

Midpeninsula Regional Open Space District

R-19-41 Meeting 19-10 April 10, 2019

### AGENDA ITEM

## AGENDA ITEM 6

Authorization to Solicit Bids for the South Area Field Office Project

## GENERAL MANAGER'S RECOMMENDATION

Authorize the General Manager to solicit construction bids for South Area Field Office Project.

#### SUMMARY

On February 27, 2019, Midpeninsula Regional Open Space District (District) submitted plans and documents to the City of Campbell (City) for Building, Site, and other necessary permits to repurpose the industrial building located at 240 Cristich Lane in Campbell as the District's new South Area Field Office. This report provides the Board of Directors (Board) with an update on the project status, including the anticipated schedule and estimated cost. The next step is to prepare the bid documents to solicit construction bids for the project. The Release of Bids is scheduled for July 2019. Funds for the project will be included in the Fiscal Year (FY) 2019-20 Budget. Funding is available via the 2017 Parity Bond and/or from the Committed for Infrastructure Reserve Fund.

### BACKGROUND

The District has long sought to locate an additional, permanent staff facility in the southern reaches of its jurisdiction, providing a management presence and a staging area for tools, materials, and equipment to service its southerly preserves. Operational needs for a larger and more functional field office located in the southern area of the District continue to increase in part due to the opening of new preserve areas to public access (Mount Umunhum in 2017 and Bear Creek Redwoods in June 2019).

In March 2017, the Board approved the purchase of an industrial property at 240 Cristich Lane in the City of Campbell as the site of a new South Area Field Office (SAO, R-17-38). The new SAO will house staff from the Land & Facilities and Visitor Services Departments, serve as a storage and service center for field equipment, and allow the public to drop in to acquire information about the District. The property provides the following District benefits:

- 1. Central location with great access and reduced travel time to South Area Preserves (Sierra Azul, El Sereno, St Joseph's Hill and Bear Creek Redwoods).
- 2. Includes municipal utility services and infrastructure to support a field office/corporation yard.
- 3. Reuses a developed industrial site with an existing building for a similar purpose and avoids developing open space lands for this use.
- 4. Expedites bringing a new facility online.
- 5. Less costly alternative as compared to new development.

- 6. Potential for expansion, if needed, when adjacent industrial properties come up for sale.
- 7. Accessible location via multiple modes of transportation.
- 8. Offers opportunity for satellite office space for administrative staff.

In September 2017, the District acquired a Conditional Use Permit (CUP) from the City to use the property as a new field office and corporation yard. As Cristich Lane is a private street, the CUP requires the District to make an irrevocable offer of dedication for public street purposes and a public service easement prior to the issuance of any grading or building permits. This item will come before the Board at a future meeting.

In December 2017, the Board authorized the General Manager to enter into a multi-year contract with Terry Martin and Associates (TMA) for architecture/engineering design, permitting assistance, and construction administration services to prepare the detailed construction plans to repurpose the site for District use (R-17-130). These detailed plans are required to secure the necessary City permits for the site improvements and to solicit the construction bids for the project.

#### DISCUSSION

#### SAO Design and Permitting

The site for the new SAO is located in a light-industrial zone in the City of Campbell. The main building is a "butler" metal building, constructed in the 1960's, with a footprint of approximately 5,600 square foot. The building has served as a repair shop for buses and has had several unfinished and unpermitted interior upgrades throughout its life. This "butler" building's original enclosure is galvanized corrugated metal with visible wear and tear on its windows, doors, roll doors and skylights. The structural integrity of the building was assessed as part of the site feasibility study, focusing on the opportunity to refurbish rather than build new. Refurbishing the existing structure will maximize the 29,490 square foot lot, and save time and money compared to rebuilding a new structure. There is also one (1) semi-built, unpermitted equipment storage structure.

The existing building conditions and site configurations are not suitable for District needs. Improvements are necessary to accommodate District operational functions, parking requirements, Americans with Disabilities Act (ADA) code upgrades, and to meet the Conditional Use Permit approval conditions. See Attachment 1 for Site and Architectural Plans. New site and building improvements include:

- Interior insulation and space reconfiguration
- Exterior building siding and roof repair
- Repurposing the existing fuel tank
- Asphalt concrete paving and striping for 24 parking spaces
- Automatic vehicular gate
- Site lighting and security fencing
- Signage and flagpole
- Curb, gutter, and sidewalk
- Landscaping improvements
- Stormwater treatment
- Trash and recycling enclosure
- Enlarged mezzanine for storage

The District has worked closely with TMA on an aggressive design and permitting schedule. Below is a summary of the major milestones completed to date.

Completed Milestones	Dates Completed
Completed Design Development plans	June 4, 2018
Structural Assessment	June 22, 2018
Review and confirm program elements and department needs	July 25, 2018
for Land & Facilities and Visitor Services	
Selection of building material and finishes	August 7, 2018
50% Construction Documents plans	August 13, 2018
90% Cost Estimate	August 21, 2018
90% Construction Documents plans	September 25, 2018
Value engineering to reduce project costs	December 3, 2018
95% Construction Documents plans	January 18, 2019
City of Campbell permit submittal	February 27, 2019

#### Project Construction Cost Estimate and Budget

A summary of planned site improvements and associated costs is shown in the table below (refer to Attachment 2 for cost estimate dated September 11, 2018).

		Building	Sitework	Overall Totals
Elements		Total	Total	Total
1 General Conditions (see below)				
2 Sitework		\$ 91,000.00	\$ 747,608.00	\$ 838,608.00
3 Concrete		\$ 60,904.00		\$ 60,904.00
4 Masonry				
5 Metals		\$ 141,875.00		\$ 141,875.00
6 Wood & Plastics		\$ 416,512.00		\$ 416,512.00
7 Thermal & Moisture		\$ 69,429.00		\$ 69,429.00
8 Doors & Windows		\$ 160,440.00		\$ 160,440.00
9 Finishes		\$ 308,565.00		\$ 308,565.00
10 Specialties		\$ 52,062.00		\$ 52,062.00
14 Conveying		\$ 30,000.00		\$ 30,000.00
15 Mechanical		\$ 223,217.00		\$ 223,217.00
16 Electrical		\$ 401,068.00		\$ 401,068.00
Subtotal Cost		\$1,955,071.00	\$ 747,608.00	\$ 2,702,679.00
General Conditions	15.3%	\$ 298,148.00	\$ 114,010.00	\$ 412,159.00
Bonds & Insurance	2.0%	\$ 45,064.00	\$ 17,232.00	\$ 62,297.00
Contractor's Fee	8.0%	\$ 183,863.00	\$ 70,308.00	\$ 254,171.00
Design Contingency	15.0%	\$ 372,322.00	\$ 142,374.00	\$ 514,696.00
Escalation to MOC, 05/31/19	4.0%	\$ 114,677.00	\$ 43,852.00	\$ 158,529.00
Initial Estimated Construction Cost		\$2,969,145.00	\$ 1,135,385.00	\$ 4,104,530.00
Value Engineering Deduction		<i>\</i>	÷ 1,100,000.00	\$ 439,619.00
Final Estimated Construction Cost				\$ 3,664,911.00

The cost estimate includes required code upgrades, repairs to extend the life of the property and main butler building, District programmatic needs for a field office and corporation yard, and upgrades to satisfy City CUP requirements. The initial construction cost estimate was approximately \$4.10 million. This estimate was reduced by approximately \$440,000 through value engineering by removing scope of work, reducing product quality or quantity, and/or developing bid alternates. The final estimated construction cost is approximately \$3.66 million. The items removed or reduced from the project were discussed with the Land & Facilities and Visitor Services departments to ensure that the final design meets District programmatic and functionality needs.

#### FISCAL IMPACT

Funding of \$4.1 million is available via the 2017 Parity Bond and/or in the Committed for Infrastructure Reserve Fund. Additionally, to generate the most lease revenue from the SAO property during the project design and permitting process, the District has leased the property to the prior owner from October 2, 2017 through May 31, 2019, generating approximately \$242,000 in lease income.

The project is not funded by Measure AA.

#### **PUBLIC NOTICE**

Public notice of this Agenda Item was provided as required by the Brown Act.

#### **CEQA COMPLIANCE**

District staff prepared a Categorical Exemption for the project and determined that the project would not result in any impacts to the environment. The District found that the proposed refurbishment and improvements at 240 Cristich Lane and its subsequent use as a field office and corporation yard are categorically exempt from CEQA pursuant to CEQA Guidelines Sections 15301, 15302, 15303, 15304, and 15311.

*Section 15301 – Existing Facilities:* The project proposes interior and exterior alterations to the existing industrial building that would involve a negligible or no expansion of use. The project will generate vehicle trips equivalent to the trips of the previous occupancy of the building and would not result in any significant traffic impacts. The proposed modifications will not substantially change the site's function as an industrial building with employees and surface parking.

Section 15302 – Replacement or Reconstruction: The project includes the demolition and removal of an unfinished wooden accessory structure, and construction of a new storage building (250 sf) and shed (700 sf) of substantially the same purpose and capacity at the same location.

Section 15303 – New Construction or Conversion of Small Structures: The project includes construction of new storage building (250 sf) and shed (700 sf), replacing an unfinished accessory structure at the rear of the site.

*Section 15304 – Minor Alterations to Land*: The project includes new landscaping and minor trenching and backfilling where the surface is restored. There will be no extensive grading on site.

*Section 15311 – Accessory Structures*: The project includes the placement of an on premise sign and flagpole that would be appurtenant to the District's facility.

A Notice of Exemption was filed with the County of Santa Clara on July 21, 2017 and was posted for a period of 30 days in accordance with CEQA. As a Responsible Agency under CEQA, the City of Campbell concurred that the project qualified for a categorical exemption at the time the City issued the Conditional Use Permit.

#### NEXT STEPS

The table below lists the remaining project milestones.

Upcoming Milestones	Target Dates
First round of City of Campbell review comments	April 2019
Release Request for Bids for Construction	July 2019
Receive City of Campbell permits	August 2019
Award of Contract	September 2019
Complete Construction	July 2020
Move In	August 2020

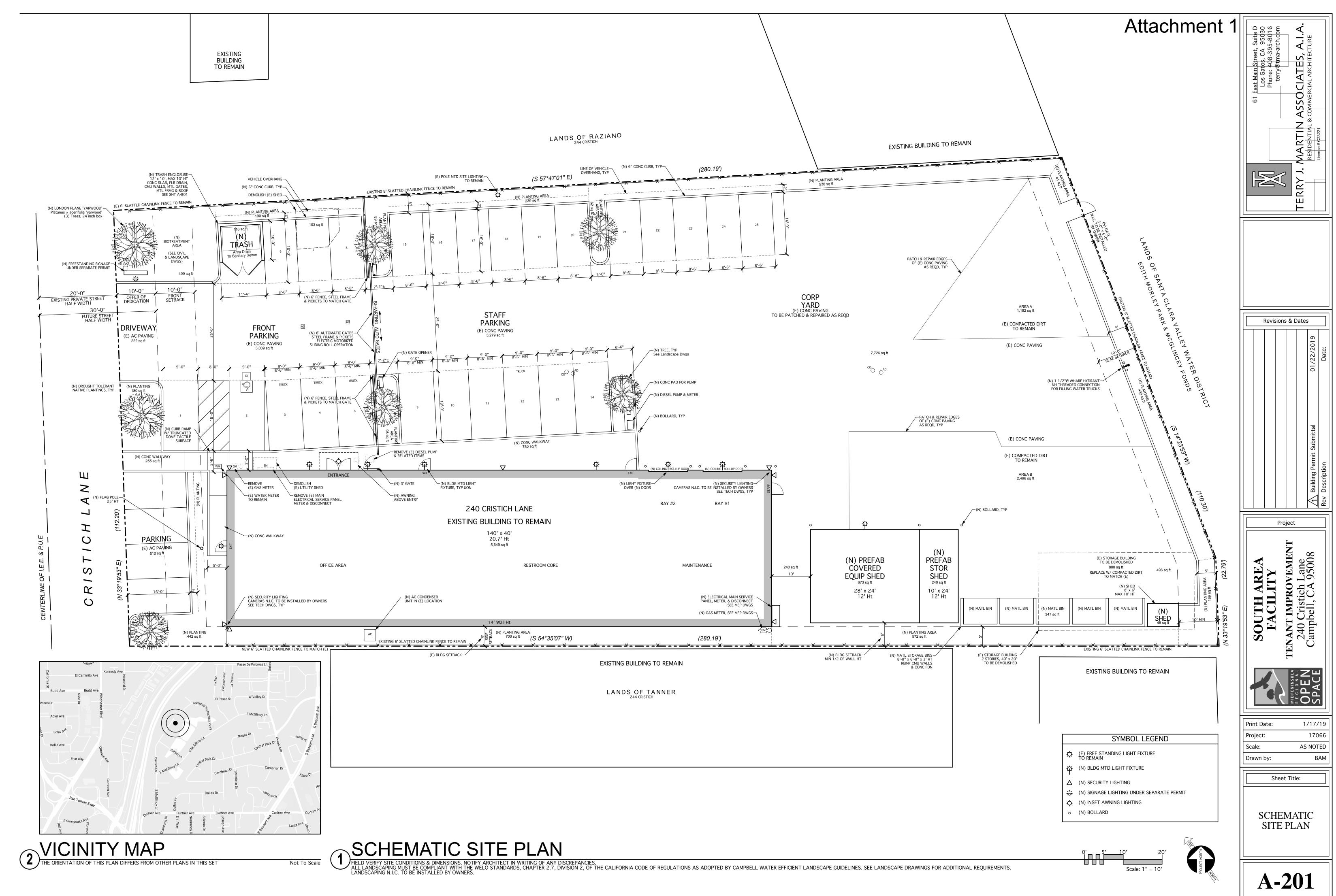
Attachment:

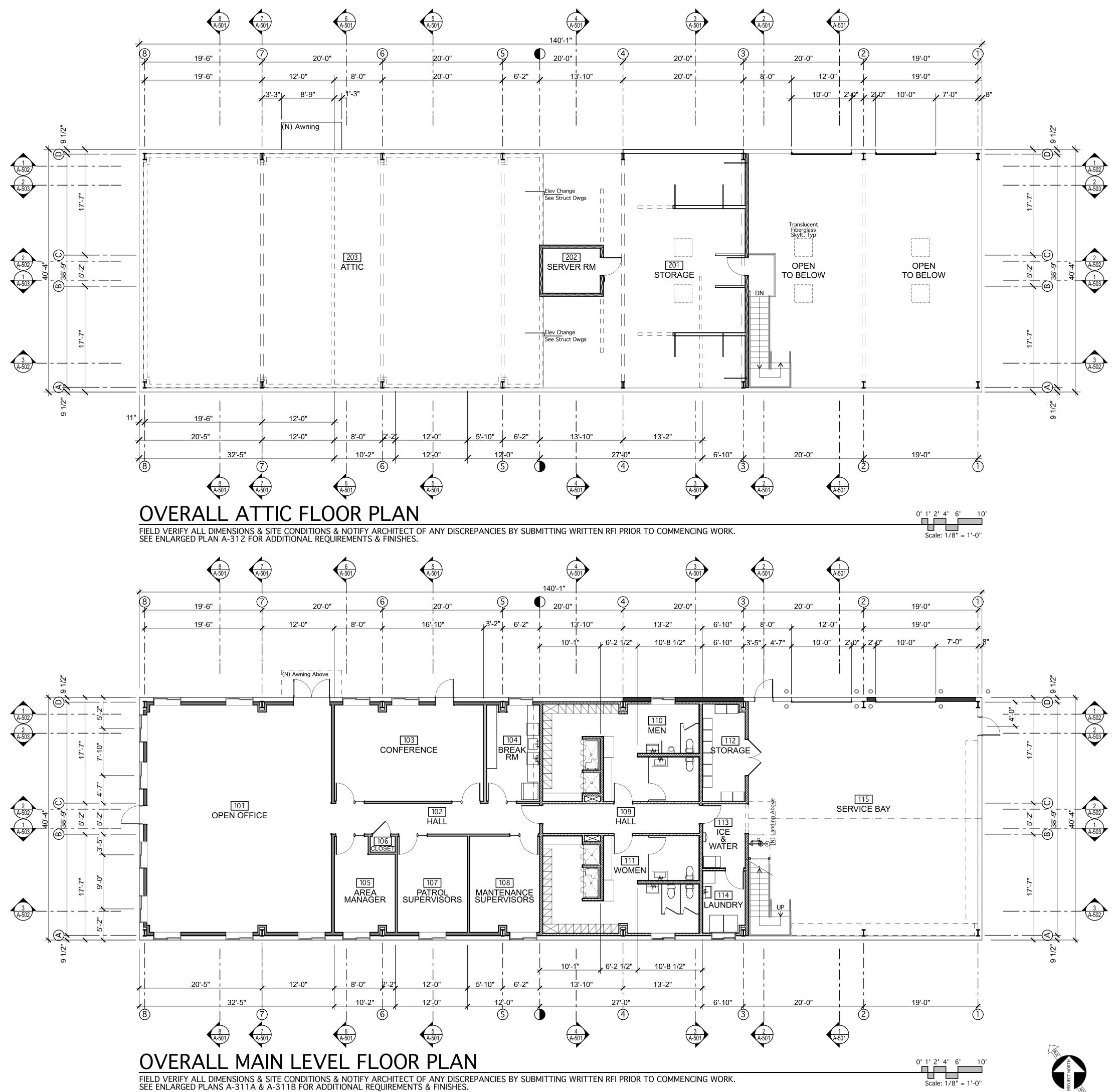
- 1. Site and Architectural Plans
- 2. Cumming Construction Document Cost Estimate, 9/11/2018.

Responsible Department Head:

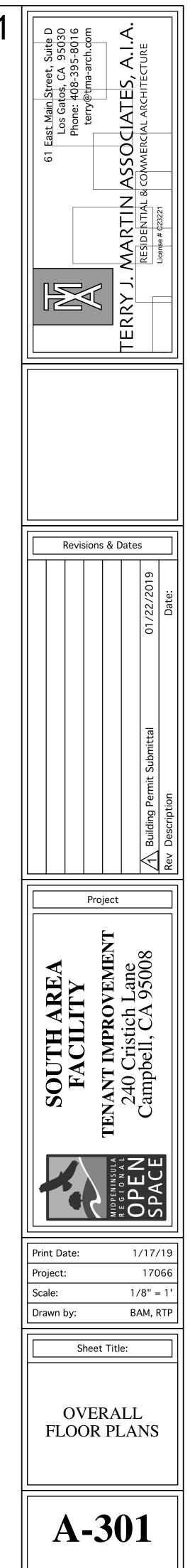
Jason Lin, Engineering and Construction Department Manager

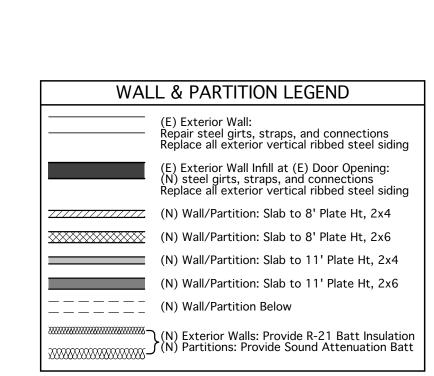
Prepared by: Felipe Nistal, Senior Capital Project Manager



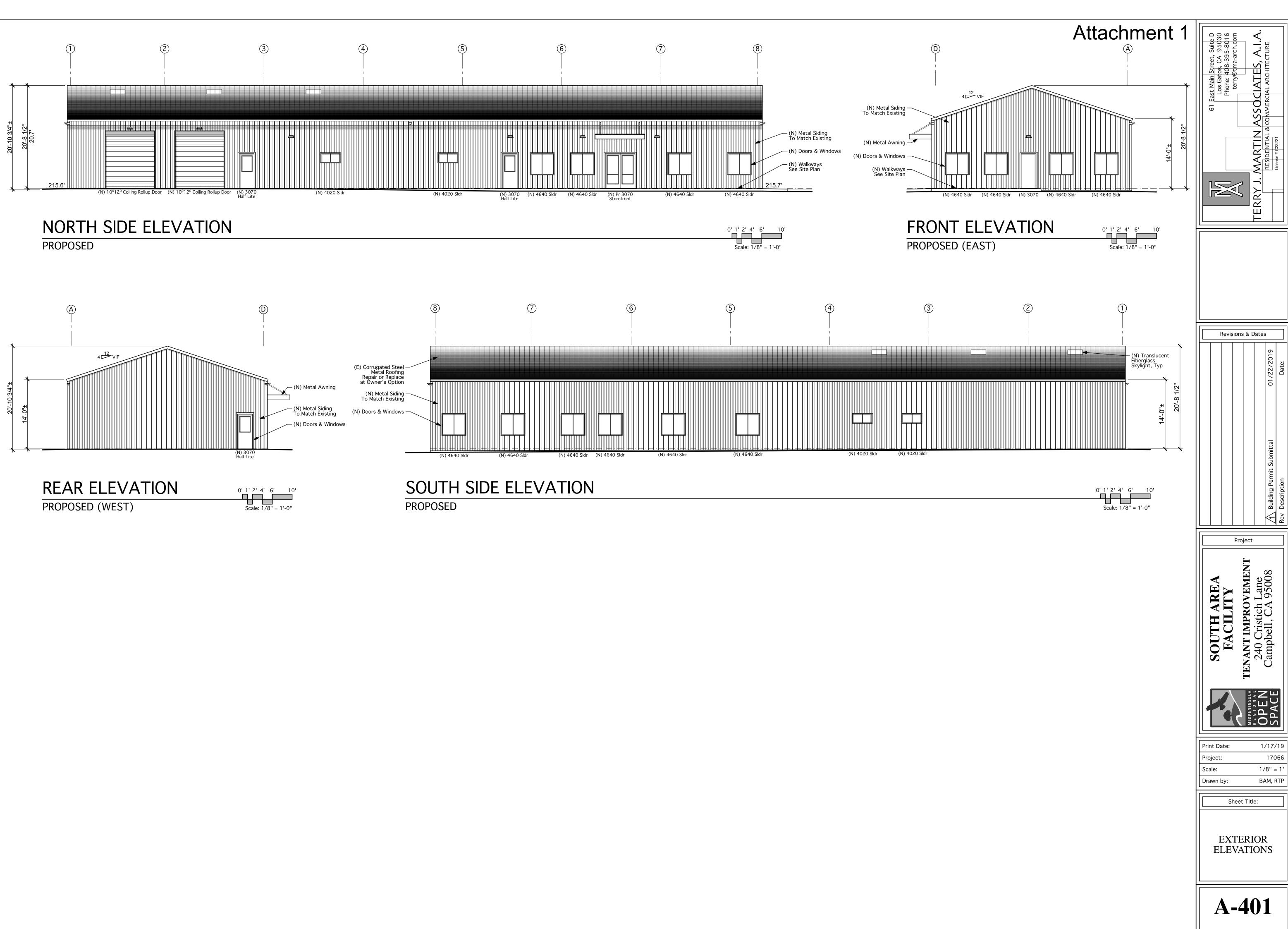


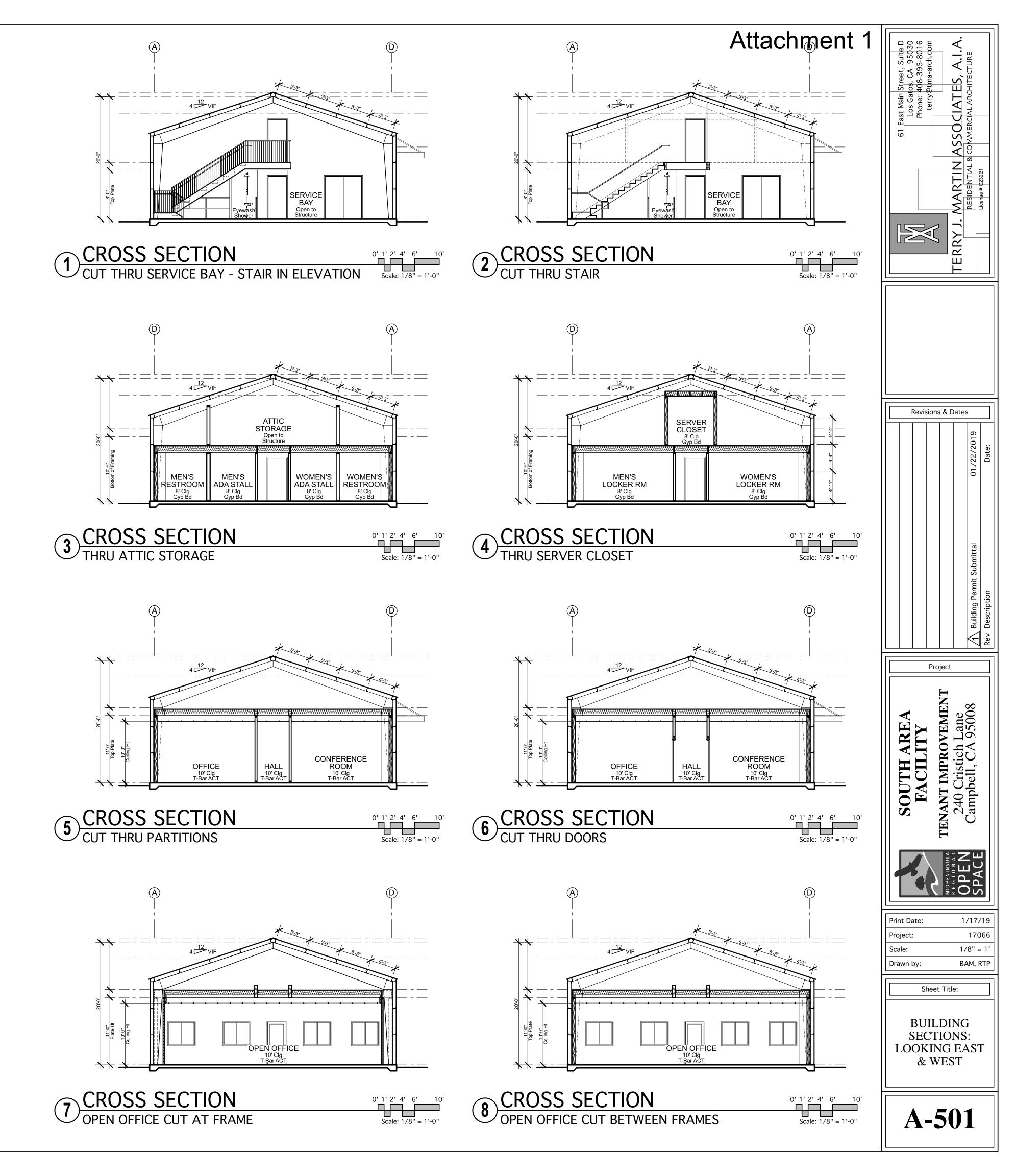
# Attachment 1

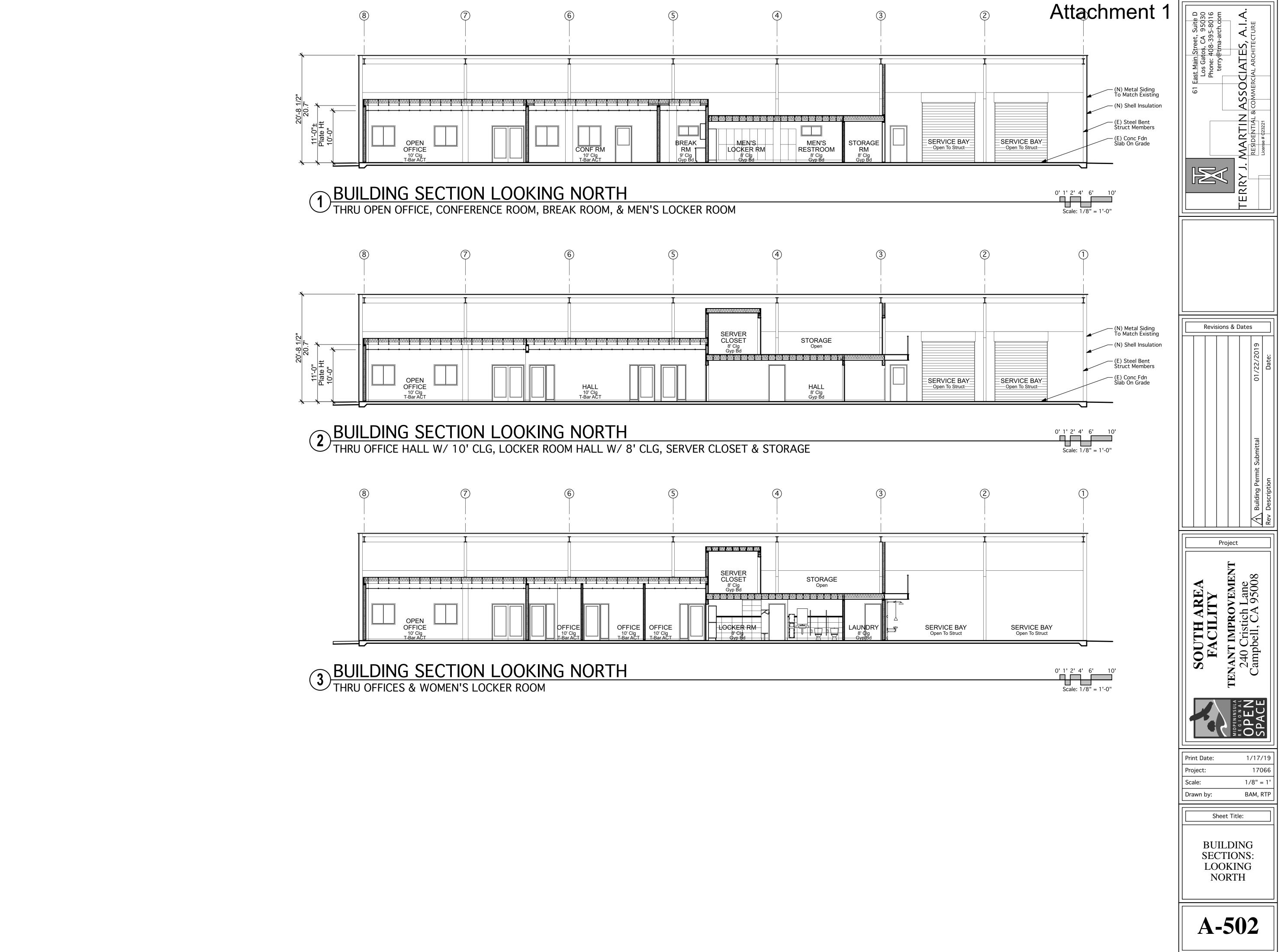




101A) SEE SHEET A-702 FOR DOOR SCHEDULE (1) SEE SHEET A-702 FOR WINDOW SCHEDULE









## New South Area Office

Campbell, CA

Construction Documents September 11, 2018 Cumming Project No. 18-01120.00

Prepared for Midpeninsula Regional Open Space District

## TABLE OF CONTENTS

	Page
1. Project Introduction Executive Summary	3
	0
2. Cost Summaries	
Summary	4
Summary Matrix	5
3. Control Areas	
Controls	6
4. Construction Cost Back Up	
Building	8
Sitework	19
5. Appendix	
Qualifications	23

#### **EXECUTIVE SUMMARY**

#### 1.1 Introduction

This estimate has been prepared, pursuant to an agreement between Midpeninsula Regional Open Space District and Cumming, for the purpose of establishing a probable cost of construction at the schematic design stage.

The project scope encompasses the demolition and tenant improvement of a storage facility and associated sitework.

#### **1.2 Project Schedule**

	Start	Finish	Duration
Design & Engineering	Sep-18	Mar-19	7 months
Construction	Mar-19	Aug-19	6 months

#### 1.3 Key Assumptions & Exclusions

:This document should be read in association with Appendix 1 which outlines assumptions, project understanding, approach, and cost management methodology. Key assumptions built into the above cost breakdown include

#### Key Assumptions

- Design, Bid, Build
- Single Phase Construction
- Demolish and Re-skin Building Exterior
- Interior Demolition, Incl. MEP
- Concrete Work by Hand
- Wood Frame Construction
- Trade Parking Available at No Cost
- Material Laydown Area Available at No Cost
- Buildings Vacant During Construction

#### Key Exclusions

- Project Soft Costs
- Department Relocation
- AV Equipment
- Medium Voltage Terminations
- Hazardous Materials Abatement
- Temporary Storage Space
- Overtime / Premium Time
- Construction Contingency
- Furniture
- Equipment
- Upgrades to Existing Structural Frame for Increased Loading

SUMMARY					
Element	Area	Cost / SF	Total		
Building	7,050	\$421.16	\$2,969,145		
Sitework	25,150	\$45.14	\$1,135,385		
Total Estimated Construction Cost	32,200	\$127.47	\$4,104,530		

#### SUMMARY MATRIX

		Building		Sitework		Overall Totals	
		7,050 SF		25,150 SF			
Element		Total	Cost/SF	Total	Cost/SF	Total	Cost/SF
1 General Requirements (see below)							
2 Sitework		\$91,000	\$12.91	\$747,608	\$29.73	\$838,608	\$26.04
3 Concrete		\$60,904	\$8.64			\$60,904	\$1.89
4 Masonry							
5 Metals		\$141,875	\$20.12			\$141,875	\$4.41
6 Wood & Plastics		\$416,512	\$59.08			\$416,512	\$12.94
7 Thermal & Moisture		\$69,429	\$9.85			\$69,429	\$2.16
8 Doors & Windows		\$160,440	\$22.76			\$160,440	\$4.98
9 Finishes		\$308,565	\$43.77			\$308,565	\$9.58
10 Specialties		\$52,062	\$7.38			\$52,062	\$1.62
11 Equipment							
12 Furnishings							
13 Special Construction							
14 Conveying		\$30,000	\$4.26			\$30,000	\$0.93
15 Mechanical		\$223,217	\$31.66			\$223,217	\$6.93
16 Electrical		\$401,068	\$56.89			\$401,068	\$12.46
Subtotal Cost		\$1,955,071	\$277.32	\$747,608	\$29.73	\$2,702,679	\$84
General Conditions	15.3%	\$298,148	\$42.29	\$114,010	\$4.53	\$412,159	\$12.80
Bonds & Insurance	2.0%	\$45,064	\$6.39	\$17,232	\$0.69	\$62,297	\$1.93
Contractor's Fee	8.0%	\$183,863	\$26.08	\$70,308	\$2.80	\$254,171	\$7.89
Design Contingency	15.0%	\$372,322	\$52.81	\$142,374	\$5.66	\$514,696	\$15.98
Escalation to MOC, 05/31/19	4.0%	\$114,677	\$16.27	\$43,852	\$1.74	\$158,529	\$4.92
Total Estimated Construction Cost		\$2,969,145	\$421.16	\$1,135,385	\$45.14	\$4,104,530	\$127.47

## SCHEDULE OF AREAS AND CONTROL QUANTITIES

Schedule of Areas	Building	Sitework	Total
1. Enclosed Areas (x 100%)			
Level 1	5,650		5,650
Attic Storage	1,400		1,400
Sitework		25,150	25,150
То	tal Enclosed 7,050	25,150	32,200

Building

## SUMMARY - BUILDING

Element		Total	Cost / SF
1 General Requirements (Incl. Below)			
2 Sitework		\$91,000	\$12.91
3 Concrete		\$60,904	\$8.64
4 Masonry			
5 Metals		\$141,875	\$20.12
6 Wood & Plastics		\$416,512	\$59.08
7 Thermal & Moisture		\$69,429	\$9.85
8 Doors & Windows		\$160,440	\$22.76
9 Finishes		\$308,565	\$43.77
10 Specialties		\$52,062	\$7.38
11 Equipment			
12 Furnishings			
13 Special Construction			
14 Conveying		\$30,000	\$4.26
15 Mechanical		\$223,217	\$31.66
16 Electrical		\$401,068	\$56.89
Subtotal		\$1,955,071	\$277.32
General Conditions	15.25%	\$298,148	\$42.29
Subtotal		\$2,253,219	\$319.61
Bonds & Insurance	2.00%	\$45,064	\$6.39
Subtotal		\$2,298,284	\$326.00
Contractor's Fee	8.00%	\$183,863	\$26.08
Subtotal		\$2,482,146	\$352.08
Design Contingency	15.00%	\$372,322	\$52.81
Subtotal		\$2,854,468	\$404.89
Escalation to MOC, 05/31/19	4.02%	\$114,677	\$16.27
TOTAL ESTIMATED CONSTRUCTION COST		\$2,969,145	\$421.16

Total Area:

7,050 SF

## **DETAIL ELEMENTS - BUILDING**

lement	Quantity	Unit	Unit Cost	Total
Sitework				
Selective Building Demolition				
Demo existing interior - floors, ceilings and partitions	7,050	sf	\$4.50	\$31,72
Demo existing MEP	7,050	sf	\$2.00	\$14,10
New opening, at coiling doors	400	sf	\$20.00	\$8,00
Sawcut existing SOG, at new footings	235	lf	\$15.00	\$3,52
Dispose of existing SOG	165	sf	\$10.00	\$1,65
Sawcut existing SOG, for new MEP, allow	5,650	sf	\$0.50	\$2,82
Exterior	0,000	51	ψ0.00	ΨΖ,02
Remove metal siding	5,320	sf	\$5.00	\$26,60
Remove exterior glazing	195	sf	\$10.00	\$1,95
Remove exterior door, single	5		\$125.00	\$62 \$62
Remove exterior door, single	5	ea	\$125.00	φ02
Total - Sitework				\$91,00
Concrete				
Spread Foundations				
F1, 15" x 24" x 12"	8	ea		
Concrete	0.8	су	\$600.00	\$46
Formwork	52	sf	\$25.00	\$1,30
Reinforcement, allow 180 / cy	140	lbs	\$2.00	\$28
Excavation, by hand	0.9	су	\$125.00	\$10
Backfill, by hand	0.1	су	\$65.00	¢.
Haul excess	0.8	су	\$85.00	\$6
F2, 24" x 24" x 12"	2	ea	φ00.00	Ψ
Concrete	0.3	су	\$600.00	\$18
Formwork	16	sf	\$25.00	\$40
	56	lbs	\$2.00	\$40 \$11
Reinforcement, allow 180 / cy	0.3		\$2.00 \$125.00	ې 2
Excavation, by hand		су	\$125.00	
Backfill, by hand	0.0	су		
Haul excess	0.3	су	\$85.00	\$2
F3, 30" x 30" x 12"	3	ea	<b>\$</b> 000.00	<b>A</b> 44
Concrete	0.7	су	\$600.00	\$43
Formwork	30	sf	\$25.00	\$75
Reinforcement, allow 180 / cy	131	lbs	\$2.00	\$26
Excavation, by hand	0.8	су	\$125.00	\$10
Backfill, by hand	0.1	су	\$65.00	ę
Haul excess	0.7	су	\$85.00	\$6
F4, 36" x 36" x 12"	6	ea		
Concrete	2.1	су	\$600.00	\$1,26
Formwork	72	sf	\$25.00	\$1,80
Reinforcement, allow 180 / cy	378	lbs	\$2.00	\$75
Excavation, by hand	2.3	су	\$125.00	\$28
Backfill, by hand	0.2		\$65.00	\$
Haul excess	2.1	су	\$85.00	\$17
F5, 42" x 42" x 18"	4	ea	÷••••	Ŧ
Concrete	1.9	су	\$600.00	\$1,14

## DETAIL ELEMENTS - BUILDING

Element	Quantity	Unit	Unit Cost	Total
Formwork	56	sf	\$25.00	\$1,400
Reinforcement, allow 180 / cy	343	lbs	\$2.00	\$686
Excavation, by hand	2.1	су	\$125.00	\$262
Backfill, by hand	0.2	cy	\$65.00	\$12
Haul excess	1.9	cy	\$85.00	\$162
Slab on Grade				
X-ray Inspections, Allow	1	ls	\$2,500.00	\$2,500
Patch and repair SOG, at new footings	165	sf	\$45.00	\$7,425
Epoxy dowels, connect new to existing SOG, allow 12" OC	236	ea	\$55.00	\$12,980
Miscellaneous				
Misc. concrete work, not shown, allowance	5,650	sf	\$4.50	\$25,425
Total - Concrete				\$60,904

#### 4 Masonry

No Work Anticipated

Total - Masonry

#### 5 Metals

Exterior Skin Metal siding to match existing Stainless steel corner guard Miscellaneous Metals Structural Work for Exhaust Fans, Allow	4,900 5 7,050 1	sf ea sf Is	\$25.00 \$465.00 \$1.00 \$10,000.00	\$122,500 \$2,325 \$7,050 \$10,000
Total - Metals				\$141,875
6 Wood & Plastics				
Rough Carpentry				
Structural Wall Framing			<b>*</b> =00.00	<b>*</b> = <b>*</b> *
4x4 post, 11'	11	ea	\$530.00	\$5,830
4x6 post, 11'	41	ea	\$600.00	\$24,600
6x6 post, 11'	25	ea	\$700.00	\$17,500
1/2" plywood sheathing, at shear walls	1,617	sf	\$5.00	\$8,085
Upper Floor Framing	4.045	- 4	¢ос оо	¢00.075
Wood truss framing, 11.875" TJI at 16" OC	1,315	sf	\$25.00	\$32,875
Wood truss framing, 14" TJI at 24" OC 4x10 header	2,580 14	sf If	\$30.00 \$53.48	\$77,400 \$749
	24	li If	\$53.46 \$60.95	\$749 \$1,463
6x8 header 1 3/4" x 11 7/8" LVL	24 10	li If		
3 1/2" x 11 7/8" PSL	10	ll If	\$34.50 \$61.53	\$345 \$923
3 1/2" x 14" PSL	87	li If	\$92.00	\$923 \$8,004
3 1/2" x 14" PSL 3 1/2" x 16" PSL	10	li If	\$92.00 \$122.48	\$8,004 \$1,225

## **DETAIL ELEMENTS - BUILDING**

Element	Quantity	Unit	Unit Cost	Total
5 1/4" x 9.5" PSL	5	lf	\$96.03	\$480
5 1/4" x 11 7/8" PSL	26	lf	\$112.70	\$2,930
5 1/4" x 14" PSL	26	lf	\$147.78	\$3,842
5 1/4" x 24" PSL	63	lf	\$207.00	\$13,041
7 x 14 PSL	19	lf	\$201.25	\$3,824
3/4" plywood sheathing, at floor framing	3,895	sf	\$5.25	\$20,449
Miscellaneous				
Hold downs	37	ea	\$250.00	\$9,250
Bridging / bracing, at headers and beams	299	lf	\$20.00	\$5,980
Exterior Wall Framing, Wood Studs				
Exterior wall infill, ~200sf	1	ls	\$5,000.00	\$5,000
2x6, standard	4,900	sf	\$12.00	\$58,800
1/2" plywood sheathing	4,900	sf	\$5.25	\$25,725
Interior Wall Framing, Wood Studs	,			
2x4, standard	2,111	sf	\$10.00	\$21,110
2x6, standard	2,439	sf	\$12.00	\$29,268
2x4, furred	871	sf	\$10.00	\$8,710
2x6, furred	200	sf	\$12.00	\$2,400
Building Casework		•	<b>*</b> · = · • •	+_,
Base cabinets	23	lf	\$365.00	\$8,395
Upper cabinets	16	lf	\$285.00	\$4,560
Bench	28	lf	\$250.00	\$7,000
Shelf	15	lf	\$150.00	\$2,250
Boot cubbies	7	lf	\$325.00	\$2,275
Blocking and backing	89	lf	\$25.00	\$2,225
Total - Wood & Plastics				\$416,512
7 Thermal & Moisture				
Roofing, Allow Repair Existing Only	7,938	sf	\$5.00	\$39,690
Building Paper	4,900	sf	\$0.25	\$1,225
Insulation	4,000	51	ψ0.20	ψ1,220
Rigid insulation, at exterior studs	4,900	sf	\$2.50	\$12,250
Batt insulation, at interior partitions	5,621	sf	\$1.75	\$9,837
Batt insulation, at floor framing	3,895	sf	\$1.65	\$6,427
Total - Thermal & Moisture				\$69,429
8 Doors & Windows				
Exterior Doors				
Type 3070 - Glazed in AL frame, double, 6'-0" x 7'-0"	1	pr	\$8,200.00	\$8,200
Type 3070 - HM door in HM frame, single, 3'-0" x 7'-0"	2	ea	\$3,000.00	\$6,000
HM door in HM frame, single w / half light	2		\$3,200.00	\$6,400
Overhead Coiling Door	2	u	<i>\\</i> 0,200.00	ψ0,100
14'-0" x 12'-6"	1	ea	\$17,500.00	\$17,500
18'-0" x 12'-6"	1	ea	\$22,500.00	\$22,500
	I	u	<i><i><i><i><i><i><i><i><i><i><i><i><i><i><i></i></i></i></i></i></i></i></i></i></i></i></i></i></i></i>	<i><i><i><i><i><i><i><i><i><i></i></i></i></i></i></i></i></i></i></i>

## **DETAIL ELEMENTS - BUILDING**

Exterior Glazing Type 4020 - Standard glazing, operable Type 4640 - Standard glazing, operable Interior Doors Type 3070 - HM door in HM frame, double, 6'-0" x 7'-0" Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing Sidelight glazing <b>5</b> /8" gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	32 315 1 1 7 1 6 88 88 84 84 4,900 2,209 221 4,473 3,116 374	sf sf ea ea ea ea sf sf sf sf	\$130.00 \$130.00 \$3,850.00 \$2,100.00 \$2,100.00 \$2,750.00 \$90.00 \$90.00 \$90.00 \$90.00 \$5.00 \$5.00 \$5.00 \$4.00 \$5.25	\$4,160 \$40,950 \$3,850 \$2,100 \$14,700 \$16,500 \$7,920 \$7,560 \$160,440 \$160,440 \$24,500 \$11,043 \$883 \$23,483
Type 4640 - Standard glazing, operable Interior Doors Type 3070 - HM door in HM frame, double, 6'-0" x 7'-0" Type 3068 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3070 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>9 Finishes</b> <b>9 Finishes</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	315 1 1 7 1 6 88 84 4,900 2,209 221 4,473 3,116	sf ea ea ea sf sf sf sf sf sf sf	\$130.00 \$3,850.00 \$2,100.00 \$2,100.00 \$2,100.00 \$2,750.00 \$90.00 \$90.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$40,950 \$3,850 \$2,100 \$14,700 \$16,500 \$7,920 \$7,560 \$160,440 \$24,500 \$11,043 \$883 \$23,483
Interior Doors Type 3070 - HM door in HM frame, double, 6'-0" x 7'-0" Type 3068 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>Total - Doors &amp; Windows</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	1 1 7 1 6 88 88 84 84 4,900 2,209 221 4,473 3,116	ea ea ea sf sf sf sf sf sf sf	\$3,850.00 \$2,100.00 \$2,100.00 \$2,750.00 \$90.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$3,850 \$2,100 \$14,700 \$2,100 \$16,500 \$7,920 \$7,560 \$160,440 \$160,440 \$24,500 \$11,043 \$883 \$23,483
Type 3070 - HM door in HM frame, double, 6'-0" x 7'-0" Type 3068 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>Total - Doors &amp; Windows</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gipsum board, finished, taped and sanded 5/8" comentitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	1 7 1 6 88 84 84 4,900 2,209 221 4,473 3,116	ea ea ea sf sf sf sf sf sf sf	\$2,100.00 \$2,100.00 \$2,100.00 \$2,750.00 \$90.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$2,100 \$14,700 \$2,100 \$16,500 \$7,920 \$7,560 <b>\$160,440</b> \$24,500 \$11,043 \$883 \$23,483
Type 3068 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3070 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>Total - Doors &amp; Windows</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	1 7 1 6 88 84 84 4,900 2,209 221 4,473 3,116	ea ea ea sf sf sf sf sf sf sf	\$2,100.00 \$2,100.00 \$2,100.00 \$2,750.00 \$90.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$2,100 \$14,700 \$2,100 \$16,500 \$7,920 \$7,560 <b>\$160,440</b> \$24,500 \$11,043 \$883 \$23,483
Type 3070 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>Total - Doors &amp; Windows</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	7 1 6 88 84 4,900 2,209 221 4,473 3,116	ea ea sf sf sf sf sf sf sf	\$2,100.00 \$2,100.00 \$2,750.00 \$90.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$14,700 \$2,100 \$16,500 \$7,920 \$7,560 \$160,440 \$11,043 \$883 \$23,483
Type 3080 - HM door in HM frame, single, 3'-0" x 7'-0" Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>Total - Doors &amp; Windows</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	1 6 88 84 4,900 2,209 221 4,473 3,116	ea ea sf sf sf sf sf sf sf	\$2,100.00 \$2,750.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$2,100 \$16,500 \$7,920 \$7,560 <b>\$160,440</b> \$24,500 \$11,043 \$883 \$23,483
Type 3080 - HM door in HM frame, single w / half light, 3'-0" x 7'-0" Interior Glazing Transom glazing Sidelight glazing <b>Total - Doors &amp; Windows</b> <b>9 Finishes</b> Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	88 84 4,900 2,209 221 4,473 3,116	ea sf sf sf sf sf sf sf	\$2,750.00 \$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$16,500 \$7,920 \$7,560 \$160,440 \$24,500 \$11,043 \$883 \$23,483
Interior Glazing Transom glazing Sidelight glazing Total - Doors & Windows 9 Finishes Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	88 84 4,900 2,209 221 4,473 3,116	sf sf sf sf sf sf	\$90.00 \$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$7,920 \$7,560 <b>\$160,440</b> \$24,500 \$11,043 \$883 \$23,483
Transom glazing Sidelight glazing Total - Doors & Windows 9 Finishes Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, inished, taped and sanded 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	84 4,900 2,209 221 4,473 3,116	sf sf sf sf sf	\$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$7,560 \$160,440 \$24,500 \$11,043 \$883 \$23,483
Sidelight glazing Total - Doors & Windows 9 Finishes Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, finished, taped and sanded 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	84 4,900 2,209 221 4,473 3,116	sf sf sf sf sf	\$90.00 \$5.00 \$5.00 \$4.00 \$5.25	\$7,560 \$160,440 \$24,500 \$11,043 \$883 \$23,483
Total - Doors & Windows         9 Finishes         Gypsum Board + Plywood         5/8" gypsum board, finished, taped and sanded, int. of ext.         5/8" gypsum board, finished, taped and sanded         5/8" gypsum board, unfinished, allow 10%         5/8", finished, taped and sanded, moisture resistant         Cementitious backerboard         Plywood, fire treated         Floor Finishes         Sealed concrete         Stained concrete         Porcelain tile         VCT         VCT, static resistant	4,900 2,209 221 4,473 3,116	sf sf sf sf	\$5.00 \$5.00 \$4.00 \$5.25	\$160,440 \$24,500 \$11,043 \$883 \$23,483
9 Finishes Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	2,209 221 4,473 3,116	sf sf sf	\$5.00 \$4.00 \$5.25	\$24,500 \$11,043 \$883 \$23,483
Gypsum Board + Plywood 5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	2,209 221 4,473 3,116	sf sf sf	\$5.00 \$4.00 \$5.25	\$11,043 \$883 \$23,483
5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	2,209 221 4,473 3,116	sf sf sf	\$5.00 \$4.00 \$5.25	\$11,043 \$883 \$23,483
5/8" gypsum board, finished, taped and sanded, int. of ext. 5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	2,209 221 4,473 3,116	sf sf sf	\$5.00 \$4.00 \$5.25	\$11,043 \$883 \$23,483
5/8" gypsum board, finished, taped and sanded 5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	2,209 221 4,473 3,116	sf sf sf	\$5.00 \$4.00 \$5.25	\$11,043 \$883 \$23,483
5/8" gypsum board, unfinished, allow 10% 5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	221 4,473 3,116	sf sf	\$4.00 \$5.25	\$883 \$23,483
5/8", finished, taped and sanded, moisture resistant Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	4,473 3,116	sf	\$5.25	\$23,483
Cementitious backerboard Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	3,116			
Plywood, fire treated Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant		sf	\$6.25	\$19,472
Floor Finishes Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	.1/4	sf	\$7.50	\$2,805
Sealed concrete Stained concrete Porcelain tile VCT VCT, static resistant	014	01	ψ1.00	ψ2,000
Stained concrete Porcelain tile VCT VCT, static resistant	2,801	sf	\$2.50	\$7,003
Porcelain tile VCT VCT, static resistant	1,640	sf	\$15.00	\$24,600
VCT VCT, static resistant	837	sf	\$25.00	\$20,925
VCT, static resistant	1,521	sf	\$9.00	\$13,689
	82	sf	\$14.50	\$1,189
Base	02	31	ψ14.50	ψ1,103
Rubber base	905	lf	\$7.00	\$6,335
Porcelain tile	387	" If	\$25.00	
Ceiling	507	п	φ25.00	\$9,675
ACT, 2x2	2,565	of	\$11.00	\$28,215
		sf		
Gypsum board, incl. framing, moisture resistant	1,320	sf	\$18.50	\$24,420
Paint to gypsum board	1,320	sf	\$1.95	\$2,574
Wall Finish Daraalain tila, haakanlaah, alaan	00	۰ <sup>۲</sup>		ቀላ በማኅ
Porcelain tile, backsplash, glass	20	sf	\$55.00	\$1,073
Porcelain tile, 8'	2,995	sf	\$25.00	\$74,872
Porcelain tile, accent tile, glass	101	sf	\$55.00	\$5,562
Paint	3,787	sf	\$1.65	\$6,248

#### **10 Specialties**

**Restroom Specialties** 

\$308,565

## DETAIL ELEMENTS - BUILDING

Toilet partitions, standard Grab bars Changing station Seat cover Toilet paper dispenser Disposal Paper towel dispenser Soap dispenser Shower curtain	3 4 2 4 4 4 4 4 18	ea ea ea ea ea ea ea	\$1,550.00 \$225.00 \$950.00 \$165.00 \$105.50 \$210.00 \$425.00	\$4,650 \$900 \$1,900 \$660 \$422
Grab bars Changing station Seat cover Toilet paper dispenser Disposal Paper towel dispenser Soap dispenser Shower curtain	2 4 4 4 4 4 18	ea ea ea ea	\$225.00 \$950.00 \$165.00 \$105.50 \$210.00	\$900 \$1,900 \$660 \$422
Seat cover Toilet paper dispenser Disposal Paper towel dispenser Soap dispenser Shower curtain	4 4 4 4 18	ea ea ea ea	\$165.00 \$105.50 \$210.00	\$660 \$422
Toilet paper dispenser Disposal Paper towel dispenser Soap dispenser Shower curtain	4 4 4 4 18	ea ea ea	\$105.50 \$210.00	\$422
Disposal Paper towel dispenser Soap dispenser Shower curtain	4 4 4 18	ea ea	\$210.00	
Paper towel dispenser Soap dispenser Shower curtain	4 4 18	ea		
Soap dispenser Shower curtain	4 18		¢105 00	\$840
Shower curtain	18	ea		\$1,700
			\$125.00	\$500
		lf	\$40.00	\$720
Shower specialties, ADA	2	ea	\$1,500.00	\$3,000
Shower specialties, standard	2	ea	\$550.00	\$1,100
Hooks	18	ea	\$50.00	\$900
Building Specialties			<b>*• • • • • •</b>	<b>*</b> 0 <b>-</b> 00
Emergency eyewash	1	ea	\$3,500.00	\$3,500
Cubbies	10	ea	\$350.00	\$3,500
Hanging rod	22	lf	\$35.00	\$770
Lockers, two-tier	36	ea	\$750.00	\$27,000
Total - Specialties				\$52,062
11 Equipment				
FF+E				By Owner
	_			,
Total - Equipment				
12 Furnishings				
FF+E				By Owner
Total - Furnishings				
13 Special Construction				
No Work Anticipated				
Total - Special Construction				
14 Conveying				
Stairs				
Wood framed, complete Handrail / guardrail	1	flt	\$30,000.00	\$30,000 Incl. Above
Total - Conveying				\$30,000

## **DETAIL ELEMENTS - BUILDING**

lement	Quantity	Unit	Unit Cost	Total
5 Mechanical				
Fire Protection				
Relocate Wet-pipe sprinkler heads	7,050	sf	\$2.42	\$17,061
Plumbing				
General Plumbing Equipment				
Water heater, gas, commercial, 155 mbh, 150 gph	1	ea	\$14,156.00	\$14,156
Water storage tank, 140 gal	1	ea	\$4,614.00	\$4,614
Circulating pump	1	ea	\$2,087.00	\$2,087
Expansion tank	1	ea	\$554.00	\$554
Sanitary Fixtures				
Water closet WC-1, tank	5	ea	\$857.70	\$4,289
Urinal UR-2, sensor FV	1	ea	\$1,389.00	\$1,389
Lavatory L-2, counter, sensor faucet	4	ea	\$988.90	\$3,956
Shower SH-2	4	ea	\$1,425.00	\$5,700
Mop sink MS-1	1	ea	\$623.80	\$624
Service sink SS-1	2	ea	\$1,177.00	\$2,354
Drinking fountain DF-1	1	ea	\$2,666.00	\$2,666
Floor drain FD-1	1	ea	\$276.40	\$276
Trap primer valve	2	ea	\$108.20	\$216
Rough-ins				
Local rough-in at fixture	18	ea	\$602.40	\$10,843
Rough-in to ice-maker	1	ea	\$162.20	\$162
Rough-in to refrigerator	1	ea	\$162.20	\$162
Cold water rough-in at kitchen equipment	2	ea	\$374.70	\$749
1" thermostatic mixing valve	8	ea	\$953.60	\$7,629
Domestic Water				
HW/CW connect to water heater, cu, no recirc, 2"	1	ea	\$1,354.00	\$1,354
Connect to existing	1	ea	\$517.40	\$517
2" pipe, Cu type "K", in trench	10	lf	\$29.09	\$291
Trench excavate, backfill, compact	5	су	\$59.80	\$299
Sand bedding in trench	3	cy	\$18.43	\$55
1/2" pipe, cu type L, in bldg	14	lf	\$27.54	\$386
3/4" pipe, cu type L, in bldg	113	lf	\$29.65	\$3,350
1" pipe, cu type L, in bldg	21	lf	\$32.54	\$683
1-1/4" pipe, cu type L, in bldg	262	lf	\$32.04	\$8,394
1-1/2" pipe, cu type L, in bldg	55	lf	\$34.18	\$1,880
Pipe insulation, 1/2" pipe	14	lf	\$8.87	\$124
Pipe insulation, 3/4" pipe	113	lf	\$9.32	\$1,053
Pipe insulation, 1" pipe	21	lf	\$9.76	\$205
Pipe insulation, 1-1/4" pipe	262	lf	\$11.87	\$3,110
Pipe insulation, 1-1/2" pipe	55	lf	\$12.02	\$661
Waste / Vent			· · · · · ·	
Connect to existing	1	ea	\$581.20	\$581
2" pipe, ci, no-hub, in bldg	56	lf	\$42.42	\$2,376
3" pipe, ci, no-hub, in bldg	36	lf	\$51.44	\$1,852
	144	lf	\$60.07	\$8,650
4 DIDE CLIDO-DUD ID DIDD				Ψ0,000
4" pipe, ci, no-hub, in bldg Clean out, floor type, 4"	1	ea	\$379.90	\$380

## **DETAIL ELEMENTS - BUILDING**

Element	Quantity	Unit	Unit Cost	Total
Vent through roof, 3"	1	ea	\$381.30	\$381
Condensate Drainage				
Trap and equipment connect	6	ea	\$407.50	\$2,445
1/2" pipe, cu type M, in bldg	120	lf	\$28.63	\$3,436
Pipe insulation, 1/2"	120	lf	\$8.87	\$1,064
Natural Gas				
Rough-in / connect at water heater	1	ea	\$1,021.00	\$1,021
2" pipe, blk steel, schd 40, thrd	132	lf	\$40.30	\$5,320
2" pressure regulator valve	1	ea	\$1,041.00	\$1,041
2" seismic shut off valve	1	ea	\$1,681.00	\$1,681
Miscellaneous Plumbing				
Test / clean plumbing	24	hr	\$107.71	\$2,585
Start-up/check-out	24	hr	\$129.25	\$3,102
Seismic bracing	7,050	sf	\$0.30	\$2,115
Hoisting and rigging	. 1	ls	\$1,250.00	\$1,250
Penetrations and firestopping	7,050	sf	\$0.15	\$1,058
Heating, Ventilation and Air Conditioning	,	-		, ,
Air-Side Equipment				
MAU - (Make-up air handling unit)	2,640	cfm	\$6.12	\$16,157
DX Fancoils / Splits	_,• • •	•	<i>••••</i>	••••
Split AC, ductless, wall, 1 ton, 400 cfm	1	ea	\$2,261.00	\$2,26 <sup>2</sup>
Refrigerant line set for split system	3	ea	\$343.90	\$1,032
Fan coil, dx, 3 ton, 1200 cfm	2	ea	\$1,995.00	\$3,990
Heat pump condensing unit, ADD CURB, 1.0 tons cooling	- 1	ea	\$3,758.00	\$3,758
Heat pump condensing unit, ADD CURB, 3 tons cooling	2	ea	\$5,421.00	\$10,842
Fans	_		<i>+ • , · = · · • •</i>	<b>4</b> · • <b>,</b> • ·
Exhaust fan EF-1, 100 cfm	3	ea	\$560.10	\$1,680
Exhaust fan EF-3, 1000 cfm	1	ea	\$1,758.00	\$1,758
Exhaust fan EF-4, 1500 cfm	1	ea	\$2,320.00	\$2,320
Air Distribution		•••	<i> </i>	¥=,•=
Ductwork, galvanized steel	993	lb	\$9.40	\$9,334
Duct insulation, wrap	687	sf	\$2.77	\$1,903
Flexible duct, insulated, various sizes	120	lf	\$19.51	\$2,34
Manual volume damper	38	ea	\$86.45	\$3,28
Grilles and Diffusers		•••	çoono	<i>vo</i> , <u>-</u> o
Supply grilles	19	ea	\$159.20	\$3,02
Return Grilles	9	ea	\$136.80	\$1,23 <sup>2</sup>
Exhaust Grilles	10	ea	\$126.90	\$1,269
HVAC Controls		0u	\$120.00	ψ1,200
Thermostat, 7-day program	3	ea	\$460.00	\$1,380
Miscellaneous	Ũ	ou	φ100.00	ψ1,000
Test / balance HVAC	24	hr	\$124.00	\$2,976
Start-up/check-out	24	hr	\$112.72	\$2,70
Seismic bracing	7,050	sf	\$0.33	\$2,327
Hoisting and rigging	<i>i</i> ,050	ls	\$3,200.00	\$3,200
Penetrations and firestopping	7,050	sf	\$3,200.00 \$0.17	\$3,200
r enerations and mestopping	7,000	31	ψ0.17	ψ1,198

\$223,217

## **DETAIL ELEMENTS - BUILDING**

Element	Quantity	Unit	Unit Cost	Total
16 Electrical				
Electrical				
Service and Distribution				
Distribution Equipment				
Panelboard, 225 amp, 240/120v, 3ph, 4w	3	ea	\$5,359.52	\$16,079
PowerLogic energy and power quality meter	1	ea	\$7,641.23	\$7,641
Conduit, 2" emt	450	lf	\$24.26	\$10,919
Copper wire, #6 thhn	540	lf	\$2.78	\$1,500
Copper wire, #3/0 thhn	2,160	lf	\$10.55	\$22,791
HVAC and Equipment Connections				
Exhaust Fan 1 connection	1	ea	\$186.33	\$186
Exhaust Fan 2 connection	1	ea	\$186.33	\$186
Exhaust Fan 3 connection	1	ea	\$186.33	\$186
Exhaust Fan 4 connection	1	ea	\$186.33	\$186
Exhaust Fan 5 connection	1	ea	\$186.33	\$186
Supply Fan 1 connection	1	ea	\$186.33	\$186
Supply Fan 2 connection	1	ea	\$186.33	\$186
Fan Coil 1 connection	1	ea	\$186.33	\$186
Fan Coil 2 connection	1	ea	\$186.33	\$186
Fan Coil 3 connection	1	ea	\$186.33	\$186
Hand Dryer Connection	2	ea	\$186.33	\$373
Fork Lift Charger Connection	1	ea	\$186.33	\$186
Roll Up Door Connection	2	ea	\$186.33	\$373
Disconnect switch, motor rated	10	ea	\$510.54	\$5,105
Equipment branch, 20 amp	525	lf	\$18.40	\$9,660
Convenience Power				
Duplex receptacle, 20 amp	40	ea	\$155.80	\$6,232
Duplex receptacle, 20 amp, controlled	22	ea	\$155.80	\$3,428
Double duplex receptacle, 20 amp, controlled	4	ea	\$282.81	\$1,131
Power pack (for controlled receptacles)	26	ea	\$226.26	\$5,883
Receptacle, 20 amp, twist-lock	1	ea	\$187.92	\$188
Simplex receptacle, 20 amp,	2	ea	\$147.73	\$295
Furniture Feed Connection	9	ea	\$160.86	\$1,448
Floor Box, quadplex & tele/data outlet, 6 port	1	ea	\$686.63	\$687
Branch power, 20 amp	1,900	lf	\$17.10	\$32,482
Lighting and Lighting Control	15		¢440.c0	¢C 100
Type A - 2x2 Recessed	15	ea	\$412.60	\$6,189
Type AE - 2x2 Recessed W/ EM Battery Backup	7	ea	\$412.60	\$2,888
Type B - Linear Suspended	128 64	lf If	\$234.12 \$224.12	\$29,967 \$14,084
Type BE - Linear Suspended W/ EM Battery Backup Type C - 4' Surface Mounted	43	lf	\$234.12 \$713.46	\$14,984 \$30,670
Type D - Square Vanity	43	ea	\$406.75	\$30,679 \$2,034
Type E	4	ea	\$400.75	\$2,034 \$2,043
Type F	4	ea ea	\$510.72	\$2,043 \$511
Type G- Linear Suspended	24	lf	\$234.12	\$5,619
Type H - Damp Rated Industrial Pendant	4	ea	\$234.12 \$738.99	\$2,956
Type HE - Damp Rated Industrial Pendant	4	ea ea	\$738.99	\$2,950 \$1,478
Type EX1 - Exit Light	14	ea	\$381.24	\$5,337
Type EM - Twin Head Emergency Lighting Fixture	7	ea	\$369.84	\$3,337 \$2,589
Type Livi - Twint head Entergency Lighting Fixture	I	ea	φ309.0 <del>4</del>	φ2,009

## **DETAIL ELEMENTS - BUILDING**

ment	Quantity	Unit	Unit Cost	Total
Lighting control panel	1	ea	\$6,399.89	\$6,40
Dimmer switch	18	ea	\$289.65	\$5,2 <sup>^</sup>
Single pole 20A switch	4	ea	\$200.10	\$80
Digital on/off room controller	5	ea	\$345.73	\$1,72
Occupancy sensor, ceiling mounted	13	ea	\$396.28	\$5,1
Photoelectric cell	2	ea	\$396.28	\$7
Lighting branch power, fixtures	1,272	lf	\$17.10	\$21,74
Lighting branch power, controls	575	lf	\$17.10	\$9,8
Communications				
Voice and Data system				
Tele/data outlet, 1 port	2	ea	\$160.91	\$3
Tele/data outlet, 2 port	11	ea	\$186.34	\$2,0
Tele/data outlet, 4 port	1	ea	\$237.19	\$2
Tele/data outlet, 6 port	4	ea	\$288.04	\$1,1
Wireless access point	4	ea	\$631.22	\$2,5
Network rack, 84", two-post, 45RU - depth (6")	1	ea	\$1,971.29	\$1,9
Cable Manager, 8"	1	ea	\$839.63	\$8
Conduit, 1" emt	1,200	lf	\$15.51	\$18,6
CAT-6, 4 pair 23 AWG, UTP	8,184	lf	\$1.59	\$12,9
Cable Tray, 18"	10	lf	\$123.18	\$1,2
Audio-video outlet	3	ea	\$325.02	\$9
AV system speaker cable	720	lf	\$1.99	\$1,4
Electrical Safety And Security				
Closed Circuit Television System				
Camera location, fixed day/night dome, outdoor	4	ea	\$1,667.25	\$6,6
Conduit, 3/4" emt	400	lf	\$12.98	<b>\$</b> 5,1
CCTV cabling	480	lf	\$2.01	\$9
Access Control System				
Access control panel	1	ea	\$2,976.85	\$2,9
Card reader	3	ea	\$1,237.32	\$3,7
Door contact	2	ea	\$157.65	\$3
Conduit, 3/4" emt	600	lf	\$12.98	\$7,7
Access control cable	720	lf	\$1.90	\$1,3
Security System				. ,
Fire alarm system	7,050	sf	\$5.75	\$40,5

\$401,068

Sitework

## SUMMARY - SITEWORK

Element		Total	Cost / SF
1 General Requirements (Incl. Below)			•••
2 Sitework		\$747,608	\$29.73
3 Concrete			
4 Masonry			
5 Metals 6 Wood & Plastics			
7 Thermal & Moisture			
8 Doors & Windows			
9 Finishes			
10 Specialties			
11 Equipment			
12 Furnishings			
13 Special Construction			
14 Conveying			
15 Mechanical			
16 Electrical			
Subtotal		\$747,608	\$29.73
General Conditions	15.25%	\$114,010	\$4.53
Subtotal		\$861,619	\$34.26
Bonds & Insurance	2.00%	\$17,232	\$0.69
Subtotal		\$878,851	\$34.94
Contractor's Fee	8.00%	\$70,308	\$2.80
Subtotal		\$949,159	\$37.74
Design Contingency	15.00%	\$142,374	\$5.66
Subtotal		\$1,091,533	\$43.40
Escalation to MOC, 05/31/19	4.02%	\$43,852	\$1.74
TOTAL ESTIMATED CONSTRUCTION COST		\$1,135,385	\$45.14

Total Area:

25,150 SF

## **DETAIL ELEMENTS - SITEWORK**

ment	Quantity	Unit	Unit Cost	Total
itework				
Site Clearance / Demolition				
Structure Demolition				
Demo utility shed, 25sf	1	ls	\$950.00	\$950
Demo shed building, 110sf	1	ls	\$1,500.00	\$1,500
Demo two-story storage building	1,600	sf	\$10.00	\$16,000
Demo light pole	1	ea	\$2,500.00	\$2,500
Demo gas meter	1	ea	\$500.00	\$50
Demo diesel pump	1	ea	\$500.00	\$50
Demo area drain	5	ea	\$250.00	\$1,25
Demo curb	606	lf	\$10.00	\$6,06
Demo chain-link fence and footings	500	lf	\$15.00	\$7,50
Earthwork / Grading				
Mobilization	1	ea	\$30,000.00	\$30,00
Field staking / layout	25,150	sf	\$0.50	\$12,57
Fine grading	25,150	sf	\$0.80	\$20,12
Erosion control, SWPP	25,150	sf	\$0.25	\$6,28
Site Paving				
AC Paving			No Wor	k Anticipate
Concrete Ramps + Landings				•
Concrete paving, parking lot	6,839	sf	\$15.00	\$102,58
Concrete paving, sidewalk	910	sf	\$15.00	\$13,65
Epoxy dowels, connect new to existing concrete	303	ea	\$55.00	\$16,66
Ramped opening	3	ea	\$1,650.00	\$4,95
Truncated domes	28	sf	\$35.00	\$98
Concrete Curbs			·	
Concrete curb, 4"	121	lf	\$30.00	\$3,63
Concrete curb, 6"	641	lf	\$35.00	\$22,43
Connect to existing curb	2	ea	\$1,500.00	\$3,00
Parking Lot Striping / Signage			. ,	. ,
Parking stall, standard	27	ea	\$45.00	\$1,21
Parking stall, handicap	1	ea	\$130.00	\$13
Motorcycle stall, standard	4	ea	\$35.00	\$14
Hatched striping	150	sf	\$7.25	\$1,08
Fencing			<b>*</b> ··· <b>-*</b>	+ ,
Steel fence w / supports incl. footings, 6'	45	lf	\$240.00	\$10,80
Steel gate, 6', single	1	ea	\$5,000.00	\$5,00
Chain-link fence gate, 6', single	1	ea	\$2,500.00	\$2,50
Vehicle gate, 30', automatic	1	ea	\$25,000.00	\$25,00
Site Structures		•••	<i><i><i>v</i>=0,000100</i></i>	<i><b>4</b></i> =0,00
Trash Enclosure				
Slab on grade	45	sf	\$30.00	\$1,35
Concrete footing	42	lf	\$125.00	\$5,25
CMU, 10'	420	sf	\$50.00	\$21,00
Gate, double	1	ea	\$6,000.00	\$6,00
Shed, 10' x 24'	1		40,000.00	ψ0,00
Slab on grade	240	sf	\$30.00	\$7,20
Concrete footing	68	lf	\$125.00	\$8,50

## **DETAIL ELEMENTS - SITEWORK**

ment	Quantity	Unit	Unit Cost	Total
Gate, double, allow	1	ea	\$6,000.00	\$6,000
Shed, 8' x 6'			. ,	. ,
Slab on grade	48	sf	\$30.00	\$1,440
Concrete footing	28	lf	\$125.00	\$3,500
CMU, 10'	280	sf	\$50.00	\$14,000
Gate, double, allow	1	ea	\$6,000.00	\$6,000
Covered Equipment Shed, 28' x 24'			····	<i>, , ,</i>
Slab on grade	672	sf	\$30.00	\$20,160
Concrete footing	104	lf	\$125.00	\$13,000
CMU, 12'	1,248	sf	\$50.00	\$62,400
Roof framing, allow	672	sf	\$25.00	\$16,800
Metal roofing	672	sf	\$15.50	\$10,416
Gate, double, allow	1	ea	\$6,000.00	\$6,000
Miscellaneous	1	ou	ψ0,000.00	ψ0,000
Materials storage, CMU walls, 3' high	270	sf	\$45.00	\$12,150
Materials storage, CMU wall footing	90	lf	\$125.00	\$11,250
Awnings - overhangs above exterior door	90	sf	\$90.00	\$8,100
Equipment pad	15	sf	\$45.00	\$675
Site Specialties	10	51	φ <del>4</del> 5.00	φ07 τ
•	1	~~	\$7,500.00	\$7,500
Flag pole, 25' Bollard		ea		
	5	ea	\$650.00	\$3,250
Monument sign	1	ea	\$15,000.00	\$15,000
Landscape				
Planting	40		¢04.00	<u> </u>
Ground cover, 1 gal, at 2' OC	48	ea	\$24.00	\$1,154
Ground cover, 1 gal, at 4' OC	64	ea	\$24.00	\$1,538
Ground cover, 1 gal, at 6' OC	11	ea	\$24.00	\$267
Shrub, 1 gal	28	ea	\$24.00	\$672
Shrub, 5 gal	84	ea	\$75.00	\$6,300
Vine, 5 gal	15	ea	\$75.00	\$1,125
Mulch	1,405	sf	\$1.25	\$1,756
Topsoil, 12"	52	су	\$110.00	\$5,724
Trees				
Tree, 24" box	5	ea	\$450.00	\$2,250
Irrigation				
Shrub and turf irrigation, incl. controls	2,075	sf	\$3.50	\$7,263
Tree bubblers, allow 2 per tree	5	ea	\$350.00	\$1,750
Bioretention Area				
Filter fabric	500	sf	\$5.00	\$2,500
Drainage rock, 12"	19	су	\$85.00	\$1,574
Topsoil, 18"	28	су	\$110.00	\$3,056
Planting, allow	500	sf	\$12.00	\$6,000
Perforated pipe	18	lf	\$45.00	\$810
Cleanout	1	ea	\$1,150.00	\$1,150
Utilities				
Fire Water				
	1	ea	\$6,500.00	\$6,500
Fire hydrant / FD connection	I.			
•	1			
Fire hydrant / FD connection Sanitary Sewer Sanitary sewer line, 4"	47	lf	\$100.00	\$4,700

## DETAIL ELEMENTS - SITEWORK

Element	Quantity	Unit	Unit Cost	Total
Connect to existing	1	ea	\$3,500.00	\$3,500
Storm Water				
Valley gutter, 3'	27	lf	\$75.00	\$2,025
Connect to existing	1	ea	\$5,000.00	\$5,000
Site Electrical				
Distribution Equipment				
Main switchboard, 600 amp, 240/120v, 3ph, 4w, 65kAIC	1	ea	\$38,998.88	\$38,999
600A 2P breaker, molded case	1	ea	\$4,302.16	\$4,302
PowerLogic energy and power quality meter	1	ea	\$7,641.23	\$7,641
Conduit, 2 1/2" emt	20	lf	\$41.63	\$833
Copper wire, #2 thhn	12	lf	\$5.14	\$62
Copper wire, #350 thhn	36	lf	\$21.03	\$757

Total - Sitework

\$747,608

	APPENDIX 1 - APPROACH & METHODOLOGY
Basis of Estimate	- Midpeninsula Regional Open Space District, South Area Facility - Construction Documents - Existing Building Photos
Estimate Format	A component cost classification format has been used for the preparation of this estimate. It classifies costs by building system / element.
Cost Mark Ups	<ul> <li>The following % mark ups have been included in each design option:</li> <li>General Conditions (15.25% on direct costs)</li> <li>Bonds &amp; Insurance (2.00% compound)</li> <li>Contractor's Fee (8.00% compound)</li> <li>Design Contingency (15.00% compound)</li> <li>Escalation to MOC, 05/31/19 (4.02% compound)</li> </ul>
Escalation	All subcontract prices herein are reflective of current bid prices. Escalation has been included on the summary level to the stated mid point of construction.
Design Contingency	An allowance of 10% for undeveloped design details has been included in 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 while decreasing the % burden.
Construction Contingency	It is prudent for all program budgets to include an allowance for change orders which occur during the construction phase. These change orders normally increase the cost of the project. It is recommended that a 10% construction contingency is carried in this respect. This cost is not included within the estimate.
Construction Schedule	Costs included herein have been based upon a construction period of 6 months. Any costs for excessive overtime to meet accelerated schedule milestone dates are not included in this estimate.
Method of Procurement	The estimate is based on a design, bid, build.
Bid Conditions	This estimate has been based upon competitive bid situations (minimum of 3 bidders) for all items of subcontracted work.
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 other projects of a similar nature.
Basis for Unit Costs	Unit costs as contained herein are based on current bid prices in San Francisco Bay Area. Sub overheads and profit are included in each line item unit cost. Their overhead and profit covers each sub's cost for labor burden, materials, and equipment, sales taxes, field overhead, home office overhead, and profit. The general contractor's overhead is shown separately on the master 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 renovation construction, updated to reflect current conditions in San Francisco Bay

Area.

## **APPENDIX 1 - APPROACH & METHODOLOGY**

Key Exclusions	The following items have been excluded from our estimate: - Project Soft Costs - Department Relocation - AV Equipment - Medium Voltage Terminations - Hazardous Materials Abatement - Temporary Storage Space - Overtime / Premium Time - Construction Contingency - Furniture - Equipment - Upgrades to Existing Structural Frame for Increased Loading
Items Affecting Cost Estimate	<ul> <li>Items which may change the estimated construction cost include, but are not limited to:</li> <li>Modifications to the scope of work included in this estimate.</li> <li>Unforeseen sub-surface conditions.</li> <li>Restrictive technical specifications or excessive contract conditions.</li> <li>Any specified item of material or product that cannot be obtained from 3 sources.</li> <li>Any other non-competitive bid situations.</li> <li>Bids delayed beyond the projected schedule.</li> </ul>
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 estimate is made on the basis of the experience, qualifications, and best judgement 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'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.
	Pricing reflects probable construction costs obtainable in the project locality on the target dates specified and is a determination of fair market value for the construction of this project. The estimate is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all sub and general contractors with a range of 3 - 4 bidders for all items of work. Experience and research indicates that a fewer number of bidders may result in higher bids. Conversely, an increased number of bidders may result in more competitive bid day responses.

#### APPENDIX 1 - APPROACH & METHODOLOGY

#### Recommendations

Cumming recommends that the Owner and the Architect carefully review this entire document to ensure 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 assumed that its contents have been reviewed and accepted. If the project is over budget or there are unresolved budget issues, alternate systems / schemes should be evaluated before proceeding into further design phases.

It is recommended that there are preparations of further cost estimates throughout design by Cumming to determine overall cost changes since 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.