and Waterproofing | \$434,554 | | |
| B) Interiors (6-7) | | \$3,322,831 | \$8.27 |
| 6 Interior Partitions, Doors and Glazing | | | |
| 7 Floor, Wall and Ceiling Finishes | \$3,322,831 | | |
| C) Equipment and Vertical Transportation (8-9) | | | |
| 8 Function Equipment and Specialties | | | |
| 9 Stairs and Vertical Transportation | | | |
| D) Mechanical and Electrical (10-13) | | \$15,399,888 | \$38.32 |
| 10 Plumbing Systems | \$452,972 | | |
| 11 Heating, Ventilation and Air Conditioning | \$10,891,042 | | |
| 12 Electrical Lighting, Power and Communications | \$3,539,134 | | |
| 13 Fire Protection Systems | \$516,739 | | |
| E) Site Construction (14-16) | | \$719,431 | \$1.79 |
| 14 Site Preparation and Demolition | \$719,431 | | |
| 15 Site Paving, Structures & Landscaping | | | |
| 16 Utilities on Site | | | |
| Subtotal Cost | | \$20,654,556 | \$51.40 |
| General Conditions 6.0% | | \$1,239,273 | \$3.08 |
| Bonds & Insurance 2.0% | | \$437,877 | \$1.09 |
| General Contractor Fee 5.0% | | \$1,116,585 | \$2.78 |
| Design Contingency 15.0% | | \$3,517,244 | \$8.75 |
| Escalation to MOC, Excluded N/A | | | |
| Total Construction Cost (1st Qtr. 2016 \$\$) | | <u>\$26,965,535</u> | \$67.10 |



Coronado High School HVAC Installation
Coronado, California

Rough Order of Magnitude Statement of Probable Cost
February 2, 2016
Cumming Project No. 15-01073.00

Prepared for Coronado Unified School District

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Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

INTRODUCTION

Project Description

The scope of work for this estimate involves the installation of a new HVAC system, including demolition and repairs to existing finishes, upgrade to electrical service, removal and reinstallation of existing ceiling fixtures and devices.

Basis of Estimate

This estimate is based on the Coronado High School Spacial Area Database (undated), prepared by Coronado Unified School District.

Basis for Quantities

Wherever possible, this estimate has been based upon the actual measurement of different items of work. For the remaining items, parametric measurements were used in conjunction with references from other projects of a similar nature.

Basis for Unit Costs

Unit costs as contained herein are based on current San Diego, CA - Prevailing Wage prices. Subcontractor's overhead and profit is included in each line item unit cost. This overhead and profit covers each subcontractor's cost for labor burden, materials and equipment sales taxes, field overhead, home office overhead, and profit. The general contractor's overhead and profit is shown separately on the Summary.

Sources for Pricing

This estimate was prepared by a team of qualified cost consultants experienced in estimating construction costs at all stages of design. These consultants have used pricing data from Cumming's database for construction, updated to reflect current conditions in the Coronado, California area. In some cases, quotes were solicited from outside sources to supplement in-house pricing data.

Subcontractor's Mark-ups

Depending on the trade, subcontractor mark-ups can range from 5% to 15% of the raw cost for that particular item of work. It should be noted that Design Assist Sub Contractors may influence Sub Contractor costs.

Design Allowances

An allowance of 15.0% for undeveloped design details has been included in the summary of this estimate. As the design of each system is further developed, details which historically increase cost became apparent and must be incorporated into the estimate.

General Contractor's Overhead and Profit

Jobsite general conditions, home office overhead, profit, and bond are shown on the Summary of this estimate. It is our opinion that for this project, a rate of 13.0% is appropriate to cover these mark-ups. (6.0% for General Conditions, 2.0% for Bonds & Insurance and 5.0% for Overhead and Profit)

Construction Contingency

It is prudent for all program budgets to include an allowance for change orders which occur during construction. These change orders normally increase the cost of the project. It is recommended that a 5 - 10% contingency is carried in this respect. These costs are not included within this estimate.

Items Excluded from the Base Estimate

- 1 Professional fees, inspections and testing.
- 2 Escalation
- 3 Plan check fees and building permit fees.

INTRODUCTION

- 4 Furnishings, fixtures and equipment (FF&E), except built-in cabinets, counters and other casework indicated.
- 5 Major site and building structures demolition unless noted in body of estimate.
- 6 Costs of hazardous material surveys, abatements, and disposals unless noted in estimate.
- 7 Costs of offsite construction unless noted in estimate.
- 8 Construction contingency costs.
- 9 Repairs or upgrades to other existing HVAC or Electrical equipment. An allowance for minor upgrades to existing electrical panels for the added HVAC system is included in the estimate.
- 10 Modifications / upgrades to roof structure generally.
- 11 Moving / relocation costs. The estimates assumed the District will remove and reinstall any loose furniture and fixtures as needed during construction.
- 12 Phasing HVAC installation.

Items Affecting the Cost Estimate

Items which may change the estimated construction cost include, but are not limited to:

- 1 Modifications to the scope of work included in this estimate.
- 2 Restrictive technical specifications or excessive contract conditions.
- 3 Any specified item of equipment, material, or product that cannot be obtained from at least 3 different sources.
- 4 Any other non-competitive bid situations.
- 5 Bids delayed beyond the projected schedule.

Statement of Probable Cost

Cumming 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. This opinion of the probable cost of construction is made on the basis of the experience, qualifications, and best judgment of a professional consultant familiar with the construction industry. Cumming, however, cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from this or subsequent cost estimates.

Cumming has no control over the quality, completeness, intricacy, constructability, or coordination of design documents. Cumming also has no control over the amount of funds available for the project. We, therefore, cannot be responsible for any design revision costs incurred in the event that this estimate is in excess of the budget.

Cumming's staff of professional cost consultants has prepared this estimate in accordance with generally accepted principles and practices. This staff is available to discuss its contents with any interested party.

Recommendations for Cost Control

Cumming recommends that the Owner and the Architect carefully review this entire document to insure that it reflects their design intent. Requests for modifications of any apparent errors or omissions to this document must be made to Cumming within ten days of receipt of this estimate, otherwise, it will be understood that the contents have been concurred with and accepted. If the project is over budget, or there are unresolved budgeting issues, alternate systems/schemes should be evaluated before proceeding into further design phases.

It is recommended that further cost estimates be prepared throughout design by Cumming to determine overall cost changes subsequent to the preparation of this preliminary estimate. These future estimates will have detailed breakdowns indicating materials by type, kind, and size, priced by their respective units of measure.

CONSTRUCTION COST SUMMARY

| Element | Area | Cost / SF | Total |
|--|-------------------|---------------------|---------------------|
| A BUILDING 100 | 21,813 | \$61.21 | \$1,335,147 |
| B BUILDING 200 (800) | 12,439 | \$65.09 | \$809,630 |
| C BUILDING 300 | 18,584 | \$66.39 | \$1,233,722 |
| D BUILDING 400 | 30,747 | \$62.16 | \$1,911,244 |
| E BUILDING 500 | 23,729 | \$64.82 | \$1,538,167 |
| F BUILDING 600 | 11,244 | \$64.55 | \$725,811 |
| G BUILDING 700 | 15,741 | \$67.19 | \$1,057,636 |
| H AQUATICS CENTER | 3,750 | \$77.70 | \$291,366 |
| L GYMNASIUM | 25,553 | \$62.47 | \$1,596,375 |
| | | | |
| TOTAL ESTIMATED CONSTRUCTION COST (1st QTR 2016 \$\$) | 166,187 SF | \$63.18 / SF | \$10,499,097 |

Coronado High School HVAC Installation

Coronado, California

Estimate Summary by Category

Rough Order of Magnitude

02/02/16

| Element | A BUILDING 100 21,813 sf | | | B BUILDING 200 (800) 12,439 sf | | | C BUILDING 300 18,584 sf | | | D BUILDING 400 30,747 sf | | |
|---|--------------------------------|--------------------|----------------|--------------------------------------|------------------|----------------|--------------------------------|--------------------|----------------|--------------------------------|--------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$60,578 | \$2.78 | | \$39,181 | \$3.15 | | \$35,252 | \$1.90 | | \$78,804 | \$2.56 |
| 1 Foundations | | | | | | | | | | | | |
| 2 Vertical Structure | | | | | | | | | | | | |
| 3 Floor & Roof Structures | \$38,462 | | | \$24,877 | | | \$22,382 | | | \$50,034 | | |
| 4 Exterior Cladding | | | | | | | | | | | | |
| 5 Roofing and Waterproofing | \$22,116 | | | \$14,304 | | | \$12,870 | | | \$28,770 | | |
| B) Interiors (6-7) | | \$179,953 | \$8.25 | | \$102,618 | \$8.25 | | \$153,317 | \$8.25 | | \$253,663 | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | | | | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$179,953 | | | \$102,618 | | | \$153,317 | | | \$253,663 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | | | | | | | |
| 8 Function Equipment and Specialties | | | | | | | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$742,633 | \$34.05 | | \$454,713 | \$36.56 | | \$726,649 | \$39.10 | | \$1,077,351 | \$35.04 |
| 10 Plumbing Systems | \$25,084 | | | \$14,304 | | | \$21,372 | | | \$35,359 | | |
| 11 Heating, Ventilation and Air Conditioning | \$515,783 | | | \$325,353 | | | \$533,376 | | | \$757,582 | | |
| 12 Electrical Lighting, Power and Communications | \$174,500 | | | \$99,508 | | | \$148,671 | | | \$245,976 | | |
| 13 Fire Protection Systems | \$27,266 | | | \$15,548 | | | \$23,230 | | | \$38,434 | | |
| E) Site Construction (14-16) | | \$39,508 | \$1.81 | | \$23,633 | \$1.90 | | \$29,765 | \$1.60 | | \$54,122 | \$1.76 |
| 14 Site Preparation and Demolition | \$39,508 | | | \$23,633 | | | \$29,765 | | | \$54,122 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | | | | | | | |
| 16 Utilities on Site | | | | | | | | | | | | |
| Subtotal Cost | | \$1,022,671 | \$46.88 | | \$620,145 | \$49.86 | | \$944,983 | \$50.85 | | \$1,463,939 | \$47.61 |
| General Conditions 6.0% | | \$61,360 | \$2.81 | | \$37,209 | \$2.99 | | \$56,699 | \$3.05 | | \$87,836 | \$2.86 |
| Bonds & Insurance 2.0% | | \$21,681 | \$0.99 | | \$13,147 | \$1.06 | | \$20,034 | \$1.08 | | \$31,036 | \$1.01 |
| General Contractor Fee 5.0% | | \$55,286 | \$2.53 | | \$33,525 | \$2.70 | | \$51,086 | \$2.75 | | \$79,141 | \$2.57 |
| Design Contingency 15.0% | | \$174,150 | \$7.98 | | \$105,604 | \$8.49 | | \$160,920 | \$8.66 | | \$249,293 | \$8.11 |
| Escalation to MOC, Excluded N/A | | | | | | | | | | | | |
| Total Construction Cost (1st Qtr. 2016 \$\$) | | <u>\$1,335,147</u> | \$61.21 | | <u>\$809,630</u> | \$65.09 | | <u>\$1,233,722</u> | \$66.39 | | <u>\$1,911,244</u> | \$62.16 |

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Coronado, California

Estimate Summary by Category

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| Element | E BUILDING 500 23,729 sf | | | F BUILDING 600 11,244 sf | | | G BUILDING 700 15,741 sf | | | H AQUATICS CENTER 3,750 sf | | |
|---|--------------------------------|--------------------|----------------|--------------------------------|------------------|----------------|--------------------------------|--------------------|----------------|----------------------------------|------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$78,306 | \$3.30 | | \$35,417 | \$3.15 | | \$35,204 | \$2.24 | | \$11,813 | \$3.15 |
| 1 Foundations | | | | | | | | | | | | |
| 2 Vertical Structure | | | | | | | | | | | | |
| 3 Floor & Roof Structures | \$51,017 | | | \$22,487 | | | \$22,352 | | | \$7,500 | | |
| 4 Exterior Cladding | | | | | | | | | | | | |
| 5 Roofing and Waterproofing | \$27,288 | | | \$12,930 | | | \$12,852 | | | \$4,313 | | |
| B) Interiors (6-7) | | \$195,764 | \$8.25 | | \$92,760 | \$8.25 | | \$129,860 | \$8.25 | | \$30,938 | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | | | | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$195,764 | | | \$92,760 | | | \$129,860 | | | \$30,938 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | | | | | | | |
| 8 Function Equipment and Specialties | | | | | | | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$859,022 | \$36.20 | | \$406,403 | \$36.15 | | \$618,560 | \$39.30 | | \$173,300 | \$46.21 |
| 10 Plumbing Systems | \$27,288 | | | \$12,930 | | | \$18,102 | | | \$4,313 | | |
| 11 Heating, Ventilation and Air Conditioning | \$612,240 | | | \$289,469 | | | \$454,858 | | | \$134,300 | | |
| 12 Electrical Lighting, Power and Communications | \$189,832 | | | \$89,949 | | | \$125,925 | | | \$30,000 | | |
| 13 Fire Protection Systems | \$29,661 | | | \$14,055 | | | \$19,676 | | | \$4,688 | | |
| E) Site Construction (14-16) | | \$45,085 | \$1.90 | | \$21,363 | \$1.90 | | \$26,484 | \$1.68 | | \$7,125 | \$1.90 |
| 14 Site Preparation and Demolition | \$45,085 | | | \$21,363 | | | \$26,484 | | | \$7,125 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | | | | | | | |
| 16 Utilities on Site | | | | | | | | | | | | |
| Subtotal Cost | | \$1,178,177 | \$49.65 | | \$555,943 | \$49.45 | | \$810,108 | \$51.47 | | \$223,175 | \$59.51 |
| General Conditions 6.0% | | \$70,691 | \$2.98 | | \$33,357 | \$2.97 | | \$48,606 | \$3.09 | | \$13,391 | \$3.57 |
| Bonds & Insurance 2.0% | | \$24,977 | \$1.05 | | \$11,786 | \$1.05 | | \$17,174 | \$1.09 | | \$4,731 | \$1.26 |
| General Contractor Fee 5.0% | | \$63,692 | \$2.68 | | \$30,054 | \$2.67 | | \$43,794 | \$2.78 | | \$12,065 | \$3.22 |
| Design Contingency 15.0% | | \$200,631 | \$8.46 | | \$94,671 | \$8.42 | | \$137,952 | \$8.76 | | \$38,004 | \$10.13 |
| Escalation to MOC, Excluded N/A | | | | | | | | | | | | |
| Total Construction Cost (1st Qtr. 2016 \$\$) | | <u>\$1,538,167</u> | \$64.82 | | <u>\$725,811</u> | \$64.55 | | <u>\$1,057,636</u> | \$67.19 | | <u>\$291,366</u> | \$77.70 |

Coronado High School HVAC Installation

Coronado, California

Estimate Summary by Category

Rough Order of Magnitude

02/02/16

02/02/16

| Element | J GYMNASIUM 25,553 sf | | | TOTAL 166,187 sf | | |
|---|-----------------------------|--------------------|----------------|---------------------|---------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$80,493 | \$3.15 | | \$455,047 | \$2.74 |
| 1 Foundations | | | | | | |
| 2 Vertical Structure | | | | | | |
| 3 Floor & Roof Structures | \$51,107 | | | \$290,218 | | |
| 4 Exterior Cladding | | | | | | |
| 5 Roofing and Waterproofing | \$29,386 | | | \$164,829 | | |
| B) Interiors (6-7) | | \$123,167 | \$4.82 | | \$1,262,039 | \$7.59 |
| 6 Interior Partitions, Doors and Glazing | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$123,167 | | | \$1,262,039 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | |
| 8 Function Equipment and Specialties | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$980,112 | \$38.36 | | \$6,038,742 | \$36.34 |
| 10 Plumbing Systems | \$29,386 | | | \$188,138 | | |
| 11 Heating, Ventilation and Air Conditioning | \$714,358 | | | \$4,337,319 | | |
| 12 Electrical Lighting, Power and Communications | \$204,426 | | | \$1,308,788 | | |
| 13 Fire Protection Systems | \$31,942 | | | \$204,498 | | |
| E) Site Construction (14-16) | | \$38,990 | \$1.53 | | \$286,074 | \$1.72 |
| 14 Site Preparation and Demolition | \$38,990 | | | \$286,074 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | |
| 16 Utilities on Site | | | | | | |
| Subtotal Cost | | \$1,222,762 | \$47.85 | | \$8,041,902 | \$48.39 |
| General Conditions 6.0% | | \$73,366 | \$2.87 | | \$493,304 | \$2.97 |
| Bonds & Insurance 2.0% | | \$25,923 | \$1.01 | | \$174,301 | \$1.05 |
| General Contractor Fee 5.0% | | \$66,102 | \$2.59 | | \$444,467 | \$2.67 |
| Design Contingency 15.0% | | \$208,223 | \$8.15 | | \$1,400,070 | \$8.42 |
| Escalation to MOC, Excluded N/A | | | | | | |
| Total Construction Cost (1st Qtr. 2016 \$\$) | | <u>\$1,596,375</u> | \$62.47 | | <u>\$10,554,043</u> | \$63.51 |

BUILDING 100

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 100

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|--------------------|-----------|----------------|
| A) Shell (1-5) | | \$60,578 | | \$2.78 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$38,462 | | \$1.76 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$22,116 | | \$1.01 | |
| B) Interiors (6-7) | | \$179,953 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$179,953 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$742,633 | | \$34.05 |
| 10 Plumbing Systems | \$25,084 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$515,783 | | \$23.65 | |
| 12 Electrical Lighting, Power and Communications | \$174,500 | | \$8.00 | |
| 13 Fire Protection Systems | \$27,266 | | \$1.25 | |
| E) Site Construction (14-16) | | \$39,508 | | \$1.81 |
| 14 Site Preparation and Demolition | \$39,508 | | \$1.81 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$1,022,671 | | \$46.88 |
| General Conditions | 6.0% | \$61,360 | | \$2.81 |
| Subtotal | | \$1,084,031 | | \$49.70 |
| Bonds & Insurance | 2.0% | \$21,681 | | \$0.99 |
| Subtotal | | \$1,105,712 | | \$50.69 |
| General Contractor Fee | 5.0% | \$55,286 | | \$2.53 |
| Subtotal | | \$1,160,997 | | \$53.23 |
| Design Contingency | 15.0% | \$174,150 | | \$7.98 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$\$) | | \$1,335,147 | | \$61.21 |

Total Area: 21,813 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 100

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 19,231 | sf | \$2.00 | \$38,462 |
| Total - Floor & Roof Structures | | | | <u>\$38,462</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 19,231 | sf | \$1.15 | \$22,116 |
| Total - Roofing and Waterproofing | | | | <u>\$22,116</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 21,813 | sf | \$8.25 | \$179,953 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$179,953</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 21,813 | sf | \$1.15 | \$25,084 |
| Total - Plumbing Systems | | | | <u>\$25,084</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Practice Room | 353 | sf | \$20.00 | \$7,050 |
| AV Room | 143 | sf | \$25.00 | \$3,575 |
| Workroom | 84 | sf | \$20.00 | \$1,680 |
| Scene | 1,125 | sf | \$30.00 | \$33,750 |
| Storage | 2,409 | sf | \$10.00 | \$24,090 |
| Mechanical / Electrical | 162 | sf | \$50.00 | \$8,075 |
| Closed Office | 489 | sf | \$25.00 | \$12,225 |
| Open Rooms | 3,452 | sf | \$20.00 | \$69,040 |
| Dressing Room | 213 | sf | \$20.00 | \$4,260 |
| Restroom | 1,190 | sf | \$15.00 | \$17,850 |
| Orch Pit/ Stage | 2,799 | sf | \$25.00 | \$69,975 |
| Theater | 2,797 | sf | \$30.00 | \$83,910 |
| Custodian | 65 | sf | \$20.00 | \$1,300 |
| Kiln | 480 | sf | \$30.00 | \$14,400 |
| Dance Room | 1,254 | sf | \$30.00 | \$37,620 |
| Data | 70 | sf | \$50.00 | \$3,500 |
| Corridor / Hallway / Vestibule | 1,788 | sf | \$25.00 | \$44,688 |
| Lobby | 1,435 | sf | \$30.00 | \$43,050 |
| Concessions | 90 | sf | \$50.00 | \$4,500 |
| Ticket Office | 39 | sf | \$25.00 | \$975 |
| Control Room / Lighting / Dimmer | 849 | sf | \$30.00 | \$25,470 |
| Exterior Walk | 480 | sf | \$5.00 | \$2,400 |

Coronado High School HVAC Installation
Coronado, California
Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 100

| Element | Quantity | Unit | Unit Cost | Total |
|---|----------|------|-----------|-------------------------|
| AC Comp | 48 | sf | \$50.00 | <u>\$2,400</u> |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$515.783</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 21,813 | sf | \$1.00 | \$21,813 |
| HVAC Equipment connections, conduit and wire | 21,813 | sf | \$1.50 | \$32,719 |
| HVAC convenience power, outlets, connections, conduit and wire | 21,813 | sf | \$1.25 | \$27,266 |
| Remove, store and reinstall ceiling light fixtures and devices | 21,813 | sf | \$4.25 | <u>\$92,703</u> |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$174.500</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required, minor work | 21,813 | sf | \$1.25 | <u>\$27,266</u> |
| Total - Fire Protection Systems | | | | <u>\$27.266</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 19,231 | sf | \$0.75 | \$14,423 |
| Demolish ceilings for new ductwork | 21,813 | sf | \$0.90 | \$19,631 |
| Miscellaneous demolition | 21,813 | sf | \$0.25 | <u>\$5,453</u> |
| Total - Site Preparation and Demolition | | | | <u>\$39.508</u> |

BUILDING 200 (800)

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 200 (800)

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|-------------------------|-----------|----------------|
| A) Shell (1-5) | | \$39,181 | | \$3.15 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$24,877 | | \$2.00 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$14,304 | | \$1.15 | |
| B) Interiors (6-7) | | \$102,618 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$102,618 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$454,713 | | \$36.56 |
| 10 Plumbing Systems | \$14,304 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$325,353 | | \$26.16 | |
| 12 Electrical Lighting, Power and Communications | \$99,508 | | \$8.00 | |
| 13 Fire Protection Systems | \$15,548 | | \$1.25 | |
| E) Site Construction (14-16) | | \$23,633 | | \$1.90 |
| 14 Site Preparation and Demolition | \$23,633 | | \$1.90 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$620,145 | | \$49.86 |
| General Conditions | 6.0% | \$37,209 | | \$2.99 |
| Subtotal | | \$657,354 | | \$52.85 |
| Bonds & Insurance | 2.0% | \$13,147 | | \$1.06 |
| Subtotal | | \$670,501 | | \$53.91 |
| General Contractor Fee | 5.0% | \$33,525 | | \$2.70 |
| Subtotal | | \$704,026 | | \$56.60 |
| Design Contingency | 15.0% | \$105,604 | | \$8.49 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$) | | <u>\$809,630</u> | | \$65.09 |

Total Area: 12,439 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 200 (800)

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 12,439 | sf | \$2.00 | \$24,877 |
| Total - Floor & Roof Structures | | | | <u>\$24,877</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 12,439 | sf | \$1.15 | \$14,304 |
| Total - Roofing and Waterproofing | | | | <u>\$14,304</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 12,439 | sf | \$8.25 | \$102,618 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$102,618</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 12,439 | sf | \$1.15 | \$14,304 |
| Total - Plumbing Systems | | | | <u>\$14,304</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom / Lecture | 3,979 | sf | \$20.00 | \$79,580 |
| Study Room | 275 | sf | \$25.00 | \$6,875 |
| Miscellaneous Rooms | 21 | sf | \$20.00 | \$425 |
| Computer Room | 275 | sf | \$50.00 | \$13,750 |
| Storage | 178 | sf | \$10.00 | \$1,784 |
| Mechanical / Electrical | 106 | sf | \$50.00 | \$5,300 |
| Elevator / Elevator Machine Room | 148 | sf | \$50.00 | \$7,393 |
| Closed Office | 200 | sf | \$25.00 | \$5,000 |
| Corridor / Hallways | 2,586 | sf | \$25.00 | \$64,650 |
| Dance Room | 3,470 | sf | \$30.00 | \$104,100 |
| Custodian | 48 | sf | \$20.00 | \$963 |
| Balcony / High Loft | 1,103 | sf | \$30.00 | \$33,090 |
| Data / Communications Room | 49 | sf | \$50.00 | \$2,444 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$325,353</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 12,439 | sf | \$1.00 | \$12,439 |
| HVAC Equipment connections, conduit and wire | 12,439 | sf | \$1.50 | \$18,658 |
| HVAC convenience power, outlets, connections, conduit and wire | 12,439 | sf | \$1.25 | \$15,548 |
| Remove, store and reinstall ceiling light fixtures and devices | 12,439 | sf | \$4.25 | \$52,864 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$99,508</u> |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 200 (800)

| Element | Quantity | Unit | Unit Cost | Total |
|---|----------|------|-----------|------------------------|
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 12,439 | sf | \$1.25 | \$15,548 |
| Total - Fire Protection Systems | | | | <u>\$15,548</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 12,439 | sf | \$0.75 | \$9,329 |
| Demolish ceilings for new ductwork | 12,439 | sf | \$0.90 | \$11,195 |
| Miscellaneous demolition | 12,439 | sf | \$0.25 | \$3,110 |
| Total - Site Preparation and Demolition | | | | <u>\$23,633</u> |

BUILDING 300

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 300

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|---------------------------|-----------|----------------|
| A) Shell (1-5) | | \$35,252 | | \$1.90 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$22,382 | | \$1.20 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$12,870 | | \$0.69 | |
| B) Interiors (6-7) | | \$153,317 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$153,317 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$726,649 | | \$39.10 |
| 10 Plumbing Systems | \$21,372 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$533,376 | | \$28.70 | |
| 12 Electrical Lighting, Power and Communications | \$148,671 | | \$8.00 | |
| 13 Fire Protection Systems | \$23,230 | | \$1.25 | |
| E) Site Construction (14-16) | | \$29,765 | | \$1.60 |
| 14 Site Preparation and Demolition | \$29,765 | | \$1.60 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$944,983 | | \$50.85 |
| General Conditions | 6.0% | \$56,699 | | \$3.05 |
| Subtotal | | \$1,001,682 | | \$53.90 |
| Bonds & Insurance | 2.0% | \$20,034 | | \$1.08 |
| Subtotal | | \$1,021,716 | | \$54.98 |
| General Contractor Fee | 5.0% | \$51,086 | | \$2.75 |
| Subtotal | | \$1,072,802 | | \$57.73 |
| Design Contingency | 15.0% | \$160,920 | | \$8.66 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$) | | <u>\$1,233,722</u> | | \$66.39 |

Total Area: 18,584 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 300

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 11,191 | sf | \$2.00 | \$22,382 |
| Total - Floor & Roof Structures | | | | <u>\$22,382</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 11,191 | sf | \$1.15 | \$12,870 |
| Total - Roofing and Waterproofing | | | | <u>\$12,870</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 18,584 | sf | \$8.25 | \$153,317 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$153,317</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 18,584 | sf | \$1.15 | \$21,372 |
| Total - Plumbing Systems | | | | <u>\$21,372</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 1,746 | sf | \$20.00 | \$34,924 |
| Art Classroom | 5,391 | sf | \$25.00 | \$134,781 |
| Spray Booth | 95 | sf | \$50.00 | \$4,750 |
| Workroom / Wood shop / Lumber | 3,356 | sf | \$35.00 | \$117,469 |
| Saw Dust Collector | 149 | sf | \$50.00 | \$7,466 |
| Glazing Room / Project Room | 369 | sf | \$30.00 | \$11,075 |
| Computer Lab | 2,595 | sf | \$35.00 | \$90,825 |
| Editing Room | 706 | sf | \$30.00 | \$21,173 |
| TV Classroom | 959 | sf | \$30.00 | \$28,755 |
| Storage | 496 | sf | \$10.00 | \$4,961 |
| Mechanical / Electrical | 275 | sf | \$50.00 | \$13,750 |
| Closed Office | 104 | sf | \$25.00 | \$2,588 |
| Corridor / Hallways | 478 | sf | \$20.00 | \$9,553 |
| Restroom | 409 | sf | \$15.00 | \$6,128 |
| Music Technology | 694 | sf | \$25.00 | \$17,338 |
| Custodian | 72 | sf | \$20.00 | \$1,440 |
| Comm#1 | 78 | sf | \$30.00 | \$2,340 |
| Computer Equipment | 481 | sf | \$50.00 | \$24,063 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$533,376</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 18,584 | sf | \$1.00 | \$18,584 |
| HVAC Equipment connections, conduit and wire | 18,584 | sf | \$1.50 | \$27,876 |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 300

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| HVAC convenience power, outlets, connections, conduit and wire | 18,584 | sf | \$1.25 | \$23,230 |
| Remove, store and reinstall ceiling light fixtures and devices | 18,584 | sf | \$4.25 | \$78,982 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$148,671</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 18,584 | sf | \$1.25 | \$23,230 |
| Total - Fire Protection Systems | | | | <u>\$23,230</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 11,191 | sf | \$0.75 | \$8,393 |
| Demolish ceilings for new ductwork | 18,584 | sf | \$0.90 | \$16,726 |
| Miscellaneous demolition | 18,584 | sf | \$0.25 | \$4,646 |
| Total - Site Preparation and Demolition | | | | <u>\$29,765</u> |

BUILDING 400

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 400

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|--------------------|-----------|----------------|
| A) Shell (1-5) | | \$78,804 | | \$2.56 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$50,034 | | \$1.63 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$28,770 | | \$0.94 | |
| B) Interiors (6-7) | | \$253,663 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$253,663 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$1,077,351 | | \$35.04 |
| 10 Plumbing Systems | \$35,359 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$757,582 | | \$24.64 | |
| 12 Electrical Lighting, Power and Communications | \$245,976 | | \$8.00 | |
| 13 Fire Protection Systems | \$38,434 | | \$1.25 | |
| E) Site Construction (14-16) | | \$54,122 | | \$1.76 |
| 14 Site Preparation and Demolition | \$54,122 | | \$1.76 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$1,463,939 | | \$47.61 |
| General Conditions | 6.0% | \$87,836 | | \$2.86 |
| Subtotal | | \$1,551,775 | | \$50.47 |
| Bonds & Insurance | 2.0% | \$31,036 | | \$1.01 |
| Subtotal | | \$1,582,811 | | \$51.48 |
| General Contractor Fee | 5.0% | \$79,141 | | \$2.57 |
| Subtotal | | \$1,661,951 | | \$54.05 |
| Design Contingency | 15.0% | \$249,293 | | \$8.11 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$) | | \$1,911,244 | | \$62.16 |

Total Area: 30,747 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 400

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 25,017 | sf | \$2.00 | \$50,034 |
| Total - Floor & Roof Structures | | | | <u>\$50,034</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 25,017 | sf | \$1.15 | \$28,770 |
| Total - Roofing and Waterproofing | | | | <u>\$28,770</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 30,747 | sf | \$8.25 | \$253,663 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$253,663</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 30,747 | sf | \$1.15 | \$35,359 |
| Total - Plumbing Systems | | | | <u>\$35,359</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 7,694 | sf | \$25.00 | \$192,346 |
| Computer Lab | 1,867 | sf | \$30.00 | \$56,024 |
| Workroom | 91 | sf | \$25.00 | \$2,274 |
| Reception | 424 | sf | \$30.00 | \$12,707 |
| Career Center / MPR | 4,828 | sf | \$25.00 | \$120,688 |
| Dry Storage | 190 | sf | \$15.00 | \$2,850 |
| Storage | 822 | sf | \$15.00 | \$12,323 |
| Mechanical / Electrical | 138 | sf | \$50.00 | \$6,888 |
| Elevator / Elevator Machine Room | 35 | sf | \$50.00 | \$1,750 |
| Closed Office | 600 | sf | \$30.00 | \$18,005 |
| Open Office | 587 | sf | \$25.00 | \$14,668 |
| Corridor / Hallways | 5,980 | sf | \$20.00 | \$119,599 |
| Restroom | 922 | sf | \$15.00 | \$13,836 |
| Freezer / Refrigerator | 295 | sf | \$15.00 | \$4,431 |
| Custodian | 88 | sf | \$20.00 | \$1,760 |
| Kitchen | 597 | sf | \$50.00 | \$29,838 |
| Concessions | 670 | sf | \$40.00 | \$26,800 |
| Server / Data Room | 67 | sf | \$50.00 | \$3,363 |
| Reading Room and Book Stacks | 4,077 | sf | \$25.00 | \$101,932 |
| Open Air Seating | 581 | sf | \$20.00 | \$11,620 |
| Book Room | 194 | sf | \$20.00 | \$3,880 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$757,582</u> |

DETAIL ELEMENTS - BUILDING 400

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 30,747 | sf | \$1.00 | \$30,747 |
| HVAC Equipment connections, conduit and wire | 30,747 | sf | \$1.50 | \$46,121 |
| HVAC convenience power, outlets, connections, conduit and wire | 30,747 | sf | \$1.25 | \$38,434 |
| Remove, store and reinstall ceiling light fixtures and devices | 30,747 | sf | \$4.25 | \$130,675 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$245,976</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 30,747 | sf | \$1.25 | \$38,434 |
| Total - Fire Protection Systems | | | | <u>\$38,434</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 25,017 | sf | \$0.75 | \$18,763 |
| Demolish ceilings for new ductwork | 30,747 | sf | \$0.90 | \$27,672 |
| Miscellaneous demolition | 30,747 | sf | \$0.25 | \$7,687 |
| Total - Site Preparation and Demolition | | | | <u>\$54,122</u> |

BUILDING 500

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 500

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|--------------------|-----------|----------------|
| A) Shell (1-5) | | \$78,306 | | \$3.30 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$51,017 | | \$2.15 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$27,288 | | \$1.15 | |
| B) Interiors (6-7) | | \$195,764 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$195,764 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$859,022 | | \$36.20 |
| 10 Plumbing Systems | \$27,288 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$612,240 | | \$25.80 | |
| 12 Electrical Lighting, Power and Communications | \$189,832 | | \$8.00 | |
| 13 Fire Protection Systems | \$29,661 | | \$1.25 | |
| E) Site Construction (14-16) | | \$45,085 | | \$1.90 |
| 14 Site Preparation and Demolition | \$45,085 | | \$1.90 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$1,178,177 | | \$49.65 |
| General Conditions | 6.0% | \$70,691 | | \$2.98 |
| Subtotal | | \$1,248,867 | | \$52.63 |
| Bonds & Insurance | 2.0% | \$24,977 | | \$1.05 |
| Subtotal | | \$1,273,845 | | \$53.68 |
| General Contractor Fee | 5.0% | \$63,692 | | \$2.68 |
| Subtotal | | \$1,337,537 | | \$56.37 |
| Design Contingency | 15.0% | \$200,631 | | \$8.46 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$\$) | | \$1,538,167 | | \$64.82 |

Total Area: 23,729 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 500

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 23,729 | sf | \$2.15 | \$51,017 |
| Total - Floor & Roof Structures | | | | <u>\$51,017</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 23,729 | sf | \$1.15 | \$27,288 |
| Total - Roofing and Waterproofing | | | | <u>\$27,288</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 23,729 | sf | \$8.25 | \$195,764 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$195,764</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 23,729 | sf | \$1.15 | \$27,288 |
| Total - Plumbing Systems | | | | <u>\$27,288</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 17,320 | sf | \$20.00 | \$346,400 |
| Computer Classroom | 2,346 | sf | \$25.00 | \$58,650 |
| Mechanical / Electrical | 207 | sf | \$550.00 | \$113,850 |
| Corridor / Hallways | 3,550 | sf | \$25.00 | \$88,750 |
| Restroom | 306 | sf | \$15.00 | \$4,590 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$612,240</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 23,729 | sf | \$1.00 | \$23,729 |
| HVAC Equipment connections, conduit and wire | 23,729 | sf | \$1.50 | \$35,594 |
| HVAC convenience power, outlets, connections, conduit and wire | 23,729 | sf | \$1.25 | \$29,661 |
| Remove, store and reinstall ceiling light fixtures and devices | 23,729 | sf | \$4.25 | \$100,848 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$189,832</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 23,729 | sf | \$1.25 | \$29,661 |
| Total - Fire Protection Systems | | | | <u>\$29,661</u> |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 500

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|------------------------|
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 23,729 | sf | \$0.75 | \$17,797 |
| Demolish ceilings for new ductwork | 23,729 | sf | \$0.90 | \$21,356 |
| Miscellaneous demolition | 23,729 | sf | \$0.25 | <u>\$5,932</u> |
| Total - Site Preparation and Demolition | | | | <u>\$45,085</u> |

BUILDING 600

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 600

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|-------------------------|-----------|----------------|
| A) Shell (1-5) | | \$35,417 | | \$3.15 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$22,487 | | \$2.00 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$12,930 | | \$1.15 | |
| B) Interiors (6-7) | | \$92,760 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$92,760 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$406,403 | | \$36.15 |
| 10 Plumbing Systems | \$12,930 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$289,469 | | \$25.75 | |
| 12 Electrical Lighting, Power and Communications | \$89,949 | | \$8.00 | |
| 13 Fire Protection Systems | \$14,055 | | \$1.25 | |
| E) Site Construction (14-16) | | \$21,363 | | \$1.90 |
| 14 Site Preparation and Demolition | \$21,363 | | \$1.90 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$555,943 | | \$49.45 |
| General Conditions | 6.0% | \$33,357 | | \$2.97 |
| Subtotal | | \$589,299 | | \$52.41 |
| Bonds & Insurance | 2.0% | \$11,786 | | \$1.05 |
| Subtotal | | \$601,085 | | \$53.46 |
| General Contractor Fee | 5.0% | \$30,054 | | \$2.67 |
| Subtotal | | \$631,140 | | \$56.13 |
| Design Contingency | 15.0% | \$94,671 | | \$8.42 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$\$) | | <u>\$725,811</u> | | \$64.55 |

Total Area: 11,244 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 600

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 11,244 | sf | \$2.00 | \$22,487 |
| Total - Floor & Roof Structures | | | | <u>\$22,487</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 11,244 | sf | \$1.15 | \$12,930 |
| Total - Roofing and Waterproofing | | | | <u>\$12,930</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 11,244 | sf | \$8.25 | \$92,760 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$92,760</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 11,244 | sf | \$1.15 | \$12,930 |
| Total - Plumbing Systems | | | | <u>\$12,930</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom / Lecture Room | 3,605 | sf | \$25.00 | \$90,122 |
| Biology Lab | 2,605 | sf | \$30.00 | \$78,143 |
| Physics | 1,134 | sf | \$30.00 | \$34,022 |
| Storage | 757 | sf | \$10.00 | \$7,572 |
| Mechanical / Electrical | 103 | sf | \$50.00 | \$5,132 |
| Closed Office | 528 | sf | \$25.00 | \$13,199 |
| Corridor / Hallways | 1,806 | sf | \$20.00 | \$36,122 |
| Restroom | 276 | sf | \$15.00 | \$4,140 |
| Custodian | 16 | sf | \$20.00 | \$320 |
| Server / Data Room | 414 | sf | \$50.00 | \$20,697 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$289,469</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 11,244 | sf | \$1.00 | \$11,244 |
| HVAC Equipment connections, conduit and wire | 11,244 | sf | \$1.50 | \$16,865 |
| HVAC convenience power, outlets, connections, conduit and wire | 11,244 | sf | \$1.25 | \$14,055 |
| Remove, store and reinstall ceiling light fixtures and devices | 11,244 | sf | \$4.25 | \$47,785 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$89,949</u> |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 600

| Element | Quantity | Unit | Unit Cost | Total |
|---|----------|------|-----------|------------------------|
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 11,244 | sf | \$1.25 | \$14,055 |
| Total - Fire Protection Systems | | | | <u>\$14,055</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 11,244 | sf | \$0.75 | \$8,433 |
| Demolish ceilings for new ductwork | 11,244 | sf | \$0.90 | \$10,119 |
| Miscellaneous demolition | 11,244 | sf | \$0.25 | \$2,811 |
| Total - Site Preparation and Demolition | | | | <u>\$21,363</u> |

BUILDING 700

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING 700

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|---------------------------|-----------|----------------|
| A) Shell (1-5) | | \$35,204 | | \$2.24 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$22,352 | | \$1.42 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$12,852 | | \$0.82 | |
| B) Interiors (6-7) | | \$129,860 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$129,860 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$618,560 | | \$39.30 |
| 10 Plumbing Systems | \$18,102 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$454,858 | | \$28.90 | |
| 12 Electrical Lighting, Power and Communications | \$125,925 | | \$8.00 | |
| 13 Fire Protection Systems | \$19,676 | | \$1.25 | |
| E) Site Construction (14-16) | | \$26,484 | | \$1.68 |
| 14 Site Preparation and Demolition | \$26,484 | | \$1.68 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$810,108 | | \$51.47 |
| General Conditions | 6.0% | \$48,606 | | \$3.09 |
| Subtotal | | \$858,715 | | \$54.55 |
| Bonds & Insurance | 2.0% | \$17,174 | | \$1.09 |
| Subtotal | | \$875,889 | | \$55.65 |
| General Contractor Fee | 5.0% | \$43,794 | | \$2.78 |
| Subtotal | | \$919,683 | | \$58.43 |
| Design Contingency | 15.0% | \$137,952 | | \$8.76 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$) | | <u>\$1,057,636</u> | | \$67.19 |

Total Area: 15,741 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 700

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 11,176 | sf | \$2.00 | \$22,352 |
| Total - Floor & Roof Structures | | | | <u>\$22,352</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 11,176 | sf | \$1.15 | \$12,852 |
| Total - Roofing and Waterproofing | | | | <u>\$12,852</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 15,741 | sf | \$8.25 | \$129,860 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$129,860</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 15,741 | sf | \$1.15 | \$18,102 |
| Total - Plumbing Systems | | | | <u>\$18,102</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom / Lecture | 4,972 | sf | \$25.00 | \$124,312 |
| Chemistry Lab | 1,823 | sf | \$45.00 | \$82,018 |
| Biology Lab | 1,394 | sf | \$40.00 | \$55,760 |
| Workroom | 338 | sf | \$25.00 | \$8,450 |
| Small Room | 132 | sf | \$30.00 | \$3,953 |
| Reception | 1,148 | sf | \$30.00 | \$34,450 |
| Storage | 550 | sf | \$10.00 | \$5,504 |
| Mechanical / Electrical | 26 | sf | \$50.00 | \$1,275 |
| Closed Office | 1,519 | sf | \$30.00 | \$45,583 |
| Restroom | 825 | sf | \$15.00 | \$12,376 |
| Prep Room | 306 | sf | \$25.00 | \$7,638 |
| Custodian | 140 | sf | \$20.00 | \$2,805 |
| Lounge | 1,055 | sf | \$25.00 | \$26,375 |
| Data Room | 32 | sf | \$50.00 | \$1,600 |
| Nurse Office | 330 | sf | \$25.00 | \$8,244 |
| Aquarium | 105 | sf | \$30.00 | \$3,150 |
| Conference Room | 1,046 | sf | \$30.00 | \$31,367 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$454,858</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 15,741 | sf | \$1.00 | \$15,741 |
| HVAC Equipment connections, conduit and wire | 15,741 | sf | \$1.50 | \$23,611 |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING 700

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| HVAC convenience power, outlets, connections, conduit and wire | 15,741 | sf | \$1.25 | \$19,676 |
| Remove, store and reinstall ceiling light fixtures and devices | 15,741 | sf | \$4.25 | \$66,898 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$125,925</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 15,741 | sf | \$1.25 | \$19,676 |
| Total - Fire Protection Systems | | | | <u>\$19,676</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 11,176 | sf | \$0.75 | \$8,382 |
| Demolish ceilings for new ductwork | 15,741 | sf | \$0.90 | \$14,167 |
| Miscellaneous demolition | 15,741 | sf | \$0.25 | \$3,935 |
| Total - Site Preparation and Demolition | | | | <u>\$26,484</u> |

AQUATICS CENTER

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - AQUATICS CENTER

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|-------------------------|-----------|----------------|
| A) Shell (1-5) | | \$11,813 | | \$3.15 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$7,500 | | \$2.00 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$4,313 | | \$1.15 | |
| B) Interiors (6-7) | | \$30,938 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$30,938 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$173,300 | | \$46.21 |
| 10 Plumbing Systems | \$4,313 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$134,300 | | \$35.81 | |
| 12 Electrical Lighting, Power and Communications | \$30,000 | | \$8.00 | |
| 13 Fire Protection Systems | \$4,688 | | \$1.25 | |
| E) Site Construction (14-16) | | \$7,125 | | \$1.90 |
| 14 Site Preparation and Demolition | \$7,125 | | \$1.90 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$223,175 | | \$59.51 |
| General Conditions | 6.0% | \$13,391 | | \$3.57 |
| Subtotal | | \$236,566 | | \$63.08 |
| Bonds & Insurance | 2.0% | \$4,731 | | \$1.26 |
| Subtotal | | \$241,297 | | \$64.35 |
| General Contractor Fee | 5.0% | \$12,065 | | \$3.22 |
| Subtotal | | \$253,362 | | \$67.56 |
| Design Contingency | 15.0% | \$38,004 | | \$10.13 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$\$) | | <u>\$291,366</u> | | \$77.70 |

Total Area: 3,750 SF

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - AQUATICS CENTER

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 3,750 | sf | \$2.00 | \$7,500 |
| Total - Floor & Roof Structures | | | | <u>\$7,500</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 3,750 | sf | \$1.15 | \$4,313 |
| Total - Roofing and Waterproofing | | | | <u>\$4,313</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 3,750 | sf | \$8.25 | \$30,938 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$30,938</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 3,750 | sf | \$1.15 | \$4,313 |
| Total - Plumbing Systems | | | | <u>\$4,313</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Shower / Locker | 682 | sf | \$15.00 | \$10,230 |
| Ticket Office | 149 | sf | \$30.00 | \$4,470 |
| Concession | 181 | sf | \$35.00 | \$6,335 |
| Closed Office | 149 | sf | \$30.00 | \$4,470 |
| Chemical Storage | 108 | sf | \$75.00 | \$8,100 |
| Storage | 170 | sf | \$10.00 | \$1,700 |
| Equipment Room | 1,179 | sf | \$50.00 | \$58,950 |
| Closed Office | 114 | sf | \$30.00 | \$3,420 |
| Classroom | 801 | sf | \$35.00 | \$28,035 |
| Closed Office | 113 | sf | \$30.00 | \$3,390 |
| Electrical Room | 54 | sf | \$50.00 | \$2,700 |
| Telephone / Data Room | 50 | sf | \$50.00 | \$2,500 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$134,300</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 3,750 | sf | \$1.00 | \$3,750 |
| HVAC Equipment connections, conduit and wire | 3,750 | sf | \$1.50 | \$5,625 |
| HVAC convenience power, outlets, connections, conduit and wire | 3,750 | sf | \$1.25 | \$4,688 |
| Remove, store and reinstall ceiling light fixtures and devices | 3,750 | sf | \$4.25 | \$15,938 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$30,000</u> |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - AQUATICS CENTER

| Element | Quantity | Unit | Unit Cost | Total |
|---|----------|------|-----------|-----------------------|
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 3,750 | sf | \$1.25 | \$4,688 |
| Total - Fire Protection Systems | | | | <u>\$4,688</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 3,750 | sf | \$0.75 | \$2,813 |
| Demolish ceilings for new ductwork | 3,750 | sf | \$0.90 | \$3,375 |
| Miscellaneous demolition | 3,750 | sf | \$0.25 | \$938 |
| Total - Site Preparation and Demolition | | | | <u>\$7,125</u> |

GYMNASIUM

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - GYMNASIUM

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|--------------------|-----------|----------------|
| A) Shell (1-5) | | \$80,493 | | \$3.15 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$51,107 | | \$2.00 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$29,386 | | \$1.15 | |
| B) Interiors (6-7) | | \$123,167 | | \$4.82 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$123,167 | | \$4.82 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$980,112 | | \$38.36 |
| 10 Plumbing Systems | \$29,386 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$714,358 | | \$27.96 | |
| 12 Electrical Lighting, Power and Communications | \$204,426 | | \$8.00 | |
| 13 Fire Protection Systems | \$31,942 | | \$1.25 | |
| E) Site Construction (14-16) | | \$38,990 | | \$1.53 |
| 14 Site Preparation and Demolition | \$38,990 | | \$1.53 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$1,222,762 | | \$47.85 |
| General Conditions | 6.0% | \$73,366 | | \$2.87 |
| Subtotal | | \$1,296,127 | | \$50.72 |
| Bonds & Insurance | 2.0% | \$25,923 | | \$1.01 |
| Subtotal | | \$1,322,050 | | \$51.74 |
| General Contractor Fee | 5.0% | \$66,102 | | \$2.59 |
| Subtotal | | \$1,388,152 | | \$54.32 |
| Design Contingency | 15.0% | \$208,223 | | \$8.15 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$) | | \$1,596,375 | | \$62.47 |

Total Area: 25,553 SF

Coronado High School HVAC Installation
Coronado, California
Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - GYMNASIUM

| Element | Quantity | Unit | Unit Cost | Total |
|--|-----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 25,553 | sf | \$2.00 | \$51,107 |
| Total - Floor & Roof Structures | | | | <u>\$51,107</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 25,553 | sf | \$1.15 | \$29,386 |
| Total - Roofing and Waterproofing | | | | <u>\$29,386</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 14,929.30 | sf | \$8.25 | \$123,167 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$123,167</u> |
| Total - Stairs and Vertical Transportation | | | | |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 25,553 | sf | \$1.15 | \$29,386 |
| Total - Plumbing Systems | | | | <u>\$29,386</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Gymnasium | 10,624 | sf | \$35.00 | \$371,840 |
| Classroom | 462 | sf | \$25.00 | \$11,550 |
| Weight Room | 880 | sf | \$35.00 | \$30,800 |
| Concessions Room | 117 | sf | \$30.00 | \$3,510 |
| Ticket Office | 96 | sf | \$25.00 | \$2,400 |
| Storage | 1,368 | sf | \$10.00 | \$13,678 |
| Mechanical/Electrical | 373 | sf | \$50.00 | \$18,625 |
| Closed Office | 1,281 | sf | \$30.00 | \$38,430 |
| Corridor/Vestibule/Stairs | 4,471 | sf | \$20.00 | \$89,420 |
| Restroom | 1,537 | sf | \$15.00 | \$23,055 |
| Restroom and Dressing Rooms | 2,798 | sf | \$20.00 | \$55,960 |
| Custodian | 48 | sf | \$15.00 | \$720 |
| Conference Room | 117 | sf | \$30.00 | \$3,510 |
| Press Box | 270 | sf | \$30.00 | \$8,100 |
| Training Room | 176 | sf | \$35.00 | \$6,160 |
| Lobby | 840 | sf | \$35.00 | \$29,400 |
| Laundry Room | 96 | sf | \$75.00 | \$7,200 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$714,358</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 25,553 | sf | \$1.00 | \$25,553 |
| HVAC Equipment connections, conduit and wire | 25,553 | sf | \$1.50 | \$38,330 |

Coronado High School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - GYMNASIUM

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| HVAC convenience power, outlets, connections, conduit and wire | 25,553 | sf | \$1.25 | \$31,942 |
| Remove, store and reinstall ceiling light fixtures and devices | 25,553 | sf | \$4.25 | \$108,602 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$204,426</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 25,553 | sf | \$1.25 | \$31,942 |
| Total - Fire Protection Systems | | | | <u>\$31,942</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 25,553 | sf | \$0.75 | \$19,165 |
| Demolish ceilings for new ductwork | 14,929 | sf | \$0.90 | \$13,436 |
| Miscellaneous demolition | 25,553 | sf | \$0.25 | \$6,388 |
| Total - Site Preparation and Demolition | | | | <u>\$38,990</u> |



Coronado Middle School HVAC Installation
Coronado, California

Rough Order of Magnitude Statement of Probable Cost
February 2, 2016
Cumming Project No. 15-01073.00

Prepared for Coronado Unified School District

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Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

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INTRODUCTION

Project Description

The scope of work for this estimate involves the installation of a new HVAC system, including demolition and repairs to existing finishes, upgrade to electrical service, removal and reinstallation of existing ceiling fixtures and devices.

Basis of Estimate

This estimate is based on the Coronado Middle School Spacial Area Database (undated), prepared by Coronado Unified School District.

Basis for Quantities

Wherever possible, this estimate has been based upon the actual measurement of different items of work. For the remaining items, parametric measurements were used in conjunction with references from other projects of a similar nature.

Basis for Unit Costs

Unit costs as contained herein are based on current San Diego, CA - Prevailing Wage prices. Subcontractor's overhead and profit is included in each line item unit cost. This overhead and profit covers each subcontractor's cost for labor burden, materials and equipment sales taxes, field overhead, home office overhead, and profit. The general contractor's overhead and profit is shown separately on the Summary.

Sources for Pricing

This estimate was prepared by a team of qualified cost consultants experienced in estimating construction costs at all stages of design. These consultants have used pricing data from Cumming's database for construction, updated to reflect current conditions in the Coronado, California area. In some cases, quotes were solicited from outside sources to supplement in-house pricing data.

Subcontractor's Mark-ups

Depending on the trade, subcontractor mark-ups can range from 5% to 15% of the raw cost for that particular item of work. It should be noted that Design Assist Sub Contractors may influence Sub Contractor costs.

Design Allowances

An allowance of 15.0% for undeveloped design details has been included in the summary of this estimate. As the design of each system is further developed, details which historically increase cost became apparent and must be incorporated into the estimate.

Construction Contingency

It is prudent for all program budgets to include an allowance for change orders which occur during construction. These change orders normally increase the cost of the project. It is recommended that a 5 - 10% contingency is carried in this respect. These costs are not included within this estimate.

Items Excluded from the Base Estimate

- 1 Professional fees, inspections and testing.
- 2 Escalation
- 3 Plan check fees and building permit fees.
- 4 Furnishings, fixtures and equipment (FF&E), except built-in cabinets, counters and other casework indicated.
- 5 Major site and building structures demolition unless noted in body of estimate.
- 6 Costs of hazardous material surveys, abatements, and disposals unless noted in estimate.
- 7 Costs of offsite construction unless noted in estimate.

INTRODUCTION

- 8 Construction contingency costs.
- 9 Repairs or upgrades to other existing HVAC or Electrical equipment. An allowance for minor upgrades to existing electrical panels for the added HVAC system is included in the estimate.
- 10 Modifications / upgrades to roof structure generally.
- 11 Moving / relocation costs. The estimates assumed the District will remove and reinstall any loose furniture and fixtures as needed during construction.
- 12 Phasing HVAC installation.

Items Affecting the Cost Estimate

Items which may change the estimated construction cost include, but are not limited to:

- 1 Modifications to the scope of work included in this estimate.
- 2 Restrictive technical specifications or excessive contract conditions.
- 3 Any specified item of equipment, material, or product that cannot be obtained from at least 3 different sources.
- 4 Any other non-competitive bid situations.
- 5 Bids delayed beyond the projected schedule.

Statement of Probable Cost

Cumming 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. This opinion of the probable cost of construction is made on the basis of the experience, qualifications, and best judgment of a professional consultant familiar with the construction industry. Cumming, however, cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from this or subsequent cost estimates.

Cumming has no control over the quality, completeness, intricacy, constructability, or coordination of design documents. Cumming also has no control over the amount of funds available for the project. We, therefore, cannot be responsible for any design revision costs incurred in the event that this estimate is in excess of the budget.

Cumming's staff of professional cost consultants has prepared this estimate in accordance with generally accepted principles and practices. This staff is available to discuss its contents with any interested party.

Recommendations for Cost Control

Cumming recommends that the Owner and the Architect carefully review this entire document to insure that it reflects their design intent. Requests for modifications of any apparent errors or omissions to this document must be made to Cumming within ten days of receipt of this estimate, otherwise, it will be understood that the contents have been concurred with and accepted. If the project is over budget, or there are unresolved budgeting issues, alternate systems/schemes should be evaluated before proceeding into further design phases.

It is recommended that further cost estimates be prepared throughout design by Cumming to determine overall cost changes subsequent to the preparation of this preliminary estimate. These future estimates will have detailed breakdowns indicating materials by type, kind, and size, priced by their respective units of measure.

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

CONSTRUCTION COST SUMMARY

| Element | | Area | Cost / SF | Total |
|--|------------|-----------|--------------|-------------|
| A | BUILDING A | 51,777 | \$62.64 | \$3,243,194 |
| B | BUILDING B | 13,519 | \$64.65 | \$874,045 |
| C | BUILDING C | 8,550 | \$79.59 | \$680,524 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st QTR 2016 \$\$) | | 73,846 SF | \$64.97 / SF | \$4,797,764 |

Coronado Middle School HVAC Installation
Coronado, California
Estimate Summary by Category
Rough Order of Magnitude

02/02/16

| Element | A BUILDING 1 51,777 sf | | | B BUILDING 2 13,519 sf | | | C BUILDING 3 8,550 sf | | | TOTAL 73,846 sf | | |
|--|------------------------------|--------------------|----------------|------------------------------|------------------|----------------|-----------------------------|------------------|----------------|--------------------|--------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$102,505 | \$1.98 | | \$29,848 | \$2.21 | | \$29,925 | \$3.50 | | \$162,278 | \$2.20 |
| 1 Foundations | | | | | | | | | | | | |
| 2 Vertical Structure | | | | | | | | | | | | |
| 3 Floor & Roof Structures | \$63,080 | | | \$17,056 | | | \$17,100 | | | \$97,236 | | |
| 4 Exterior Cladding | | | | | | | | | | | | |
| 5 Roofing and Waterproofing | \$39,425 | | | \$12,792 | | | \$12,825 | | | \$65,042 | | |
| B) Interiors (6-7) | | \$427,160 | \$8.25 | | \$111,531 | \$8.25 | | \$70,538 | \$8.25 | | \$609,229 | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | | | | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$427,160 | | | \$111,531 | | | \$70,538 | | | \$609,229 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | | | | | | | |
| 8 Function Equipment and Specialties | | | | | | | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$1,879,182 | \$36.29 | | \$506,162 | \$37.44 | | \$404,548 | \$47.32 | | \$2,789,893 | \$37.78 |
| 10 Plumbing Systems | \$51,777 | | | \$15,547 | | | \$9,833 | | | \$77,156 | | |
| 11 Heating, Ventilation and Air Conditioning | \$1,283,747 | | | \$341,907 | | | \$300,665 | | | \$1,926,319 | | |
| 12 Electrical Lighting, Power and Communications | \$478,937 | | | \$131,810 | | | \$83,363 | | | \$694,110 | | |
| 13 Fire Protection Systems | \$64,721 | | | \$16,899 | | | \$10,688 | | | \$92,307 | | |
| E) Site Construction (14-16) | | \$75,314 | \$1.45 | | \$21,943 | \$1.62 | | \$16,245 | \$1.90 | | \$113,501 | \$1.54 |
| 14 Site Preparation and Demolition | \$75,314 | | | \$21,943 | | | \$16,245 | | | \$113,501 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | | | | | | | |
| 16 Utilities on Site | | | | | | | | | | | | |
| Subtotal Cost | | \$2,484,161 | \$47.98 | | \$669,485 | \$49.52 | | \$521,255 | \$60.97 | | \$3,674,901 | \$49.76 |
| General Conditions 6.0% | | \$149,050 | \$2.88 | | \$40,169 | \$2.97 | | \$31,275 | \$3.66 | | \$220,494 | \$2.99 |
| Bonds & Insurance 2.0% | | \$52,664 | \$1.02 | | \$14,193 | \$1.05 | | \$11,051 | \$1.29 | | \$77,908 | \$1.06 |
| General Contractor Fee 5.0% | | \$134,294 | \$2.59 | | \$36,192 | \$2.68 | | \$28,179 | \$3.30 | | \$198,665 | \$2.69 |
| Design Contingency 15.0% | | \$423,025 | \$8.17 | | \$114,006 | \$8.43 | | \$88,764 | \$10.38 | | \$625,795 | \$8.47 |
| Escalation to MOC, Excluded N/A | | | | | | | | | | | | |
| Total Construction Cost (1st Qtr. 2016 \$) | | <u>\$3,243,194</u> | <u>\$62.64</u> | | <u>\$874,045</u> | <u>\$64.65</u> | | <u>\$680,524</u> | <u>\$79.59</u> | | <u>\$4,797,764</u> | <u>\$64.97</u> |

Coronado Middle School HVAC Installation
Coronado, California
Rough Order of Magnitude

BUILDING A

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING A

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-------------|---------------------------|-----------|----------------|
| A) Shell (1-5) | | \$102,505 | | \$1.98 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$63,080 | | \$1.22 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$39,425 | | \$0.76 | |
| B) Interiors (6-7) | | \$427,160 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$427,160 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$1,879,182 | | \$36.29 |
| 10 Plumbing Systems | \$51,777 | | \$1.00 | |
| 11 Heating, Ventilation and Air Conditioning | \$1,283,747 | | \$24.79 | |
| 12 Electrical Lighting, Power and Communications | \$478,937 | | \$9.25 | |
| 13 Fire Protection Systems | \$64,721 | | \$1.25 | |
| E) Site Construction (14-16) | | \$75,314 | | \$1.45 |
| 14 Site Preparation and Demolition | \$75,314 | | \$1.45 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$2,484,161 | | \$47.98 |
| General Conditions | 6.0% | \$149,050 | | \$2.88 |
| Subtotal | | \$2,633,211 | | \$50.86 |
| Bonds & Insurance | 2.0% | \$52,664 | | \$1.02 |
| Subtotal | | \$2,685,875 | | \$51.87 |
| General Contractor Fee | 5.0% | \$134,294 | | \$2.59 |
| Subtotal | | \$2,820,169 | | \$54.47 |
| Design Contingency | 15.0% | \$423,025 | | \$8.17 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$) | | <u>\$3,243,194</u> | | \$62.64 |

Total Area: 51,777 SF

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING A

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|---------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 31,540 | sf | \$2.00 | \$63,080 |
| Total - Floor & Roof Structures | | | | <u>\$63,080</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 31,540 | sf | \$1.25 | \$39,425 |
| Total - Roofing and Waterproofing | | | | <u>\$39,425</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 51,777 | sf | \$8.25 | \$427,160 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$427,160</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 51,777 | sf | \$1.00 | \$51,777 |
| Total - Plumbing Systems | | | | <u>\$51,777</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 13,372 | sf | \$20.00 | \$267,438 |
| Math/Science Classroom | 11,384 | sf | \$25.00 | \$284,604 |
| Small Group Instruction | 1,955 | sf | \$30.00 | \$58,647 |
| Workroom | 2,024 | sf | \$25.00 | \$50,600 |
| Library / IMC | 3,568 | sf | \$30.00 | \$107,040 |
| Storage | 1,126 | sf | \$10.00 | \$11,262 |
| Mechanical/Electrical | 1,719 | sf | \$50.00 | \$85,930 |
| Closed Office | 608 | sf | \$30.00 | \$18,240 |
| Corridor/Vestibule | 5,413 | sf | \$25.00 | \$135,313 |
| Restroom | 2,604 | sf | \$15.00 | \$39,062 |
| Nurse / Health / Infirmary | 385 | sf | \$25.00 | \$9,625 |
| Testing / Evaluation | 232 | sf | \$25.00 | \$5,800 |
| Custodian | 373 | sf | \$20.00 | \$7,456 |
| Lounge/Kitchen | 954 | sf | \$40.00 | \$38,152 |
| Conference Room | 480 | sf | \$35.00 | \$16,800 |
| I.S.S. | 216 | sf | \$30.00 | \$6,480 |
| Lobby | 494 | sf | \$35.00 | \$17,302 |
| Elevator Machine Room | 106 | sf | \$50.00 | \$5,300 |
| Copy Room | 72 | sf | \$40.00 | \$2,880 |
| Outdoor Work Area | 100 | sf | \$10.00 | \$1,000 |
| Other Areas | 4,593 | sf | \$25.00 | \$114,816 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$1,283,747</u> |

DETAIL ELEMENTS - BUILDING A

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 51,777 | sf | \$1.00 | \$51,777 |
| HVAC Equipment connections, conduit and wire | 51,777 | sf | \$2.25 | \$116,498 |
| HVAC convenience power, outlets, connections, conduit and wire | 51,777 | sf | \$1.25 | \$64,721 |
| Remove, store and reinstall ceiling light fixtures and devices | 51,777 | sf | \$4.75 | \$245,941 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$478,937</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 51,777 | sf | \$1.25 | \$64,721 |
| Total - Fire Protection Systems | | | | <u>\$64,721</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 31,540 | sf | \$0.50 | \$15,770 |
| Demolish ceilings for new ductwork | 51,777 | sf | \$0.90 | \$46,599 |
| Miscellaneous demolition | 51,777 | sf | \$0.25 | \$12,944 |
| Total - Site Preparation and Demolition | | | | <u>\$75,314</u> |

BUILDING B

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING B

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|-------------------------|-----------|----------------|
| A) Shell (1-5) | | \$29,848 | | \$2.21 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$17,056 | | \$1.26 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$12,792 | | \$0.95 | |
| B) Interiors (6-7) | | \$111,531 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$111,531 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$506,162 | | \$37.44 |
| 10 Plumbing Systems | \$15,547 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$341,907 | | \$25.29 | |
| 12 Electrical Lighting, Power and Communications | \$131,810 | | \$9.75 | |
| 13 Fire Protection Systems | \$16,899 | | \$1.25 | |
| E) Site Construction (14-16) | | \$21,943 | | \$1.62 |
| 14 Site Preparation and Demolition | \$21,943 | | \$1.62 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$669,485 | | \$49.52 |
| General Conditions | 6.0% | \$40,169 | | \$2.97 |
| Subtotal | | \$709,654 | | \$52.49 |
| Bonds & Insurance | 2.0% | \$14,193 | | \$1.05 |
| Subtotal | | \$723,847 | | \$53.54 |
| General Contractor Fee | 5.0% | \$36,192 | | \$2.68 |
| Subtotal | | \$760,039 | | \$56.22 |
| Design Contingency | 15.0% | \$114,006 | | \$8.43 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$\$) | | <u>\$874,045</u> | | \$64.65 |

Total Area: 13,519 SF

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING B

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 8,528 | sf | \$2.00 | \$17,056 |
| Total - Floor & Roof Structures | | | | <u>\$17,056</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 8,528 | sf | \$1.50 | \$12,792 |
| Total - Roofing and Waterproofing | | | | <u>\$12,792</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 13,519 | sf | \$8.25 | \$111,531 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$111,531</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 13,519 | sf | \$1.15 | \$15,547 |
| Total - Plumbing Systems | | | | <u>\$15,547</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 1,024 | sf | \$25.00 | \$25,600 |
| Computer Classroom | 1,707 | sf | \$30.00 | \$51,197 |
| Media / Special Ed | 1,024 | sf | \$30.00 | \$30,720 |
| RSP | 1,024 | sf | \$25.00 | \$25,600 |
| Tech Lab / Future Lab | 1,707 | sf | \$35.00 | \$59,730 |
| Testing | 114 | sf | \$40.00 | \$4,580 |
| Group Activity Room | 1,556 | sf | \$35.00 | \$54,469 |
| Storage | 504 | sf | \$10.00 | \$5,042 |
| Mechanical / Electrical | 1,067 | sf | \$50.00 | \$53,340 |
| Corridor | 820 | sf | \$20.00 | \$16,400 |
| Restroom | 610 | sf | \$15.00 | \$9,149 |
| Outdoor Work Area | 2,119 | sf | | |
| Other Areas | 243 | sf | \$25.00 | \$6,082 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$341,907</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 13,519 | sf | \$1.50 | \$20,278 |
| HVAC Equipment connections | 13,519 | sf | \$2.25 | \$30,418 |
| HVAC convenience power, outlets, connections, conduit and wire | 13,519 | sf | \$1.25 | \$16,899 |
| Remove, store and reinstall ceiling light fixtures and devices | 13,519 | sf | \$4.75 | \$64,215 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$131,810</u> |

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING B

| Element | Quantity | Unit | Unit Cost | Total |
|---|----------|------|-----------|------------------------|
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 13,519 | sf | \$1.25 | \$16,899 |
| Total - Fire Protection Systems | | | | <u>\$16,899</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 8,528 | sf | \$0.75 | \$6,396 |
| Demolish ceilings for new ductwork | 13,519 | sf | \$0.90 | \$12,167 |
| Miscellaneous demolition | 13,519 | sf | \$0.25 | \$3,380 |
| Total - Site Preparation and Demolition | | | | <u>\$21,943</u> |

BUILDING C

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING C

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|-------------------------|-----------|----------------|
| A) Shell (1-5) | | \$29,925 | | \$3.50 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$17,100 | | \$2.00 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$12,825 | | \$1.50 | |
| B) Interiors (6-7) | | \$70,538 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$70,538 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$404,548 | | \$47.32 |
| 10 Plumbing Systems | \$9,833 | | \$1.15 | |
| 11 Heating, Ventilation and Air Conditioning | \$300,665 | | \$35.17 | |
| 12 Electrical Lighting, Power and Communications | \$83,363 | | \$9.75 | |
| 13 Fire Protection Systems | \$10,688 | | \$1.25 | |
| E) Site Construction (14-16) | | \$16,245 | | \$1.90 |
| 14 Site Preparation and Demolition | \$16,245 | | \$1.90 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$521,255 | | \$60.97 |
| General Conditions | 6.0% | \$31,275 | | \$3.66 |
| Subtotal | | \$552,531 | | \$64.62 |
| Bonds & Insurance | 2.0% | \$11,051 | | \$1.29 |
| Subtotal | | \$563,581 | | \$65.92 |
| General Contractor Fee | 5.0% | \$28,179 | | \$3.30 |
| Subtotal | | \$591,760 | | \$69.21 |
| Design Contingency | 15.0% | \$88,764 | | \$10.38 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st Qtr. 2016 \$\$) | | <u>\$680,524</u> | | \$79.59 |

Total Area: 8,550 SF

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING C

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 8,550 | sf | \$2.00 | \$17,100 |
| Total - Floor & Roof Structures | | | | <u>\$17,100</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 8,550 | sf | \$1.50 | \$12,825 |
| Total - Roofing and Waterproofing | | | | <u>\$12,825</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 8,550 | sf | \$8.25 | \$70,538 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$70,538</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 8,550 | sf | \$1.15 | \$9,833 |
| Total - Plumbing Systems | | | | <u>\$9,833</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Practice Room | 510 | sf | \$30.00 | \$15,304 |
| Storage | 541 | sf | \$10.00 | \$5,410 |
| Access Ramp | 362 | sf | \$20.00 | \$7,241 |
| Assembly / Indoor Eating / Band / Choral / Stage | 6,154 | sf | \$35.00 | \$215,390 |
| Food Service Area / Kitchen | 912 | sf | \$50.00 | \$45,600 |
| Food Services Storage | 240 | sf | \$20.00 | \$4,800 |
| Other Areas | 277 | sf | \$25.00 | \$6,921 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$300,665</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade | 8,550 | sf | \$1.50 | \$12,825 |
| HVAC Equipment connections | 8,550 | sf | \$2.25 | \$19,238 |
| HVAC convenience power, outlets, connections, conduit and wire | 8,550 | sf | \$1.25 | \$10,688 |
| Remove, store and reinstall ceiling light fixtures and devices | 8,550 | sf | \$4.75 | \$40,613 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$83,363</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 8,550 | sf | \$1.25 | \$10,688 |
| Total - Fire Protection Systems | | | | <u>\$10,688</u> |

Coronado Middle School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING C

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|------------------------|
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 8,550 | sf | \$0.75 | \$6,413 |
| Demolish ceilings for new ductwork | 8,550 | sf | \$0.90 | \$7,695 |
| Miscellaneous demolition | 8,550 | sf | \$0.25 | \$2,138 |
| Total - Site Preparation and Demolition | | | | <u>\$16,245</u> |



Village Elementary School HVAC Installation
Coronado, California

Rough Order of Magnitude Statement of Probable Cost
February 2, 2016
Cumming Project No. 15-01073.00

Prepared for Coronado Unified School District

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Village Elementary School HVAC Installation

Coronado, California

Rough Order of Magnitude

02/02/16

INTRODUCTION

Project Description

The scope of work for this estimate involves the installation of a new HVAC system, including demolition and repairs to existing finishes, upgrade to electrical service, removal and reinstallation of existing ceiling fixtures and devices.

Basis of Estimate

This estimate is based on the Village Elementary School Spacial Area Database (undated), prepared by Coronado Unified School District.

Basis for Quantities

Wherever possible, this estimate has been based upon the actual measurement of different items of work. For the remaining items, parametric measurements were used in conjunction with references from other projects of a similar nature.

Basis for Unit Costs

Unit costs as contained herein are based on current San Diego, CA - Prevailing Wage prices. Subcontractor's overhead and profit is included in each line item unit cost. This overhead and profit covers each subcontractor's cost for labor burden, materials and equipment sales taxes, field overhead, home office overhead, and profit. The general contractor's overhead and profit is shown separately on the Summary.

Sources for Pricing

This estimate was prepared by a team of qualified cost consultants experienced in estimating construction costs at all stages of design. These consultants have used pricing data from Cumming's database for construction, updated to reflect current conditions in the Coronado, California area. In some cases, quotes were solicited from outside sources to supplement in-house pricing data.

Subcontractor's Mark-ups

Depending on the trade, subcontractor mark-ups can range from 5% to 15% of the raw cost for that particular item of work. It should be noted that Design Assist Sub Contractors may influence Sub Contractor costs.

Design Allowances

An allowance of 15.0% for undeveloped design details has been included in the summary of this estimate. As the design of each system is further developed, details which historically increase cost become apparent and must be incorporated into the estimate.

General Contractor's Overhead and Profit

Jobsite general conditions, home office overhead, profit, and bond are shown on the Summary of this estimate. It is our opinion that for this project, a rate of 13.0% is appropriate to cover these mark-ups. (6.0% for General Conditions, 2.0% for Bonds & Insurance and 5.0% for Overhead and Profit)

Construction Contingency

It is prudent for all program budgets to include an allowance for change orders which occur during construction. These change orders normally increase the cost of the project. It is recommended that a 5 - 10% contingency is carried in this respect. These costs are not included within this estimate.

Items Excluded from the Base Estimate

- 1 Professional fees, inspections and testing.
- 2 Escalation
- 3 Plan check fees and building permit fees.

INTRODUCTION

- 4 Furnishings, fixtures and equipment (FF&E), except built-in cabinets, counters and other casework indicated.
- 5 Major site and building structures demolition unless noted in body of estimate.
- 6 Costs of hazardous material surveys, abatements, and disposals unless noted in estimate.
- 7 Costs of offsite construction unless noted in estimate.
- 8 Construction contingency costs.
- 9 Repairs or upgrades to other existing HVAC or Electrical equipment. An allowance for minor upgrades to existing electrical panels for the added HVAC system is included in the estimate.
- 10 Modifications / upgrades to roof structure generally.
- 11 Moving / relocation costs. The estimates assumed the District will remove and reinstall any loose furniture and fixtures as needed during construction.
- 12 Phasing HVAC installation.

Items Affecting the Cost Estimate

Items which may change the estimated construction cost include, but are not limited to:

- 1 Modifications to the scope of work included in this estimate.
- 2 Restrictive technical specifications or excessive contract conditions.
- 3 Any specified item of equipment, material, or product that cannot be obtained from at least 3 different sources.
- 4 Any other non-competitive bid situations.
- 5 Bids delayed beyond the projected schedule.

Statement of Probable Cost

Cumming 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. This opinion of the probable cost of construction is made on the basis of the experience, qualifications, and best judgment of a professional consultant familiar with the construction industry. Cumming, however, cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from this or subsequent cost estimates.

Cumming has no control over the quality, completeness, intricacy, constructability, or coordination of design documents. Cumming also has no control over the amount of funds available for the project. We, therefore, cannot be responsible for any design revision costs incurred in the event that this estimate is in excess of the budget.

Cumming's staff of professional cost consultants has prepared this estimate in accordance with generally accepted principles and practices. This staff is available to discuss its contents with any interested party.

Recommendations for Cost Control

Cumming recommends that the Owner and the Architect carefully review this entire document to insure that it reflects their design intent. Requests for modifications of any apparent errors or omissions to this document must be made to Cumming within ten days of receipt of this estimate, otherwise, it will be understood that the contents have been concurred with and accepted. If the project is over budget, or there are unresolved budgeting issues, alternate systems/schemes should be evaluated before proceeding into further design phases.

It is recommended that further cost estimates be prepared throughout design by Cumming to determine overall cost changes subsequent to the preparation of this preliminary estimate. These future estimates will have detailed breakdowns indicating materials by type, kind, and size, priced by their respective units of measure.

Village Elementary School HVAC Installation
 Coronado, California
 Rough Order of Magnitude

02/02/16

CONSTRUCTION COST SUMMARY

| Element | | Area | Cost / SF | Total |
|--|--------------|------------------|---------------------|--------------------|
| A | BUILDING V-A | 47,618 | \$64.99 | \$3,094,832 |
| B | BUILDING V-B | 33,553 | \$65.02 | \$2,181,757 |
| C | BUILDING V-C | 10,730 | \$74.65 | \$801,042 |
| TOTAL ESTIMATED CONSTRUCTION COST (1st QTR 2016 \$\$) | | 91,901 SF | \$66.13 / SF | \$6,077,631 |

Village Elementary School HVAC Installation
Coronado, California
Estimate Summary by Category
Rough Order of Magnitude

02/02/16

| Element | A BUILDING V-A 47,618 sf | | | B BUILDING V-B 33,553 sf | | | C BUILDING V-C 10,730 sf | | | TOTAL 91,901 sf | | |
|---|--------------------------------|--------------------|----------------|--------------------------------|--------------------|----------------|--------------------------------|------------------|----------------|--------------------|--------------------|----------------|
| | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF | Subtotal | Total | Cost/SF |
| A) Shell (1-5) | | \$95,835 | \$2.01 | | \$49,585 | \$1.48 | | \$47,250 | \$4.40 | | \$192,670 | \$2.10 |
| 1 Foundations | | | | | | | | | | | | |
| 2 Vertical Structure | | | | | | | | | | | | |
| 3 Floor & Roof Structures | \$63,890 | | | \$32,084 | | | \$31,500 | | | \$127,474 | | |
| 4 Exterior Cladding | | | | | | | | | | | | |
| 5 Roofing and Waterproofing | \$31,945 | | | \$17,501 | | | \$15,750 | | | \$65,196 | | |
| B) Interiors (6-7) | | \$392,849 | \$8.25 | | \$276,812 | \$8.25 | | \$88,523 | \$8.25 | | \$758,183 | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | | | | | | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$392,849 | | | \$276,812 | | | \$88,523 | | | \$758,183 | | |
| C) Equipment and Vertical Transportation (8-9) | | | | | | | | | | | | |
| 8 Function Equipment and Specialties | | | | | | | | | | | | |
| 9 Stairs and Vertical Transportation | | | | | | | | | | | | |
| D) Mechanical and Electrical (10-13) | | \$1,814,299 | \$38.10 | | \$1,297,408 | \$38.67 | | \$459,156 | \$42.79 | | \$3,570,863 | \$38.86 |
| 10 Plumbing Systems | \$47,618 | | | \$33,553 | | | \$10,730 | | | \$91,901 | | |
| 11 Heating, Ventilation and Air Conditioning | \$1,259,550 | | | \$906,516 | | | \$334,151 | | | \$2,500,216 | | |
| 12 Electrical Lighting, Power and Communications | \$447,609 | | | \$315,398 | | | \$100,862 | | | \$863,869 | | |
| 13 Fire Protection Systems | \$59,523 | | | \$41,941 | | | \$13,413 | | | \$114,876 | | |
| E) Site Construction (14-16) | | \$67,539 | \$1.42 | | \$47,336 | \$1.41 | | \$18,640 | \$1.74 | | \$133,514 | \$1.45 |
| 14 Site Preparation and Demolition | \$67,539 | | | \$47,336 | | | \$18,640 | | | \$133,514 | | |
| 15 Site Paving, Structures & Landscaping | | | | | | | | | | | | |
| 16 Utilities on Site | | | | | | | | | | | | |
| Subtotal Cost | | \$2,370,522 | \$49.78 | | \$1,671,141 | \$49.81 | | \$613,568 | \$57.18 | | \$4,655,230 | \$50.65 |
| General Conditions 6.0% | | \$142,231 | \$2.99 | | \$100,268 | \$2.99 | | \$36,814 | \$3.43 | | \$279,314 | \$3.04 |
| Bonds & Insurance 2.0% | | \$50,255 | \$1.06 | | \$35,428 | \$1.06 | | \$13,008 | \$1.21 | | \$98,691 | \$1.07 |
| General Contractor Fee 5.0% | | \$128,150 | \$2.69 | | \$90,342 | \$2.69 | | \$33,169 | \$3.09 | | \$251,662 | \$2.74 |
| Design Contingency 15.0% | | \$403,674 | \$8.48 | | \$284,577 | \$8.48 | | \$104,484 | \$9.74 | | \$792,735 | \$8.63 |
| Escalation to MOC, Excluded N/A | | | | | | | | | | | | |
| Total Construction Cost | | <u>\$3,094,832</u> | <u>\$64.99</u> | | <u>\$2,181,757</u> | <u>\$65.02</u> | | <u>\$801,042</u> | <u>\$74.65</u> | | <u>\$6,077,631</u> | <u>\$66.13</u> |

Village Elementary School HVAC Installation
Coronado, California
Rough Order of Magnitude

BUILDING V-A

Village Elementary School HVAC Installation
 Coronado, California
 Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING V-A

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-------------|---------------------------|-----------|----------------|
| A) Shell (1-5) | | \$95,835 | | \$2.01 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$63,890 | | \$1.34 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$31,945 | | \$0.67 | |
| B) Interiors (6-7) | | \$392,849 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$392,849 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$1,814,299 | | \$38.10 |
| 10 Plumbing Systems | \$47,618 | | \$1.00 | |
| 11 Heating, Ventilation and Air Conditioning | \$1,259,550 | | \$26.45 | |
| 12 Electrical Lighting, Power and Communications | \$447,609 | | \$9.40 | |
| 13 Fire Protection Systems | \$59,523 | | \$1.25 | |
| E) Site Construction (14-16) | | \$67,539 | | \$1.42 |
| 14 Site Preparation and Demolition | \$67,539 | | \$1.42 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$2,370,522 | | \$49.78 |
| General Conditions | 6.0% | \$142,231 | | \$2.99 |
| Subtotal | | \$2,512,753 | | \$52.77 |
| Bonds & Insurance | 2.0% | \$50,255 | | \$1.06 |
| Subtotal | | \$2,563,008 | | \$53.82 |
| General Contractor Fee | 5.0% | \$128,150 | | \$2.69 |
| Subtotal | | \$2,691,158 | | \$56.52 |
| Design Contingency | 15.0% | \$403,674 | | \$8.48 |
| Subtotal | | \$3,094,832 | | \$64.99 |
| Escalation to MOC, 02/02/16 | | | | |
| TOTAL ESTIMATED CONSTRUCTION COST | | <u>\$3,094,832</u> | | \$64.99 |

Total Area: 47,618 SF

Village Elementary School HVAC Installation
Coronado, California
Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING V-A

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|---------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 25,556 | sf | \$2.50 | \$63,890 |
| Total - Floor & Roof Structures | | | | <u>\$63,890</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair shingle roofing | 25,556 | sf | \$1.25 | \$31,945 |
| Total - Roofing and Waterproofing | | | | <u>\$31,945</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 47,618 | sf | \$8.25 | \$392,849 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$392,849</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 47,618 | sf | \$1.00 | \$47,618 |
| Total - Plumbing Systems | | | | <u>\$47,618</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 23,884 | sf | \$25.00 | \$597,089 |
| Workroom | 1,502 | sf | \$30.00 | \$45,060 |
| Storage | 263 | sf | \$10.00 | \$2,630 |
| Closed Office | 981 | sf | \$30.00 | \$29,440 |
| Open Office | 2,127 | sf | \$25.00 | \$53,175 |
| Corridor | 3,198 | sf | \$20.00 | \$63,965 |
| Restroom | 845 | sf | \$15.00 | \$12,674 |
| Nurse/Health/Exam Area and Cot Room | 548 | sf | \$30.00 | \$16,425 |
| Custodian | 28 | sf | \$20.00 | \$570 |
| Lounge/Kitchenette | 700 | sf | \$40.00 | \$28,000 |
| Conference Room | 257 | sf | \$35.00 | \$9,004 |
| IT Room | 19 | sf | \$50.00 | \$963 |
| Copy Room/Phone Room | 259 | sf | \$40.00 | \$10,370 |
| Other Areas | 13,006 | sf | \$30.00 | \$390,186 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$1,259,550</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 47,618 | sf | \$1.15 | \$54,761 |
| HVAC Equipment connections, conduit and wire | 47,618 | sf | \$2.25 | \$107,141 |
| HVAC convenience power, outlets, connections, conduit and wire | 47,618 | sf | \$1.25 | \$59,523 |
| Remove, store and reinstall ceiling light fixtures and devices | 47,618 | sf | \$4.75 | \$226,186 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$447,609</u> |

Village Elementary School HVAC Installation
Coronado, California
Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING V-A

| Element | Quantity | Unit | Unit Cost | Total |
|---|----------|------|-----------|------------------------|
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 47,618 | sf | \$1.25 | <u>\$59,523</u> |
| Total - Fire Protection Systems | | | | <u>\$59,523</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 25,556 | sf | \$0.50 | \$12,778 |
| Demolish ceilings for new ductwork | 47,618 | sf | \$0.90 | \$42,856 |
| Miscellaneous demolition | 47,618 | sf | \$0.25 | <u>\$11,905</u> |
| Total - Site Preparation and Demolition | | | | <u>\$67,539</u> |

BUILDING V-B

Village Elementary School HVAC Installation
Coronado, California
Rough Order of Magnitude

02/02/16

PROJECT SUMMARY - BUILDING V-B

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|---------------------------|-----------|----------------|
| A) Shell (1-5) | | \$49,585 | | \$1.48 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$32,084 | | \$0.96 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$17,501 | | \$0.52 | |
| B) Interiors (6-7) | | \$276,812 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$276,812 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$1,297,408 | | \$38.67 |
| 10 Plumbing Systems | \$33,553 | | \$1.00 | |
| 11 Heating, Ventilation and Air Conditioning | \$906,516 | | \$27.02 | |
| 12 Electrical Lighting, Power and Communications | \$315,398 | | \$9.40 | |
| 13 Fire Protection Systems | \$41,941 | | \$1.25 | |
| E) Site Construction (14-16) | | \$47,336 | | \$1.41 |
| 14 Site Preparation and Demolition | \$47,336 | | \$1.41 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$1,671,141 | | \$49.81 |
| General Conditions 6.0% | | \$100,268 | | \$2.99 |
| Subtotal | | \$1,771,410 | | \$52.79 |
| Bonds & Insurance 2.0% | | \$35,428 | | \$1.06 |
| Subtotal | | \$1,806,838 | | \$53.85 |
| General Contractor Fee 5.0% | | \$90,342 | | \$2.69 |
| Subtotal | | \$1,897,180 | | \$56.54 |
| Design Contingency 15.0% | | \$284,577 | | \$8.48 |
| Subtotal | | \$2,181,757 | | \$65.02 |
| Escalation to MOC, 02/02/16 | | | | |
| TOTAL ESTIMATED CONSTRUCTION COST | | <u>\$2,181,757</u> | | \$65.02 |

Total Area: 33,553 SF

Village Elementary School HVAC Installation
Coronado, California
Rough Order of Magnitude

02/02/16

DETAIL ELEMENTS - BUILDING V-B

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 11,667 | sf | \$2.75 | \$32,084 |
| Total - Floor & Roof Structures | | | | <u>\$32,084</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 11,667 | sf | \$1.50 | \$17,501 |
| Total - Roofing and Waterproofing | | | | <u>\$17,501</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 33,553 | sf | \$8.25 | \$276,812 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$276,812</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 33,553 | sf | \$1.00 | \$33,553 |
| Total - Plumbing Systems | | | | <u>\$33,553</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Classroom | 7,261 | sf | \$25.00 | \$181,514 |
| Science Classroom | 993 | sf | \$30.00 | \$29,790 |
| Music Room | 1,023 | sf | \$35.00 | \$35,805 |
| Computer Room | 948 | sf | \$35.00 | \$33,180 |
| AV Classroom | 284 | sf | \$35.00 | \$9,923 |
| Workroom | 1,129 | sf | \$30.00 | \$33,871 |
| Kindergarten Activity Room | 2,495 | sf | \$25.00 | \$62,380 |
| Storage | 579 | sf | \$10.00 | \$5,787 |
| Mechanical / Electrical | 216 | sf | \$50.00 | \$10,815 |
| Elevator / Elevator Machine Room | 110 | sf | \$50.00 | \$5,501 |
| Closed Office | 248 | sf | \$30.00 | \$7,440 |
| Corridor | 1,765 | sf | \$20.00 | \$35,300 |
| Restroom | 1,605 | sf | \$15.00 | \$24,075 |
| Custodian | 312 | sf | \$20.00 | \$6,235 |
| Kitchen | 195 | sf | \$50.00 | \$9,738 |
| Reading Center | 1,830 | sf | \$35.00 | \$64,033 |
| Library | 3,690 | sf | \$35.00 | \$129,141 |
| Display | 38 | sf | \$30.00 | \$1,140 |
| Vault | 90 | sf | \$25.00 | \$2,250 |
| Other Areas | 8,744 | sf | \$25.00 | \$218,600 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$906,516</u> |

Village Elementary School HVAC Installation
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02/02/16

DETAIL ELEMENTS - BUILDING V-B

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 33,553 | sf | \$1.15 | \$38,586 |
| HVAC Equipment connections, conduit and wire | 33,553 | sf | \$2.25 | \$75,494 |
| HVAC convenience power, outlets, connections, conduit and wire | 33,553 | sf | \$1.25 | \$41,941 |
| Remove, store and reinstall ceiling light fixtures and devices | 33,553 | sf | \$4.75 | <u>\$159,377</u> |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$315,398</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 33,553 | sf | \$1.25 | <u>\$41,941</u> |
| Total - Fire Protection Systems | | | | <u>\$41,941</u> |
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 11,667 | sf | \$0.75 | \$8,750 |
| Demolish ceilings for new ductwork | 33,553 | sf | \$0.90 | \$30,198 |
| Miscellaneous demolition | 33,553 | sf | \$0.25 | <u>\$8,388</u> |
| Total - Utilities on Site | | | | |

BUILDING V-C

Village Elementary School HVAC Installation
 Coronado, California
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PROJECT SUMMARY - BUILDING V-C

| Element | Subtotal | Total | Cost / SF | Cost / SF |
|---|-----------|-------------------------|-----------|----------------|
| A) Shell (1-5) | | \$47,250 | | \$4.40 |
| 1 Foundations | | | | |
| 2 Vertical Structure | | | | |
| 3 Floor & Roof Structures | \$31,500 | | \$2.94 | |
| 4 Exterior Cladding | | | | |
| 5 Roofing and Waterproofing | \$15,750 | | \$1.47 | |
| B) Interiors (6-7) | | \$88,523 | | \$8.25 |
| 6 Interior Partitions, Doors and Glazing | | | | |
| 7 Floor, Wall and Ceiling Finishes | \$88,523 | | \$8.25 | |
| C) Equipment and Vertical Transportation (8-9) | | | | |
| 8 Function Equipment and Specialties | | | | |
| 9 Stairs and Vertical Transportation | | | | |
| D) Mechanical and Electrical (10-13) | | \$459,156 | | \$42.79 |
| 10 Plumbing Systems | \$10,730 | | \$1.00 | |
| 11 Heating, Ventilation and Air Conditioning | \$334,151 | | \$31.14 | |
| 12 Electrical Lighting, Power and Communications | \$100,862 | | \$9.40 | |
| 13 Fire Protection Systems | \$13,413 | | \$1.25 | |
| E) Site Construction (14-16) | | \$18,640 | | \$1.74 |
| 14 Site Preparation and Demolition | \$18,640 | | \$1.74 | |
| 15 Site Paving, Structures & Landscaping | | | | |
| 16 Utilities on Site | | | | |
| Subtotal | | \$613,568 | | \$57.18 |
| General Conditions 6.0% | | \$36,814 | | \$3.43 |
| Subtotal | | \$650,382 | | \$60.61 |
| Bonds & Insurance 2.0% | | \$13,008 | | \$1.21 |
| Subtotal | | \$663,389 | | \$61.83 |
| General Contractor Fee 5.0% | | \$33,169 | | \$3.09 |
| Subtotal | | \$696,559 | | \$64.92 |
| Design Contingency 15.0% | | \$104,484 | | \$9.74 |
| Subtotal | | \$801,042 | | \$74.65 |
| Escalation to MOC, 02/02/16 | | | | |
| TOTAL ESTIMATED CONSTRUCTION COST | | <u>\$801,042</u> | | \$74.65 |

Total Area: 10,730 SF

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DETAIL ELEMENTS - BUILDING V-C

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|-------------------------|
| 3 Floor & Roof Structures | | | | |
| Structural upgrades to support new HVAC equipment, including roof curbs, patch and repair roof sheathing | 12,600 | sf | \$2.50 | \$31,500 |
| Total - Floor & Roof Structures | | | | <u>\$31,500</u> |
| 5 Roofing and Waterproofing | | | | |
| Patch and repair roofing | 12,600 | sf | \$1.25 | \$15,750 |
| Total - Roofing and Waterproofing | | | | <u>\$15,750</u> |
| 7 Floor, Wall and Ceiling Finishes | | | | |
| Patch and repair finishes, including ceiling replacement | 10,730 | sf | \$8.25 | \$88,523 |
| Total - Floor, Wall and Ceiling Finishes | | | | <u>\$88,523</u> |
| 10 Plumbing Systems | | | | |
| Natural Gas | | | | |
| Modify and extend existing gas piping to HVAC units | 10,730 | sf | \$1.00 | \$10,730 |
| Total - Plumbing Systems | | | | <u>\$10,730</u> |
| 11 Heating, Ventilation and Air Conditioning | | | | |
| Air-side equipment, distribution, controls, etc. | | | | |
| Area Types | | | | |
| Storage | 929 | sf | \$10.00 | \$9,286 |
| Closed Office | 149 | sf | \$30.00 | \$4,470 |
| Restroom | 285 | sf | \$15.00 | \$4,268 |
| Assembly / Cafeteria / Physical Ed / Stage | 7,592 | sf | \$35.00 | \$265,720 |
| Custodian | 72 | sf | \$20.00 | \$1,430 |
| Freezer | 128 | sf | \$15.00 | \$1,924 |
| Kitchen | 510 | sf | \$40.00 | \$20,400 |
| Other Areas | 1,066 | sf | \$25.00 | \$26,654 |
| Total - Heating, Ventilation and Air Conditioning | | | | <u>\$334,151</u> |
| 12 Electrical Lighting, Power and Communications | | | | |
| Service and distribution upgrade, assumed minor work | 10,730 | sf | \$1.15 | \$12,340 |
| HVAC Equipment connections, conduit and wire | 10,730 | sf | \$2.25 | \$24,143 |
| HVAC convenience power, outlets, connections, conduit and wire | 10,730 | sf | \$1.25 | \$13,413 |
| Remove, store and reinstall ceiling light fixtures and devices | 10,730 | sf | \$4.75 | \$50,968 |
| Total - Electrical Lighting, Power and Communications | | | | <u>\$100,862</u> |
| 13 Fire Protection Systems | | | | |
| Fire sprinklers, protect in place, adjust as required | 10,730 | sf | \$1.25 | \$13,413 |
| Total - Fire Protection Systems | | | | <u>\$13,413</u> |

Village Elementary School HVAC Installation
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DETAIL ELEMENTS - BUILDING V-C

| Element | Quantity | Unit | Unit Cost | Total |
|--|----------|------|-----------|------------------------|
| 14 Site Preparation and Demolition | | | | |
| Demolition | | | | |
| Roof demolition for new HVAC equipment | 12,600 | sf | \$0.50 | \$6,300 |
| Demolish ceilings for new ductwork | 10,730 | sf | \$0.90 | \$9,657 |
| Miscellaneous demolition | 10,730 | sf | \$0.25 | <u>\$2,683</u> |
| Total - Site Preparation and Demolition | | | | <u>\$18,640</u> |