



Schematic Design Cost Estimate
for
Atherton Civic Center

May 11, 2016

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Schematic Design Cost Estimate

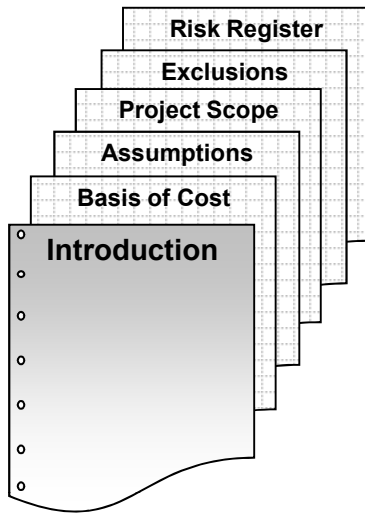
Commentary

Atherton Civic Center

Introduction
Basis of Cost
Assumptions
Exclusions
Risk Register

May 11, 2016

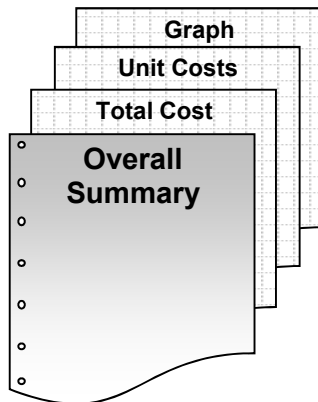
introduction



mack5 was requested to carry out a Schematic Design Cost Estimate for the proposed Atherton Civic Center located in Atherton, CA.

The first part of the Report contains the basis of the report, the assumptions made, description of the project scope, the exclusions to the costs and a risk register which contain items that have potential to impact cost at some point in the future.

The Overall Summary section contains a Summary of Gross Floor Areas, an Overall Project Summary, and Component and Trade Cost Summaries with Graphs.



Each section contains Control Quantities, a Cost Summary and Graph, and a Detailed Breakdown of Costs.

project introduction

The Town of Atherton intends to build a new Civic Center on the existing 5 acre Civic Center Site. The old building date from 1920s and include several temporary trailer offices. Many buildings are near, or at the end of their useful life. The Site itself is under utilized and split apart by several roads.

This project includes a new library, a new Police Station/City Hall that will contain Council chambers, City Administration Offices and Community Development Offices. The project also includes interior renovation of existing Town Hall to accommodate an expanded heritage room, new ADA toilets, a small cafe, and a large flexible reading/meeting room that opens out to the library front porch. The existing Corporate yard and Train depot will remain largely intact.

On-site development includes Ancillary Support building, public/visitor parking, secure department parking, vehicle sallyport, trash enclosure, light pole at front of station, station sign and on-site fire hydrant.

items used for cost estimate

architectural SD Pricing Drawing prepared by WRNS,
(11 pages, undated)
SD Narrative prepared by WRNS
(190 pages, dated April 13, 2016)

assumptions

- (a) Construction will start in July, 2017
- (b) A construction period of 18 months
- (c) The general contract will be competitively bid by a minimum of five (5) qualified contractors
- (d) The general contractor will have full access to the site during normal business hours
- (e) There are no phasing requirements
- (f) The contractor will be required to pay prevailing wages

inclusions

Police/City Hall and Library

foundations	This section includes reinforced concrete grade beams and drilled pier, elevator pit, slab on grade, perforated drain pipe, perimeter concrete curb/stemwall and allowance for mechanical pads.
superstructure	This section includes structural steel framing, metal deck with concrete fill, bare roof deck and miscellaneous metal and rough carpentry.
enclosure	This section includes exterior wall finishes, exterior storefront/curtainwall system, exterior windows, mechanical roof screen, parapet wall, and misc band and trims.
roofing	This section includes clay tile roof at Civic Center and built-up roof system at the library. It also includes roof flashing, gutter, downspouts, allowance for mechanical roof pad, roof hatches, caulking and sealants.
interior construction	This section includes interior partitions, glazed wall and sidelights, interior balustrades and guardrails, interior doors, protective bumpers, toilet partitions and accessories, shelving and millwork, casework and countertops, chalkboards and signages.
stairs	This section includes exit/egress stairs complete with finishes, handrail and guardrail.
interior finishes	This section includes floor, wall and ceiling finishes.
conveying	This section includes hydraulic elevator at Police/City Hall Building.
plumbing	This section includes plumbing fixtures, domestic water distribution, sanitary waste piping, storm water piping and miscellaneous trade specialties.
heating, ventilation, and air-conditioning	This section includes mechanical equipments, piping, ductwork and miscellaneous trade specialties.
fire protection	This section includes automatic wet-pipe sprinkler system

inclusions

electrical This section includes main service and distribution, emergency power, photovoltaic roof mounted system, equipment power, user convenience power, lighting & lighting control, telecomm, fire alarm, security, audio/visual rough-in and miscellaneous trade specialties.

equipment This section includes kitchen and breakroom equipment, and allowance for fitness room equipments.

furnishings This section includes window shades, projection screens, entrance mats, fire extinguisher cabinets, bike storage, benches and lockers.

Site Improvement

site preparation This section includes demolition of existing buildings and removal of existing hardscape surrounding the buildings. It also includes site protective construction, earthwork and erosion control

site improvement This section includes vehicular and pedestrian paving, site structures, landscaping and miscellaneous site furnishing. It also includes ancillary support building and police secured parking.

site mechanical utilities This section includes allowance for site drainage

site electrical utilities This section includes site lighting and site communications and security, and allowance for site demolition and relocation

exclusions

- (a) Cost escalation beyond a start date of July, 2017
- (b) Existing corporation shed and train depot to remain in place
- (c) Relocation of displaced management and staff
- (d) Loose furniture and equipment except as specifically identified
- (e) Hazardous materials handling, disposal and abatement

exclusions

- (f) Compression of schedule, premium or shift work, and restrictions on the contractor's working hours
- (g) Soft Cost such as testing and inspection fees, architectural design and construction management fees, assessments, taxes, finance, legal and development charges
- (h) Scope change and post contract contingencies
- (i) Environmental impact mitigation

Schematic Design Cost Estimate

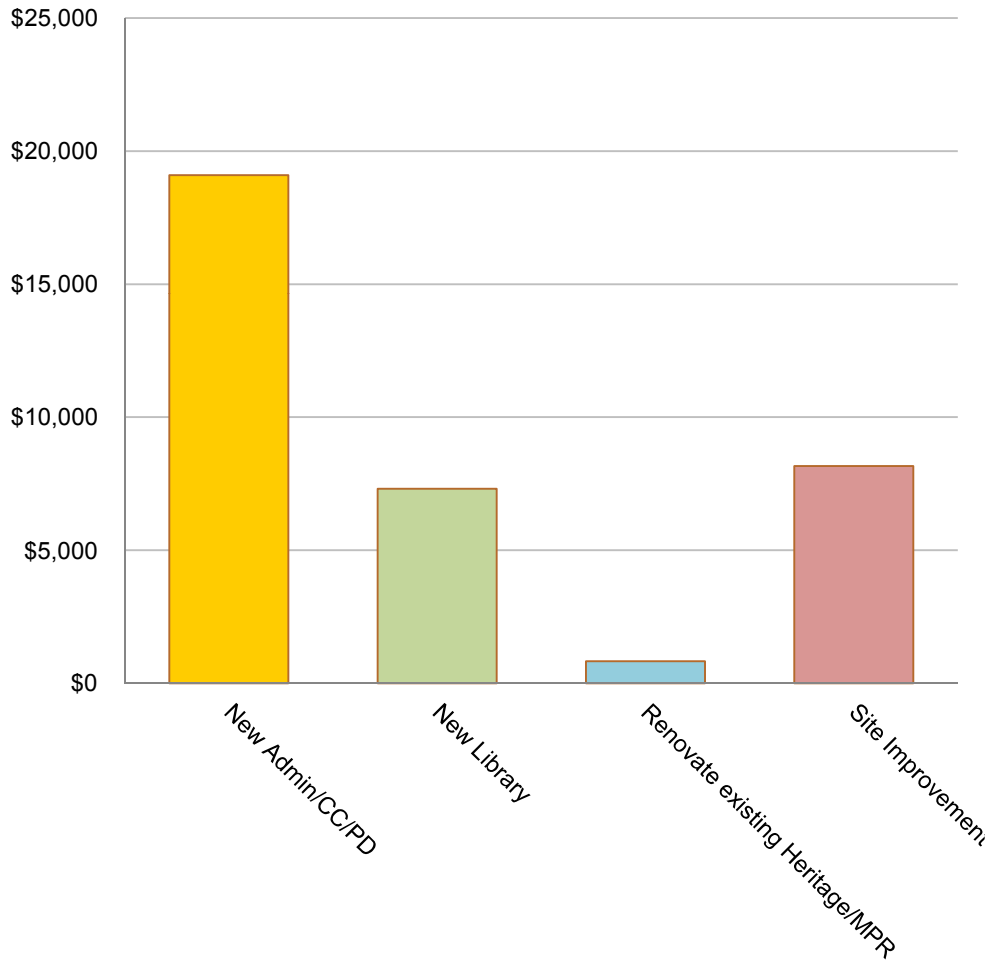
Overall Summary

Atherton Civic Center

Gross Floor Areas
Overall Summary
Component Summary
Trade Summary

May 11, 2016

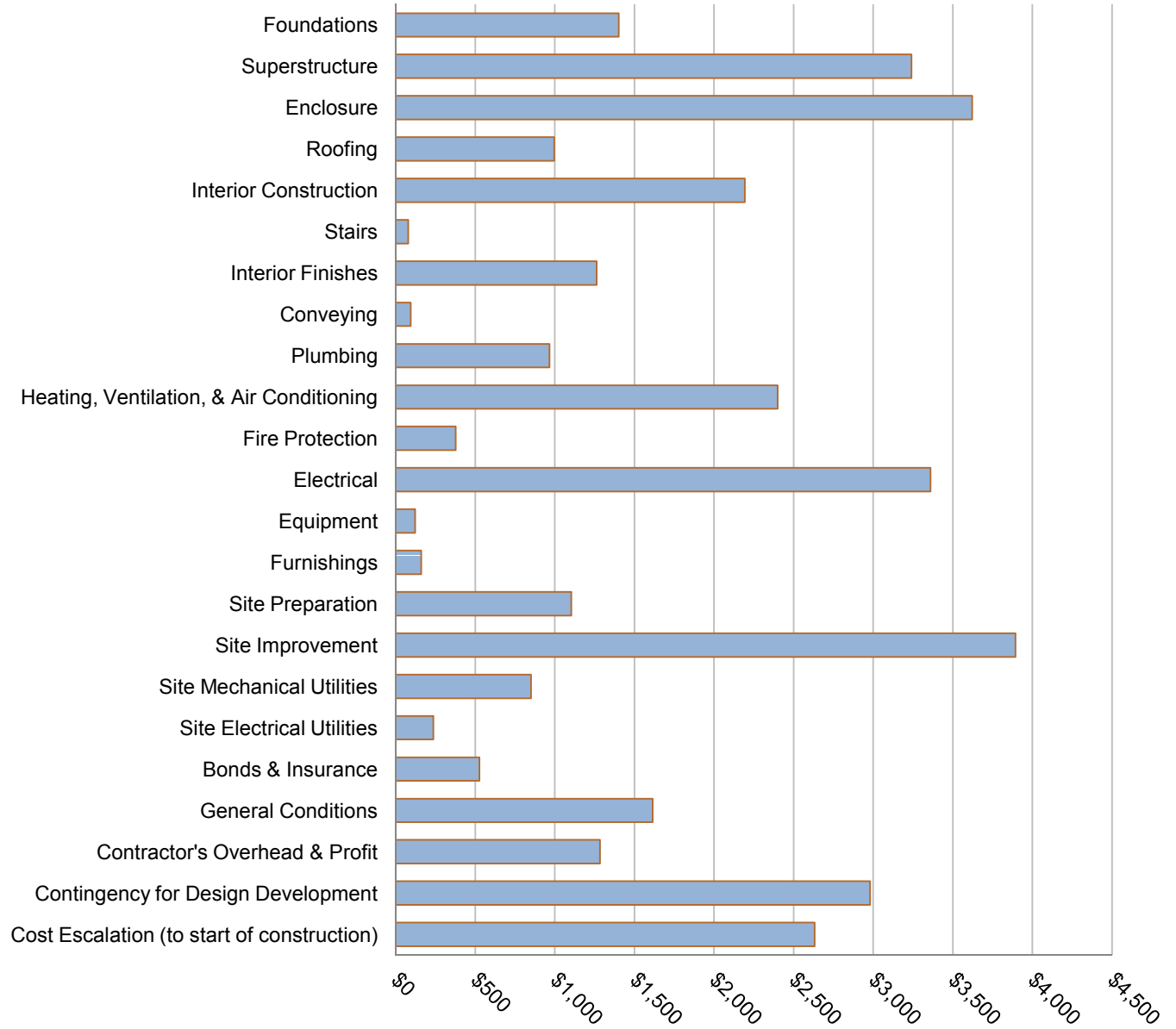
Atherton Civic Center	GFA	%	\$/SF	\$,000
New Admin/CC/PD	33,299	54%	\$573.69	\$19,103
New Library	10,403	21%	\$702.45	\$7,307
Renovate existing Heritage/MPR	1,946	2%	\$426.87	\$831
Site Improvement	221,654	23%	\$36.86	\$8,171
TOTAL CONSTRUCTION & SITEWORK:	45,648		\$775.77	\$35,412



CSI UniFormat Summary	45,648 SF	%	\$/SF	\$,000
Foundations		4%	\$30.70	\$1,401
Superstructure		9%	\$71.00	\$3,241
Enclosure		10%	\$79.33	\$3,621
Roofing		3%	\$21.81	\$996
Interior Construction		6%	\$48.07	\$2,194
Stairs		0%	\$1.75	\$80
Interior Finishes		4%	\$27.67	\$1,263
Conveying		0%	\$2.08	\$95
Plumbing		3%	\$21.19	\$967
Heating, Ventilation, & Air Conditioning		7%	\$52.58	\$2,400
Fire Protection		1%	\$8.25	\$377
Electrical		9%	\$73.59	\$3,359
Equipment		0%	\$2.70	\$123
Furnishings		0%	\$3.51	\$160
Selective Building Demolition		0%	\$0.23	\$11
Subtotal - Building Construction		57%	\$444.46	\$20,289
Site Preparation		3%	\$24.16	\$1,103
Site Improvement		11%	\$85.31	\$3,894
Site Mechanical Utilities		2%	\$18.63	\$850
Site Electrical Utilities		1%	\$5.20	\$237
Subtotal - Sitework		17%	\$133.31	\$6,085
Total - Building and Sitework Construction		74%	\$577.77	\$26,374
Bonds & Insurance	2.00%	1%	\$11.56	\$527
General Conditions		5%	\$35.39	\$1,616
Contractor's Overhead & Profit	4.50%	4%	\$28.11	\$1,283
Subtotal		84%	\$652.83	\$29,800
Contingency for Design Development	10.00%	8%	\$65.28	\$2,980
Cost Escalation (to start of construction)	8.03%	7%	\$57.65	\$2,632
TOTAL CONSTRUCTION BUDGET	July 2017	100%	\$775.77	\$35,412

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary





Fair Oaks View

New Admin/CC/PD

Atherton Civic Center

Control Quantities
Summary
Detailed Cost Breakdown

May 11, 2016

Enclosed Areas	
Level 1	18,660
Level 2	12,280

Subtotal of Enclosed Area	30,940
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Covered Area	
Roof Overhang	4,718

Subtotal of Covered Area at half value	2,359
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Total of Gross Floor Area	33,299
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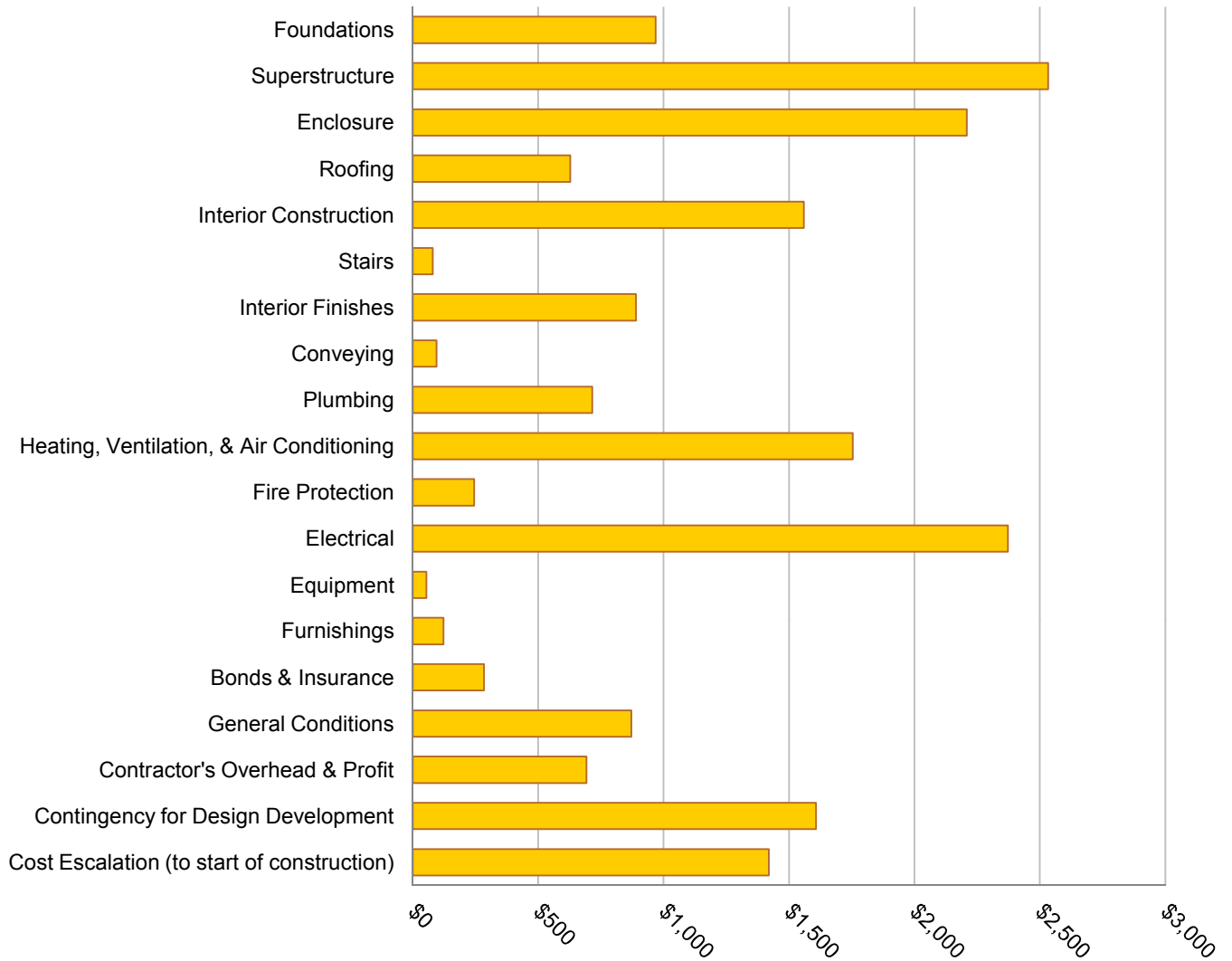
CONTROL QUANTITIES

			Ratio to Gross Area
Number of stories (x1,000)	2	EA	0.060
Gross Area	33,299	SF	1.000
Enclosed Area	30,940	SF	0.929
Covered Area	4,718	SF	0.142
Footprint Area	18,660	SF	0.560
Volume	411,550	CF	12.359
Gross Wall Area	23,522	SF	0.706
Finished Wall Area	20,091	SF	0.603
Windows or Glazing Area	15% 3,431	SF	0.103
Roof Area - Flat	5,870	SF	0.176
Roof Area - Sloping	17,508	SF	0.526
Roof Area - Total	23,378	SF	0.702
Roof Glazing Area	0	SF	0.000
Interior Partition Length	2,757	LF	0.083
Elevators (x10,000)	1	EA	0.300

CSI UniFormat Summary	33,299 SF	%	\$/SF	\$,000
Foundations		5%	\$29.08	\$968
Superstructure		13%	\$76.07	\$2,533
Enclosure		12%	\$66.35	\$2,209
Roofing		3%	\$18.87	\$628
Interior Construction		8%	\$46.82	\$1,559
Stairs		0%	\$2.40	\$80
Interior Finishes		5%	\$26.71	\$889
Conveying		0%	\$2.85	\$95
Plumbing		4%	\$21.51	\$716
Heating, Ventilation, & Air Conditioning		9%	\$52.66	\$1,754
Fire Protection		1%	\$7.35	\$245
Electrical		12%	\$71.26	\$2,373
Equipment		0%	\$1.65	\$55
Furnishings		1%	\$3.69	\$123
Subtotal - Building Construction		74%	\$427.27	\$14,228
Bonds & Insurance	2.00%	1%	\$8.55	\$285
General Conditions	6.01%	5%	\$26.17	\$872
Contractor's Overhead & Profit	4.50%	4%	\$20.79	\$692
Subtotal		84%	\$482.78	\$16,076
Contingency for Design Development	10.00%	8%	\$48.28	\$1,608
Cost Escalation (to start of construction)	8.03%	7%	\$42.63	\$1,420
TOTAL CONSTRUCTION BUDGET	July 2017	100%	\$573.69	\$19,103

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Standard Foundations				
Reinforced concrete grade beams				
24" wide x 36" deep with 150pcy rebar	1,264	LF	\$150.00	\$189,600
36" wide x 42" deep with 200pcy rebar	316	LF	\$260.00	\$82,160
Special Foundations				
Drilled concrete pier, 24" diameter x 35' deep with 200pcy rebar	1,960	LF	\$150.00	\$294,000
Mobilization/demobilization and testing	1	LS	\$30,000.00	\$30,000
Elevator pit	1	EA	\$20,000.00	\$20,000
Slab On Grade				
5" thick reinforced concrete slab on grade, reinforced with #5 @ 18" o.c., e.w.	18,660	SF	\$6.50	\$121,290
"Stegowrap" water vapor membrane, 15mil	18,660	SF	\$0.75	\$13,995
Excavation and removal	3,671	CY	\$25.00	\$91,769
4" thick crushed rock	230	CY	\$75.00	\$17,278
12" thick class 2 aggregate	691	CY	\$75.00	\$51,833
30" thick compacted engineered fill, extend pad 5' beyond edge of building on all sides				<i>see Site Preparation</i>
6~12" thick scarified/moisture conditioned/compacted native soil				<i>see Site Preparation</i>
Miscellaneous				
Perimeter perforated drain pipe	932	LF	\$25.00	\$23,300
Perimeter concrete stemwall/curb	932	LF	\$30.00	\$27,960
Allowance for mechanical pads	1	LS	\$5,000.00	\$5,000
Subtotal For Foundations:				\$968,185

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Vertical Structure				
Structural tube columns and buckling restrained braced frame (BRBF), including connections				
HSS 5x5x3/8	14	T	\$5,200.00	\$71,592
HSS 6x6x1/2	12	T	\$5,200.00	\$61,782
BRBF	64	EA	\$5,000.00	\$320,000
Base plates	130	EA	\$350.00	\$45,500

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Level2 Construction				
Structural steel framing, allow 16psf	98	T	\$5,200.00	\$510,848
Metal deck with 3-1/2" thick normal weight concrete (5-1/2" thick total depth)	12,280	SF	\$12.00	\$147,360
Headed studs at 18" o.c.	1,568	EA	\$3.00	\$4,704
Flat Roof Construction				
Structural steel framing, allow 14psf	41	T	\$5,200.00	\$213,668
Metal deck with 3-1/2" thick normal weight concrete (5-1/2" thick total depth)	5,870	SF	\$12.00	\$70,440
Headed studs at 18" o.c.	565	EA	\$3.00	\$1,696
Pitched Roof Construction				
Structural steel framing, allow 14psf	98	T	\$5,200.00	\$511,359
Architecturally exposed glulam framing, 4x spaced decking between purlins	4,160	SF	\$40.00	\$166,400
3/4" thick fire treated plywood	14,048	SF	\$4.00	\$56,193
N-deck, 18ga, G00	14,048	SF	\$6.00	\$84,290
Sprayed-fireproofing	323	T	\$300.00	\$96,773
Miscellaneous				
Structural steel support to trellis/sunshading system, allow 10psf (AESS)	7	T	\$7,500.00	\$54,000
Miscellaneous metal	33,299	GSF	\$2.00	\$66,598
Miscellaneous rough carpentry	33,299	GSF	\$1.50	\$49,949
Subtotal For Superstructure:				\$2,533,151

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Walls				
Cement plaster/stucco with decorative texture and reveals, over exterior gypboard, over 5/8" thick fire-rated plywood, over metal stud framing, insulation and water vapor membrane	20,091	SF	\$45.00	\$904,073

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Windows				
Storefront system, with insulated low-E glazing	917	SF	\$105.00	\$96,285
Aluminum framed windows, with insulated low-E vision glazing	2,514	SF	\$90.00	\$226,260
Premium for operable windows	346	EA	\$350.00	\$121,100
Premium for ballistic rated glazing	3,431	SF	\$50.00	\$171,550
Interior finish of exterior wall				
Painted gypwall	20,091	SF	\$5.00	\$100,453
Exterior Doors, finished oak door with bronze finished custom hardware				
Double leaf door	11	PR	\$10,000.00	\$110,000
Single leaf door	1	EA	\$2,400.00	\$2,400
Premium for special door hardwares	1	LS	\$24,000.00	\$24,000
Soffits				
Exterior soffit	4,718	SF	\$35.00	\$165,130
Trellis/sunshade system; decorative iron grille covering	1,440	SF	\$100.00	\$144,000
Balustrades, parapets and roof screens				
Mechanical roof screen, allow	1,600	SF	\$45.00	\$72,000
Miscellaneous Work				
Fascias, bands, screens, trim, wood articulation at doors, etc.	23,522	GWA	\$2.00	\$47,043
Rough carpentry	33,299	GSF	\$0.75	\$24,974
Subtotal For Enclosure:			\$2,209,267	

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof Coverings				
Built-up roof including rigid insulation, flat roof area	5,870	SF	\$16.00	\$93,920
Clay tile roof over fire-treated battens, over adhered membrane, sloped roof area	18,208	SF	\$25.00	\$455,208

ROOFING	Quantity	Unit	Rate	Total (\$)
Roofing upstands and sheetmetal				
Roof flashing, gutters and downspouts; bronze painted aluminum	24,078	SF	\$1.50	\$36,117
Roof or deck traffic surfaces				
Allowance for mechanical roof pad, 25% of flat roof area	1,468	SF	\$15.00	\$22,013
Miscellaneous work				
Roof access hatches with ladder	1	EA	\$4,500.00	\$4,500
Caulking and sealants	33,299	GSF	\$0.50	\$16,650
Subtotal For Roofing:				\$628,407

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Interior Partitions				
Non-rated partition, 75%	25,865	SF	\$14.00	\$362,108
Rated partition, 25%	8,622	SF	\$20.00	\$172,433
Plumbing chasewall	265	SF	\$21.00	\$5,565
Elevator shaftwall	1,060	SF	\$20.00	\$21,200
Stairwall	848	SF	\$20.00	\$16,960
Backing and blacking	33,299	GSF	\$1.25	\$41,624
Window Walls				
Allowance for glazed wall/sidelight, 10% of interior partition	3,449	SF	\$75.00	\$258,649
Balustrades and rails				
Architectural handrail/guardrail at double- height lobby	150	LF	\$350.00	\$52,500
Interior Doors				
Single leaf	91	EA	\$1,800.00	\$163,800
Double leaf	6	PR	\$3,200.00	\$19,200
Double leaf, at MEP and storage room	3	PR	\$3,000.00	\$9,000
Double leaf sliding door at closet	1	PR	\$2,800.00	\$2,800
Premium for armory and vault door	1	LS	\$20,000.00	\$20,000
Premium for special door hardware	1	LS	\$25,000.00	\$25,000
Fittings				
Protective guards, barriers and bumpers				
Allowance	1	LS	\$5,000.00	\$5,000

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Prefabricated compartments and accessories				
Toilet Partitions				
Standard	4	EA	\$1,100.00	\$4,400
Disabled	4	EA	\$1,400.00	\$5,600
Toilet Accessories, single stall				
Single stall	9	RM	\$1,500.00	\$13,500
Dual stall	4	RM	\$1,750.00	\$7,000
Shower stall and accessories	4	EA	\$2,500.00	\$10,000
Shelving and Millwork				
Vanity countertop	64	LF	\$200.00	\$12,800
Reception desk and self-service counter	60	LF	\$600.00	\$36,000
Janitor's shelf and mop rack	3	EA	\$500.00	\$1,500
Storage shelves, including kennel supply storage	1,214	SF	\$10.00	\$12,140
Cabinets and Countertops				
Upper and lower casework at Staff breakroom/kitchen	36	LF	\$650.00	\$23,400
Work countertop at admin copy/file room	84	LF	\$150.00	\$12,600
Flammable/bulk storage, safe, ref/freezer, drying locker at the laboratory/evidence processing	455	SF	\$75.00	\$34,125
General casework	33,299	GSF	\$3.00	\$99,897
Chalkboards and Graphics				
Directional/wayfinding signs	33,299	GSF	\$1.50	\$49,949
Door signage	101	EA	\$150.00	\$15,150
Building signage - exterior	1	LS	\$20,000.00	\$20,000
Chalkboards and tackboards	1	LS	\$5,000.00	\$5,000
Mail boxes	1	LS	\$10,000.00	\$10,000
Flagpoles	1	LS	\$10,000.00	\$10,000

Subtotal For Interior Construction: \$1,558,899

STAIRS	Quantity	Unit	Rate	Total (\$)
Stair Construction				
Exit/egress stair, complete with finishes and guardrail/handrail (assume 1 stair goes to the roof)	4	FLT	\$20,000.00	\$80,000
Subtotal For Stairs:				\$80,000

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Floor, Wall and Ceiling Finishes				
Council chamber	1,986	SF	\$25.00	\$49,650
Fitness room	629	SF	\$25.00	\$15,725
Lobby/reception area	3,392	SF	\$25.00	\$84,800
Hallway/circulation area	4,465	SF	\$20.00	\$89,300
Private office and conference rooms; carpet floor tile, painted gypwall and ACT ceiling	15,370	SF	\$20.00	\$307,400
Staff break rooms/kitchen/staff lounge, remaining areas; resinous floor finishes, painted gypwall and ACT ceiling	809	SF	\$20.00	\$16,180
Restroom and locker room; ceramic floor and wall finishes with painted gypboard ceiling	2,376	SF	\$75.00	\$178,200
Server, equipment room, MEP room; sealed concrete, painted gypwall and exposed soffit	1,596	SF	\$4.00	\$6,384
Water vapor emission control system, under the resinous and carpet finishes	26,651	SF	\$3.00	\$79,953
Allowance for finishes upgrade	30,940	GSF	\$2.00	\$61,880
Subtotal For Interior Finishes:				\$889,472

CONVEYING	Quantity	Unit	Rate	Total (\$)
Elevators and Lifts				
Hydraulic elevator, 2-stops	1	LS	\$95,000.00	\$95,000
Subtotal For Conveying:				\$95,000

PLUMBING	Quantity	Unit	Rate	Total (\$)
Plumbing Equipment				
Plumbing equipment	30,940	SF	\$4.00	\$123,760
Plumbing Fixtures				
Plumbing fixtures	30,940	SF	\$7.50	\$232,050
Domestic Water Distribution				
Copper pipe type L with fittings & hangers	30,940	SF	\$3.50	\$108,290
Domestic water pipe insulation	30,940	SF	\$1.50	\$46,410
Sanitary Waste & Vent Piping				
Cast iron pipe with fittings & hangers	30,940	SF	\$3.00	\$92,820
Storm Water Piping				
Cast iron pipe with fittings & hangers	30,940	SF	\$1.50	\$46,410
Natural Gas Piping				
Black steel pipe with fittings & hangers (Allowance)	30,940	SF	\$1.00	\$30,940
Miscellaneous				
Disinfecting & flushing	1	LS	\$10,000.00	\$10,000
Coring, sealing and firestopping	1	LS	\$8,000.00	\$8,000
Coordination & management	1	LS	\$12,000.00	\$12,000
Fees & permits	1	LS	\$5,600.00	\$5,600
Subtotal For Plumbing:				\$716,280

HEATING, VENTILATION, & AIR- CONDITIONING	Quantity	Unit	Rate	Total (\$)
Equipment				
Equipment	30,940	SF	\$18.00	\$556,920
Piping				
Heating hot water pipe with fittings & hangers	30,940	SF	\$4.00	\$123,760
Chilled water pipe with fittings & hangers	30,940	SF	\$3.00	\$92,820
Refrigeration piping with fittings & hangers	30,940	SF	\$0.65	\$20,111
Condensate drain piping with fittings & hangers	30,940	SF	\$0.50	\$15,470
Valves & accessories	30,940	SF	\$2.00	\$61,880
Pipe insulation	30,940	SF	\$2.50	\$77,350

HEATING, VENTILATION, & AIR-CONDITIONING

	Quantity	Unit	Rate	Total (\$)
Ductwork				
Galvanized ductwork with fittings & hangers	30,000	LB	\$11.00	\$330,000
Duct insulation	18,000	SF	\$4.00	\$72,000
Registers, grilles & diffusers	30,940	SF	\$1.50	\$46,410
Miscellaneous sheet metal accessories	30,940	SF	\$0.75	\$23,205
Miscellaneous				
Automatic temperature control DDC	30,940	SF	\$8.00	\$247,520
Test and balance	30,940	SF	\$0.75	\$23,205
Coring and firestopping	1	LS	\$7,000.00	\$7,000
Rigging & equipment rental	1	LS	\$15,000.00	\$15,000
Coordination & management	1	LS	\$25,000.00	\$25,000
Fees & permits	1	LS	\$16,000.00	\$16,000
Subtotal For Heating, Ventilation, & Air-Conditioning:				\$1,753,651

FIRE PROTECTION

	Quantity	Unit	Rate	Total (\$)
Wet Pipe Sprinkler Distribution				
Double check valve	1	EA	\$15,000.00	\$15,000
Wet alarm valve	1	EA	\$5,500.00	\$5,500
Fire department connection	1	EA	\$1,200.00	\$1,200
Sprinkler head	213	EA	\$200.00	\$42,600
Miscellaneous valves	1	LS	\$7,500.00	\$7,500
Main sprinkler pipe with fittings & hangers	900	LF	\$30.00	\$27,000
Branch sprinkler pipe with fittings & hangers	2,600	LF	\$26.00	\$67,600
Special systems (Allowance)	1	LS	\$35,000.00	\$35,000
Miscellaneous				
Hydraulic calculations	1	LS	\$4,500.00	\$4,500
Coring and firestopping	1	LS	\$3,000.00	\$3,000
Coordination & management	1	LS	\$5,000.00	\$5,000
Drawings	1	LS	\$3,000.00	\$3,000
Fees & permits	1	LS	\$2,200.00	\$2,200
Adjustment for increased area	3,198	SF	\$8.00	\$25,584
Subtotal For Fire Protection:				\$244,684

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
1600A 208/120V distribution panelboard	1	EA	\$50,000.00	\$50,000
Energy monitoring	1	LS	\$15,000.00	\$15,000
Associated panelboards and feeders	30,940	GSF	\$3.00	\$92,820
Grounding and bonding	1	LS	\$7,500.00	\$7,500
Emergency power				
250KW emergency generator	1	EA	\$85,000.00	\$85,000
Associated ATS's, panelboards and feeders	30,940	GSF	\$1.85	\$57,239
Equipment wiring				
Mechanical equipment feed and connections	30,940	GSF	\$2.00	\$61,880
Photovoltaic system				
185KW system with array of panels, inverters, panelboards, feeders and installation	1	LS	\$555,000.00	\$555,000
Allowance for structural steel support, 10psf	14,231	SF	\$30.00	\$426,923
Lighting and Branch Wiring				
Lighting fixtures LED	30,940	GSF	\$8.00	\$247,520
Exterior building lighting	1	LS	\$15,000.00	\$15,000
Lighting controls	30,940	GSF	\$1.50	\$46,410
Switches and sensors	30,940	GSF	\$0.65	\$20,111
Duplex receptacle	375	EA	\$30.00	\$11,250
GFCI duplex receptacle	20	EA	\$40.00	\$800
Special purpose receptacle	10	EA	\$45.00	\$450
Circuitry	30,940	GSF	\$7.00	\$216,580
Communications and Security				
Fire Alarm				
Fire alarm control panel	1	EA	\$7,500.00	\$7,500
Bi-Directional amplification	1	EA	\$25,000.00	\$25,000
Graphic annunciator	1	EA	\$4,500.00	\$4,500
LCD annunciator	1	EA	\$1,500.00	\$1,500
Initiating device	40	EA	\$150.00	\$6,000

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Communications and Security				
Audio visual device	50	EA	\$125.00	\$6,250
Visual device	10	EA	\$115.00	\$1,150
Modules	16	EA	\$150.00	\$2,400
Device box	120	EA	\$30.00	\$3,600
3/4" EMT	3,600	LF	\$8.00	\$28,800
FA cable	5,800	LF	\$1.50	\$8,700
Testing and programming	1	LS	\$3,500.00	\$3,500
Telecommunications				
MDF fit out	1	EA	\$8,500.00	\$8,500
Cabling and devices	30,940	GSF	\$2.50	\$77,350
Rough-in cable tray, conduit and backboxes	30,940	GSF	\$1.00	\$30,940
Grounding	1	LS	\$1,500.00	\$1,500
AV system				
AV system rough-in & power	30,940	SF	\$0.25	\$7,735
Security system				
Security system	30,940	SF	\$3.00	\$92,820
Detention room lock system (Rough-in only)	1	LS	\$7,500.00	\$7,500
Sallyport control				
Overhead door controller feed and connection	1	EA	\$2,500.00	\$2,500
E-911 (Server)				
UPS unit disconnect switch feed and connection	1	LS	\$25,000.00	\$25,000
E-911 rough-in - allowance	1	LS	\$5,000.00	\$5,000
Dispatch Room				
Dispatch room rough-in (allow)	1	LS	\$7,500.00	\$7,500
Antenna System				
Exterior antenna power and grounding only	1	LS	\$5,000.00	\$5,000
Radio system, power only	1	LS	\$5,000.00	\$5,000
Conference/Training/Operations Room				
Sound system	2	LS	\$5,000.00	\$10,000
Rough-in	2	LS	\$1,500.00	\$3,000
Projector screen feed and connection	2	LS	\$1,200.00	\$2,400

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Emergency Call System				
Call system	1	LS	\$2,500.00	\$2,500
Council Chamber Room				
Sound system	1	LS	\$7,500.00	\$7,500
Rough-in	1	LS	\$1,500.00	\$1,500
Projector screen feed and connection	1	LS	\$1,200.00	\$1,200
PA system				NIC
Master Clock				NIC
Other Electrical Systems				
Demo & make safe	1	LS	\$10,000.00	\$10,000
Temp power & lighting	1	LS	\$15,000.00	\$15,000
Seismic restraints	1	LS	\$10,000.00	\$10,000
Fees & Permits	1	LS	\$25,000.00	\$25,000
Subtotal For Electrical:				\$2,372,828

EQUIPMENT	Quantity	Unit	Rate	Total (\$)
Commercial Equipment				
Residential equipment at staff breakroom/kitchen rm# C.13, C.19 & CS.1; including refrigerator, microwave, and dishwasher	3	RM	\$10,000.00	\$30,000
At Fitness room	1	LS	\$25,000.00	\$25,000
Subtotal For Equipment:				\$55,000

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
Fixed Furnishings				
Light Control and Vision Equipment				
Window shades and blinds, manual operation	3,431	SF	\$8.00	\$27,448
Projection screens at conference rooms	1	LS	\$30,000.00	\$30,000

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
Amenities and Convenience Items				
Entrance mats and frames	1	LS	\$5,000.00	\$5,000
Fire Extinguisher cabinets	1	LS	\$5,000.00	\$5,000
Bike storage	1	LS	\$3,000.00	\$3,000
Benches at locker room	30	LF	\$300.00	\$9,000
Metal lockers				
Small, 1' x 2' x full height	16	EA	\$650.00	\$10,400
Large, 2' x 2' x full height	33	EA	\$1,000.00	\$33,000
Council Chambers Millwork & Furnishing				
Dais seating & desk	7	EA		NIC
Council Chambers seating	80	EA		NIC
Lectern	1	LS		NIC
Subtotal For Furnishings:				\$122,848



Library Cedar Terrace View

New Library

Atherton Civic Center

Control Quantities
New Library Summary
Detailed Cost Breakdown

May 11, 2016

Enclosed Areas
Ground floor, library 9,780

Subtotal of Enclosed Area 9,780

Covered Area
Roof Overhang 1,245

Subtotal of Covered Area at half value 623

Total of Gross Floor Area 10,403

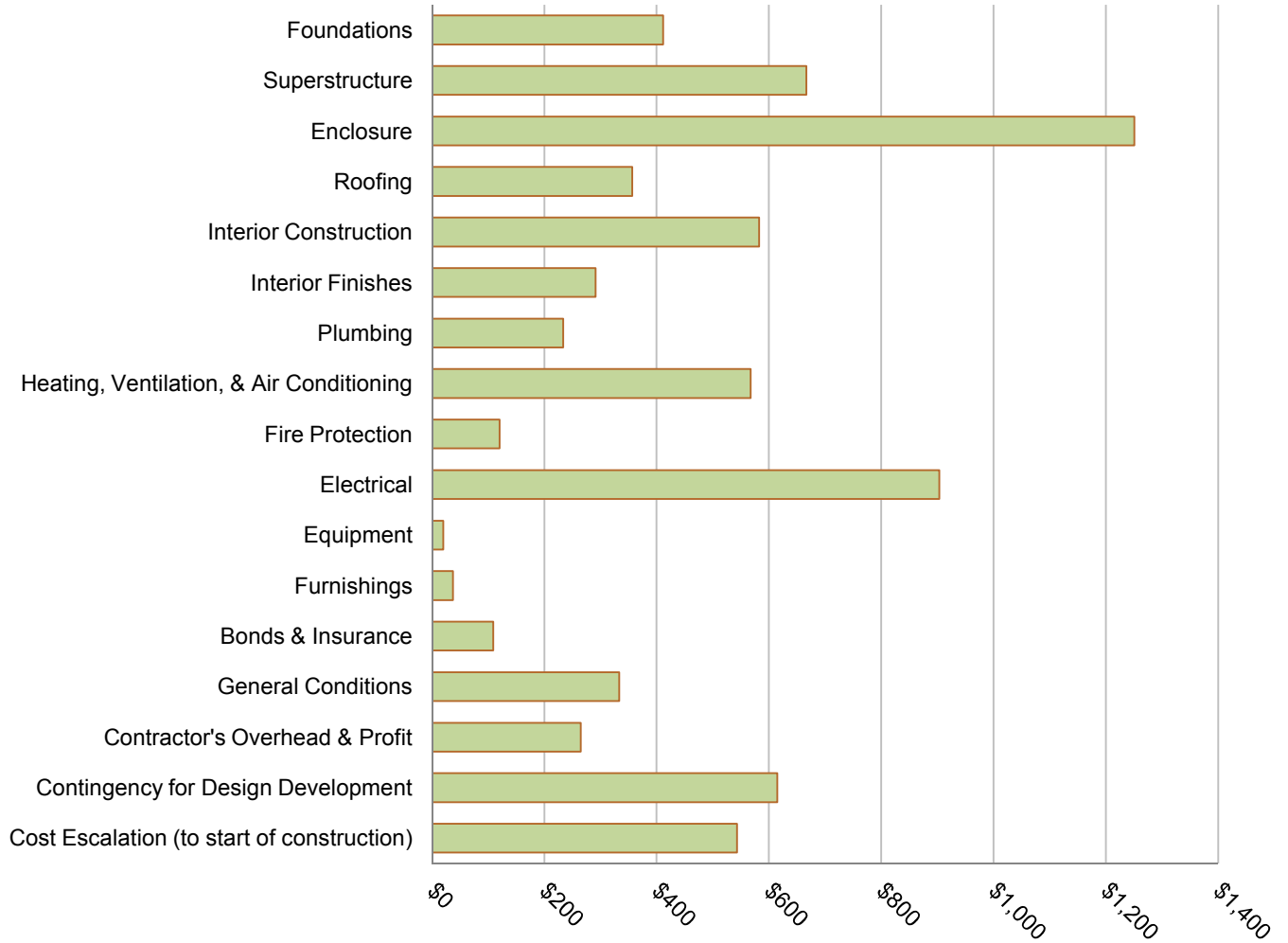
CONTROL QUANTITIES

			Ratio to Gross Area
Number of stories (x1,000)	1	EA	0.096
Gross Area	10,403	SF	1.000
Enclosed Area	9,780	SF	0.940
Covered Area	1,245	SF	0.120
Footprint Area	9,780	SF	0.940
Volume	150,954	CF	14.511
Gross Wall Area	8,767	SF	0.843
Finished Wall Area	7,338	SF	0.705
Windows or Glazing Area	16% 1,429	SF	0.137
Roof Area - Flat	0	SF	0.000
Roof Area - Sloping	11,025	SF	1.060
Roof Area - Total	11,025	SF	1.060
Roof Glazing Area	0	SF	0.000
Interior Partition Length	610	LF	0.059
Elevators (x10,000)	0	EA	0.000

CSI UniFormat Summary	10,403 SF	%	\$/SF	\$,000
Foundations		6%	\$39.56	\$412
Superstructure		9%	\$64.11	\$667
Enclosure		17%	\$120.25	\$1,251
Roofing		5%	\$34.29	\$357
Interior Construction		8%	\$56.02	\$583
Interior Finishes		4%	\$27.99	\$291
Plumbing		3%	\$22.45	\$234
Heating, Ventilation, & Air Conditioning		8%	\$54.55	\$567
Fire Protection		2%	\$11.60	\$121
Electrical		12%	\$86.83	\$903
Equipment		0%	\$1.92	\$20
Furnishings		1%	\$3.60	\$37
Subtotal - Building Construction		74%	\$523.17	\$5,442
Bonds & Insurance	2.00%	1%	\$10.46	\$109
General Conditions		5%	\$32.05	\$333
Contractor's Overhead & Profit	4.50%	4%	\$25.46	\$265
Subtotal		84%	\$591.14	\$6,149
Contingency for Design Development	10.00%	8%	\$59.11	\$615
Cost Escalation (to start of construction)	8.03%	7%	\$52.20	\$543
TOTAL CONSTRUCTION BUDGET	July 2017	100%	\$702.45	\$7,307

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Standard Foundations				
Reinforced concrete grade beams				
24" wide x 36" deep with 150pcy rebar	444	LF	\$150.00	\$66,600
36" wide x 42" deep with 200pcy rebar	60	LF	\$260.00	\$15,600
96" wide x 42" deep with 200pcy rebar	84	LF	\$600.00	\$50,400
Reinforced concrete spread footings				
5'-0" square x 2'-0" deep with 80pcy rebar	9	EA	\$1,000.00	\$9,000
7'-0" x 10'-0" x 2'-0" deep	1	EA	\$2,500.00	\$2,500
Special Foundations				
Drilled concrete pier, 24" diameter x 45' deep with 200pcy rebar	405	LF	\$150.00	\$60,750
Mobilization/demobilization and testing	1	LS	\$15,000.00	\$15,000
Slab On Grade				
5" thick reinforced concrete slab on grade, reinforced with #5 @ 18" o.c., e.w.	9,780	SF	\$6.50	\$63,570
"Stegowrap" water vapor membrane, 15mil	9,780	SF	\$0.75	\$7,335
Excavation and removal	1,933	CY	\$25.00	\$48,324
4" thick crushed rock	121	CY	\$75.00	\$9,056
12" thick class 2 aggregate	362	CY	\$75.00	\$27,167
30" thick compacted engineered fill, extend pad 5' beyond edge of building on all sides				<i>see Site Preparation</i>
6~12" thick scarified/moisture conditioned/compacted native soil				<i>see Site Preparation</i>
Miscellaneous				
Perimeter perforated drain pipe	568	LF	\$25.00	\$14,200
Perimeter concrete stemwall/curb	568	LF	\$30.00	\$17,040
Concrete curbs and mechanical pads	1	LS	\$5,000.00	\$5,000
Subtotal For Foundations:				\$411,541

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Vertical Structure				
Structural tube columns and buckling restrained braced frame (BRBF), including connections				
HSS 5x5x3/8	4	T	\$5,200.00	\$22,456
HSS 8x8x1/2	9	T	\$5,200.00	\$47,921
BRBF	10	EA	\$5,000.00	\$50,000
Base plates	36	EA	\$350.00	\$12,600

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Sloped Roof Construction				
Structural steel roof framing, allow 14psf	77	T	\$5,200.00	\$401,310
Steel deck, N18 ga G60	11,025	SF	\$6.00	\$66,150
Sprayed-fireproofing	100	T	\$300.00	\$30,097
Miscellaneous				
Miscellaneous metal	10,403	GSF	\$2.00	\$20,805
Miscellaneous rough carpentry	10,403	GSF	\$1.50	\$15,604
Subtotal For Superstructure:				\$666,943
ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Walls				
Stone rainscreen panel	7,338	SF	\$95.00	\$697,156
Exterior Windows				
Storefront system	1,429	SF	\$105.00	\$150,003
Premium for tri-leaf sliding door	6	EA	\$25,000.00	\$150,000
Interior finish of exterior wall				
Painted gypwall	7,338	SF	\$5.00	\$36,692
Exterior Doors				
Double leaf door	4	PR	\$10,000.00	\$40,000
Single leaf door	5	EA	\$5,000.00	\$25,000
Premium for special door hardwares	1	LS	\$30,000.00	\$30,000
Balustrades, parapets and roof screens				
Mechanical roof screen	1,600	SF	\$45.00	\$72,000
Backside of parapet wall, 1'-10" high	1,041	SF	\$20.00	\$20,823
Miscellaneous Work				
Fascias, bands, screens and trim etc.	8,767	GWA	\$2.50	\$21,918
Rough carpentry	9,780	GSF	\$0.75	\$7,335
Subtotal For Enclosure:				\$1,250,927

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof Coverings				
Built-up roof at all flat roofs, including rigid insulation	11,025	SF	\$16.00	\$176,400
Premium for skylights, allow 10%	1,103	SF	\$125.00	\$137,813
Premium for green roof				<i>NIC, Not required</i>
Roofing upstands and sheetmetal				
Roof flashing, gutters and downspouts	11,025	SF	\$1.50	\$16,538
Roof or deck traffic surfaces				
Allowance for mechanical roof pad, 10% of roof area	1,103	SF	\$15.00	\$16,538
Miscellaneous work				
Roof access hatches with ladder	1	EA	\$4,500.00	\$4,500
Caulking and sealants	9,780	GSF	\$0.50	\$4,890
Subtotal For Roofing:				\$356,678

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Interior Partitions				
Non-rated partition, 75%	6,195	SF	\$14.00	\$86,730
Rated partition, 25%	2,065	SF	\$20.00	\$41,300
Plumbing chasewall	280	SF	\$21.00	\$5,880
Backing and blacking	9,780	GSF	\$1.25	\$12,225
Window Walls				
Allowance for glazed wall/sidelight, 10% of interior partition	590	SF	\$75.00	\$44,250
Interior Doors				
Single leaf	18	EA	\$1,800.00	\$32,400
Double leaf	1	PR	\$3,200.00	\$3,200
Premium for tri-leaf sliding door	3	SET	\$25,000.00	\$75,000
Premium for special door hardware	1	LS	\$25,000.00	\$25,000
Fittings				
Protective guards, barriers and bumpers Allowance	1	LS	\$2,500.00	\$2,500

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Prefabricated compartments and accessories				
Toilet Partitions				
Standard	6	EA	\$1,100.00	\$6,600
Disabled	2	EA	\$1,400.00	\$2,800
Toilet Accessories, single stall				
Single stall, family restroom	1	RM	\$1,500.00	\$1,500
Multi-stall	4	RM	\$2,000.00	\$8,000
Shelving and Millwork				
Vanity countertop	28	LF	\$200.00	\$5,600
Reception desk	12	LF	\$600.00	\$7,200
Storage shelves	1	LS	\$4,000.00	\$4,000
Cabinets and Countertops				
General casework	9,780	GSF	\$3.00	\$29,340
Library shelving; includes book shelving and tools library shelving	9,780	GSF	\$15.00	\$146,700
Chalkboards and Graphics				
Directional/wayfinding signs	9,780	GSF	\$1.50	\$14,670
Door signage	19	EA	\$150.00	\$2,850
Building signage - exterior	1	LS	\$20,000.00	\$20,000
Chalkboards and tackboards	1	LS	\$5,000.00	\$5,000
Subtotal For Interior Construction:				\$582,745

STAIRS	Quantity	Unit	Rate	Total (\$)
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No work anticipated in this section

Subtotal For Stairs:

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Floor, Wall and Ceiling Finishes				
Restroom; ceramic floor and wall finishes with painted gypboard ceiling	383	SF	\$75.00	\$28,725
Server, equipment room, storage and MEP room; sealed concrete, painted gypwall and exposed soffit	750	SF	\$4.00	\$3,000
Library; combination of carpet & linoleum floor finishes, painted gypwall and ACT/gypwall ceiling	8,647	SF	\$25.00	\$216,175
Water vapor emission control system, under the resinous and carpet finishes	8,647	SF	\$3.00	\$25,941
Allowance for finishes upgrade	8,647	GSF	\$2.00	\$17,294
Subtotal For Interior Finishes:				\$291,135

CONVEYING	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Conveying:				

PLUMBING	Quantity	Unit	Rate	Total (\$)
Plumbing Equipment				
Plumbing equipment	9,780	SF	\$4.00	\$39,120
Plumbing Fixtures				
Plumbing fixtures	9,780	SF	\$6.00	\$58,680
Domestic Water Distribution				
Copper pipe type L with fittings & hangers	9,780	SF	\$3.50	\$34,230
Domestic water pipe insulation	9,780	SF	\$1.50	\$14,670
Non-Potable Water Distribution				
Copper pipe type L with fittings & hangers	9,780	SF	\$1.25	\$12,225
Domestic water pipe insulation	9,780	SF	\$0.50	\$4,890
Sanitary Waste & Vent Piping				
Cast iron pipe with fittings & hangers	9,780	SF	\$3.00	\$29,340

PLUMBING	Quantity	Unit	Rate	Total (\$)
Storm Water Piping				
Cast iron pipe with fittings & hangers	9,780	SF	\$1.50	\$14,670
Natural Gas Piping				
Black steel pipe with fittings & hangers (Allowance)	9,780	SF	\$1.00	\$9,780
Miscellaneous				
Disinfecting & flushing	1	LS	\$6,000.00	\$6,000
Coring, sealing and firestopping	1	LS	\$5,000.00	\$5,000
Coordination & management	1	LS	\$3,200.00	\$3,200
Fees & permits	1	LS	\$1,700.00	\$1,700
Subtotal For Plumbing:				\$233,505

HEATING, VENTILATION, & AIR- CONDITIONING	Quantity	Unit	Rate	Total (\$)
Equipment				
Equipment	9,780	SF	\$18.00	\$176,040
Piping				
Heating hot water pipe with fittings & hangers	9,780	SF	\$4.00	\$39,120
Chilled water pipe with fittings & hangers	9,780	SF	\$3.00	\$29,340
Refrigeration piping with fittings & hangers	9,780	SF	\$0.65	\$6,357
Condensate drain piping with fittings & hangers	9,780	SF	\$0.50	\$4,890
Valves & accessories	9,780	SF	\$2.00	\$19,560
Pipe insulation	9,780	SF	\$2.50	\$24,450
Ductwork				
Galvanized ductwork with fittings & hangers	9,400	LB	\$11.00	\$103,400
Duct insulation	5,600	SF	\$4.00	\$22,400
Registers, grilles & diffusers	9,780	SF	\$1.50	\$14,670
Miscellaneous sheet metal accessories	9,780	SF	\$0.75	\$7,335

**HEATING, VENTILATION, & AIR-
CONDITIONING**

	Quantity	Unit	Rate	Total (\$)
Miscellaneous				
Automatic temperature control DDC	9,780	SF	\$8.50	\$83,130
Test and balance	9,780	SF	\$0.75	\$7,335
Coring and firestopping	1	LS	\$4,000.00	\$4,000
Rigging & equipment rental	1	LS	\$10,000.00	\$10,000
Coordination & management	1	LS	\$10,000.00	\$10,000
Fees & permits	1	LS	\$5,400.00	\$5,400
Subtotal For Heating, Ventilation, & Air-Conditioning:				\$567,427

FIRE PROTECTION

	Quantity	Unit	Rate	Total (\$)
Wet Pipe Sprinkler Distribution				
Double check valve	1	EA	\$10,000.00	\$10,000
Wet alarm valve	1	EA	\$4,500.00	\$4,500
Fire department connection	1	EA	\$1,200.00	\$1,200
Sprinkler head	68	EA	\$200.00	\$13,600
Miscellaneous valves	1	LS	\$5,000.00	\$5,000
Main sprinkler pipe with fittings & hangers	400	LF	\$30.00	\$12,000
Branch sprinkler pipe with fittings & hangers	1,000	LF	\$26.00	\$26,000
Special systems (Allowance)	1	LS	\$25,000.00	\$25,000
Miscellaneous				
Demolition	1	LS	\$3,000.00	\$3,000
Hydraulic calculations	1	LS	\$4,000.00	\$4,000
Coring and firestopping	1	LS	\$3,000.00	\$3,000
Coordination & management	1	LS	\$3,500.00	\$3,500
Drawings	1	LS	\$2,000.00	\$2,000
Fees & permits	1	LS	\$1,200.00	\$1,200
Adjustment for increased area	833	SF	\$8.00	\$6,664
Subtotal For Fire Protection:				\$120,664

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
600A 208/120V distribution panelboard	1	EA	\$20,000.00	\$20,000
Energy monitoring	1	LS	\$10,000.00	\$10,000
Associated panelboards and feeders	9,780	SF	\$3.00	\$29,340
Grounding and bonding	1	LS	\$3,500.00	\$3,500
Emergency power				
Centralized Lighting battery inverter	1	LS	\$115,000.00	\$115,000
Equipment wiring				
Mechanical equipment feed and connections	9,780	SF	\$2.00	\$19,560
Photovoltaic system				
65KW system with array of panels, inverters, panelboards, feeders and installation	1	LS	\$195,000.00	\$195,000
Allowance for structural steel support, 10psf	5,000	SF	\$30.00	\$150,000
Lighting and Branch Wiring				
Lighting fixtures LED	9,780	SF	\$10.00	\$97,800
Exterior building lighting	1	LS	\$7,500.00	\$7,500
Lighting controls	9,780	SF	\$1.50	\$14,670
Switches and sensors	9,780	SF	\$0.65	\$6,357
Duplex receptacle	150	EA	\$30.00	\$4,500
GFCI duplex receptacle	15	EA	\$40.00	\$600
Special purpose receptacle	15	EA	\$45.00	\$675
Circuitry	9,780	SF	\$6.00	\$58,680
Communications and Security				
Fire Alarm				
Fire alarm control panel	1	EA	\$7,500.00	\$7,500
Bi-Directional amplification	1	EA	\$15,000.00	\$15,000
Graphic annunciator	1	EA	\$3,500.00	\$3,500
LCD annunciator	1	EA	\$1,500.00	\$1,500
Initiating device	16	EA	\$150.00	\$2,400
Audio visual device	20	EA	\$125.00	\$2,500
Visual device	5	EA	\$115.00	\$575
Modules	10	EA	\$150.00	\$1,500
Device box	50	EA	\$30.00	\$1,500
3/4" EMT	1,500	LF	\$8.00	\$12,000
FA cable	2,500	LF	\$1.50	\$3,750
Testing and programming	1	LS	\$3,500.00	\$3,500

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Telecommunications				
MDF fit out	1	EA	\$4,500.00	\$4,500
Cabling and devices	9,780	SF	\$2.50	\$24,450
Rough-in cable tray, conduit and backboxes	9,780	SF	\$1.00	\$9,780
Grounding	1	LS	\$1,500.00	\$1,500
AV system				
AV system rough-in & power	9,780	SF	\$1.00	\$9,780
Security system				
Security system	9,780	SF	\$3.00	\$29,340
SatelliteTV				
Rough-in, provisions only	1	LS	\$5,000.00	\$5,000
PA system				NIC
Master Clock				NIC
Other Electrical Systems				
Temp power & lighting	1	LS	\$5,500.00	\$5,500
Seismic restraints	1	LS	\$10,000.00	\$10,000
Fees & Permits	1	LS	\$15,000.00	\$15,000
Subtotal For Electrical:				\$903,257

EQUIPMENT	Quantity	Unit	Rate	Total (\$)
Commercial Equipment				
Residential equipment at breakroom; including refrigerator, microwave, and dishwasher	1	RM	\$10,000.00	\$10,000
Library equipment; including book depository slots and security gate	1	LS	\$10,000.00	\$10,000
Subtotal For Equipment:				\$20,000

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
Fixed Furnishings				
Light Control and Vision Equipment				
Window shades and blinds, manual operation	1,429	SF	\$8.00	\$11,429
Projection screens at meeting rooms and digital lab	4	EA	\$5,000.00	\$20,000
Amenities and Convenience Items				
Entrance mats and frames	1	LS	\$5,000.00	\$5,000
Fire Extinguisher cabinets	1	LS	\$1,000.00	\$1,000
Subtotal For Furnishings:				\$37,429

Schematic Design Cost Estimate

Renovate existing Heritage/MPR

Atherton Civic Center

Control Quantities
Renovate existing Heritage/MPR Summary
Detailed Cost Breakdown

May 11, 2016

Enclosed Areas
Ground floor 1,754

Subtotal of Enclosed Area 1,754

Covered Area
Roof Overhang 384

Subtotal of Covered Area at half value 192

Total of Gross Floor Area 1,946

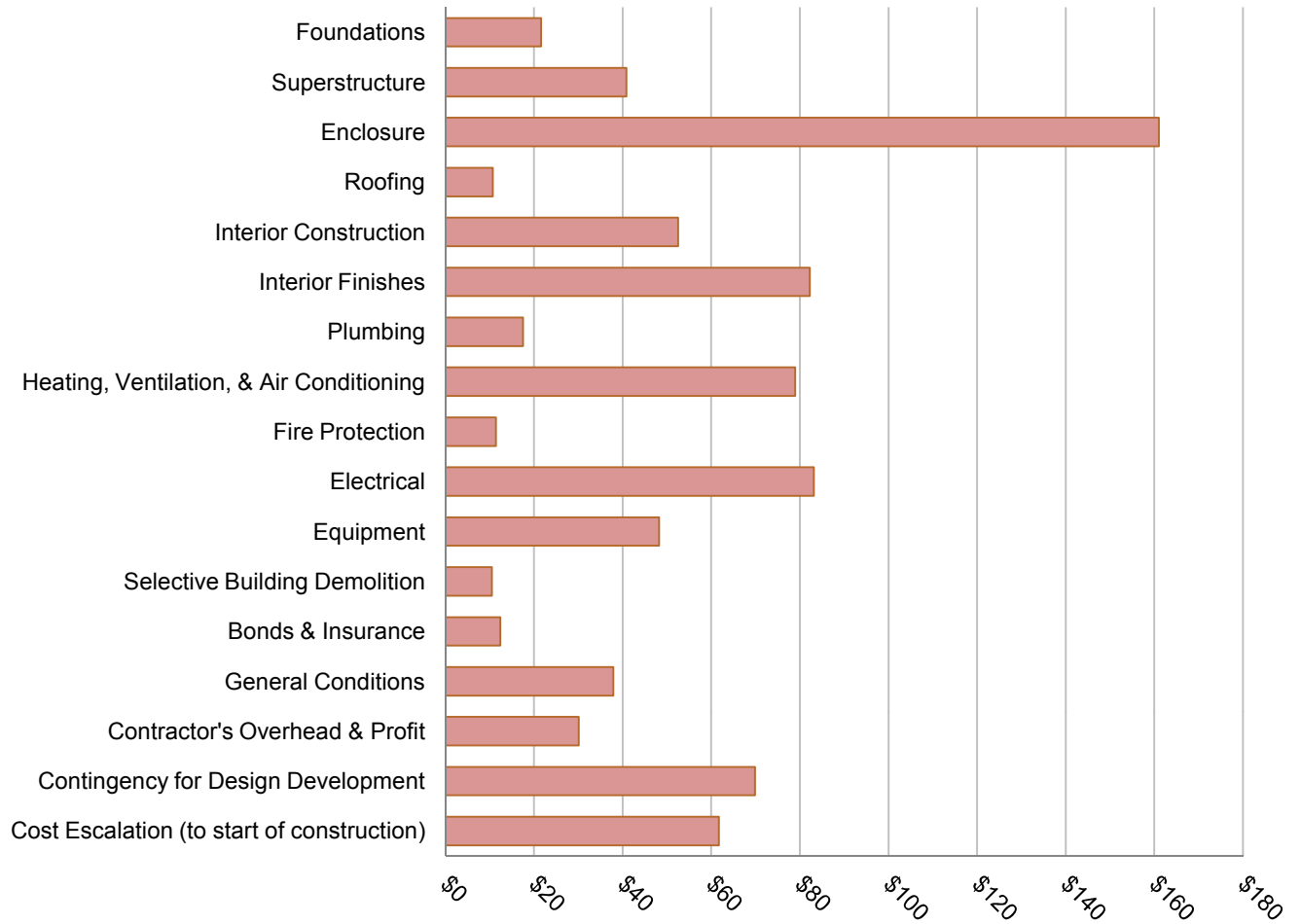
CONTROL QUANTITIES

			Ratio to Gross Area
Number of stories (x1,000)	1	EA	0.514
Gross Area	1,946	SF	1.000
Enclosed Area	1,754	SF	0.901
Covered Area	384	SF	0.197
Footprint Area	1,754	SF	0.901
Volume	24,556	CF	12.619
Gross Wall Area	3,499	SF	1.798
Finished Wall Area	3,203	SF	1.646
Windows or Glazing Area	8% 296	SF	0.152
Roof Area - Flat	0	SF	0.000
Roof Area - Sloping	2,138	SF	1.099
Roof Area - Total	2,138	SF	1.099
Roof Glazing Area	0	SF	0.000
Interior Partition Length	84	LF	0.043
Elevators (x10,000)	0	EA	0.000

CSI UniFormat Summary	1,946 SF	%	\$/SF	\$,000
Foundations		3%	\$11.10	\$22
Superstructure		5%	\$21.01	\$41
Enclosure		19%	\$82.74	\$161
Roofing		1%	\$5.49	\$11
Interior Construction		6%	\$26.98	\$52
Interior Finishes		10%	\$42.26	\$82
Plumbing		2%	\$9.01	\$18
Heating, Ventilation, & Air Conditioning		10%	\$40.56	\$79
Fire Protection		1%	\$5.86	\$11
Electrical		10%	\$42.72	\$83
Equipment		6%	\$24.79	\$48
Selective Building Demolition		1%	\$5.41	\$11
Subtotal - Building Construction		74%	\$317.92	\$619
Bonds & Insurance	2.00%	1%	\$6.36	\$12
General Conditions	6.01%	5%	\$19.48	\$38
Contractor's Overhead & Profit	4.50%	4%	\$15.47	\$30
Subtotal		84%	\$359.23	\$699
Contingency for Design Development	10.00%	8%	\$35.92	\$70
Cost Escalation (to start of construction)	8.03%	7%	\$31.72	\$62
TOTAL CONSTRUCTION BUDGET	July 2017	100%	\$426.87	\$831

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



FOUNDATIONS	Quantity	Unit	Rate	Total (\$)
Standard Foundations				
Reinforced concrete grade beams 18" wide x 24" deep with 175pcy rebar	72	LF	\$175.00	\$12,600
Slab On Grade				
Cut and patch (E) slab on grade, over the new grade beams	360	SF	\$25.00	\$9,000
Subtotal For Foundations:				\$21,600

SUPERSTRUCTURE	Quantity	Unit	Rate	Total (\$)
Seismic Upgrade				
Strip existing inside finishes to studs	3,499	GWA	\$2.00	\$6,998
New 1/2" thick plywood sheathing	3,499	SF	\$5.00	\$17,495
Hold-downs epoxied to the foundation at each end of each wall	24	EA	\$150.00	\$3,600
Miscellaneous sheet-metal hardware to tie together various sections of the building	1,946	GSF	\$2.00	\$3,892
Miscellaneous				
Rough carpentry	1,946	GSF	\$2.00	\$3,892
Temporary scaffolding, shoring and safety measure	1	LS	\$5,000.00	\$5,000
Subtotal For Superstructure:				\$40,877

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Exterior Walls				
Patch/repair and repaint existing cement plaster/stucco wall	3,499	SF	\$10.00	\$34,990
Exterior Windows				
Storefront system, with insulated low-E glazing	212	SF	\$105.00	\$22,260
Premium for tri-leaf sliding door	2	EA	\$25,000.00	\$50,000
Aluminum framed windows, with insulated low-E vision glazing	84	SF	\$90.00	\$7,560

ENCLOSURE	Quantity	Unit	Rate	Total (\$)
Interior finish of exterior wall				
Painted gypwall	3,499	SF	\$5.00	\$17,495
Exterior Doors, finished oak door with bronze finished custom hardware				
Double leaf door	1	PR	\$10,000.00	\$10,000
Single leaf door	1	EA	\$2,400.00	\$2,400
Premium for special door hardwares	1	LS	\$4,000.00	\$4,000
Soffits				
Exterior soffit, patch/repair and repaint existing	384	SF	\$10.00	\$3,840
Miscellaneous Work				
Fascias, bands, screens, trim, wood articulation at doors, etc.	3,499	GWA	\$2.00	\$6,998
Rough carpentry	1,946	GSF	\$0.75	\$1,460
Subtotal For Enclosure:				\$161,003

ROOFING	Quantity	Unit	Rate	Total (\$)
Roof Coverings				
Patch/repair existing clay roof system	2,138	SF	\$5.00	\$10,690
Subtotal For Roofing:				\$10,690

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Interior Partitions				
Non-rated partition, 75%	851	SF	\$14.00	\$11,907
Rated partition, 25%	284	SF	\$20.00	\$5,670
Backing and blacking	1,946	GSF	\$1.25	\$2,433
Window Walls				
Allowance for glazed wall/sidelight	72	SF	\$75.00	\$5,400
Interior Doors				
Single leaf	3	EA	\$1,800.00	\$5,400
Double leaf	1	PR	\$3,200.00	\$3,200

INTERIOR CONSTRUCTION	Quantity	Unit	Rate	Total (\$)
Fittings				
Protective guards, barriers and bumpers	1,946	GSF	\$0.50	\$973
Toilet Partitions and accessories	1,946	GSF	\$5.00	\$9,730
Shelving and Millwork	1,946	GSF	\$1.00	\$1,946
Cabinets and Countertops	1,946	GSF	\$1.00	\$1,946
Allowance for chalkboards, insignia and graphics; including door signages, directional/wayfinding signs and chalkboards/tackboards	1,946	GSF	\$2.00	\$3,892
Subtotal For Interior Construction:				\$52,497

STAIRS	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Stairs:				

INTERIOR FINISHES	Quantity	Unit	Rate	Total (\$)
Floor, Wall and Ceiling Finishes				
Café/Warming kitchen	322	SF	\$75.00	\$24,120
Meeting room lobby	137	SF	\$75.00	\$10,260
Community meeting; carpet tile floor finish, gypwall ceiling	986	SF	\$25.00	\$24,660
Restroom; ceramic floor and wall finishes with painted gypboard ceiling	309	SF	\$75.00	\$23,201
Subtotal For Interior Finishes:				\$82,241

CONVEYING	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Conveying:				

PLUMBING	Quantity	Unit	Rate	Total (\$)
Allowance for roof drainage repair	1,754	GSF	\$10.00	\$17,540
Subtotal For Plumbing:				\$17,540

HEATING, VENTILATION, & AIR-CONDITIONING	Quantity	Unit	Rate	Total (\$)
Allowance to modify existing HVAC	1,754	GSF	\$45.00	\$78,930
Subtotal For Heating, Ventilation, & Air-Conditioning:				\$78,930

FIRE PROTECTION	Quantity	Unit	Rate	Total (\$)
Allowance to modify existing fire sprinkler system	1,754	GSF	\$6.50	\$11,401
Subtotal For Fire Protection:				\$11,401

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
Gear and distribution	1,946	SF	\$3.00	\$5,838
Emergency power	1,946	SF	\$1.50	\$2,919
Mechanical equipment wiring	1,946	SF	\$2.50	\$4,865
Kitchen equipment wiring	1	LS	\$10,000.00	\$10,000
Lighting and Branch Wiring				
LED lighting	1,946	SF	\$6.00	\$11,676
Exit and emergency lighting	1,946	SF	\$2.00	\$3,892
Exterior lighting	1	LS	\$8,500.00	\$8,500
Lighting controls	1,946	SF	\$1.50	\$2,919
Communications and Security				
Fire alarm system	1,946	SF	\$2.50	\$4,865
Security system	1,946	SF	\$3.00	\$5,838

ELECTRICAL	Quantity	Unit	Rate	Total (\$)
Telecommunications				
MDF closet fit-out	1	LS	\$6,500.00	\$6,500
Devices and cabling	1,946	SF	\$2.00	\$3,892
Rough in, conduit and backboxes	1,946	SF	\$1.00	\$1,946
AV system				
AV system rough-in & power	1,946	SF	\$0.25	\$487
Other Electrical Systems				
Demo & make safe	1	LS	\$3,500.00	\$3,500
Temp power & lighting	1	LS	\$2,500.00	\$2,500
Fees & Permits	1	LS	\$3,000.00	\$3,000
Subtotal For Electrical:				\$83,137

EQUIPMENT	Quantity	Unit	Rate	Total (\$)
Commercial Equipment				
Food Service allowance	322	SF	\$150.00	\$48,240
Subtotal For Equipment:				\$48,240

FURNISHINGS	Quantity	Unit	Rate	Total (\$)
<i>No work anticipated in this section</i>				
Subtotal For Furnishings:				

SELECTIVE BUILDING DEMOLITION	Quantity	Unit	Rate	Total (\$)
Selective Demolition				
Demolition and removal of existing partitions/doors and interior finishes	1,754	SF	\$6.00	\$10,524
Hazardous Materials Abatement				NIC, Excluded
Subtotal For Selective Building Demolition:				\$10,524



Site Improvement

Atherton Civic Center

Control Quantities
Site Improvement Summary
Detailed Cost Breakdown

May 11, 2016

Site Areas

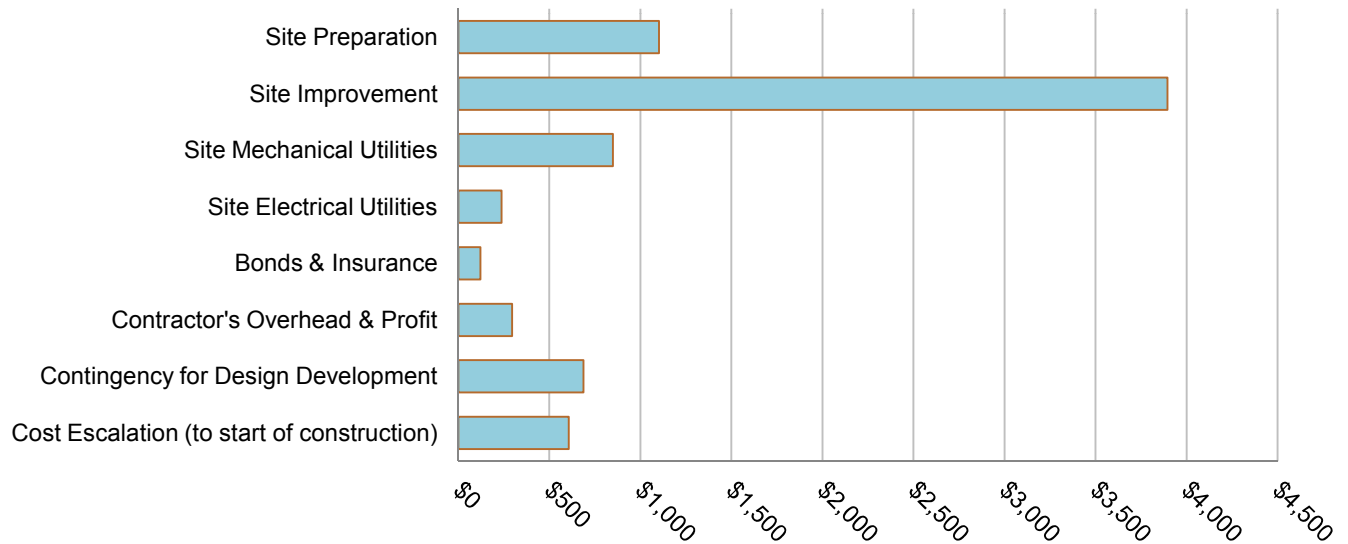
New Roadways	2,000
Secure PD parking lot	12,518
Vehicular paving and parking	87,042
Pedestrian paving and hardscape	32,900
Landscaping and Softscape	52,000
Biofiltration basin	5,000
New Building footprint	28,440
Existing MPR to remain	1,754

Subtotal of Site Area	221,654
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CSI UniFormat Summary	221,654 SF	%	\$/SF	,\$000
Site Preparation		14%	\$4.98	\$1,103
Site Improvement		48%	\$17.57	\$3,894
Site Mechanical Utilities		10%	\$3.84	\$850
Site Electrical Utilities		3%	\$1.07	\$237
Subtotal - Sitework		74%	\$27.45	\$6,085
Bonds & Insurance	2.00%	1%	\$0.55	\$122
General Conditions	6.01%	5%	\$1.68	\$373
Contractor's Overhead & Profit	4.50%	4%	\$1.34	\$296
Subtotal		84%	\$31.02	\$6,876
Contingency for Design Development	10.00%	8%	\$3.10	\$688
Cost Escalation (to start of construction)	8.03%	7%	\$2.74	\$607
TOTAL CONSTRUCTION BUDGET	July 2017	100%	\$36.86	\$8,171

NOTE: Inclusions and Exclusions listed in the Commentary Section.

CSI UniFormat Summary



SITE PREPARATION	Quantity	Unit	Rate	Total (\$)
Demolition Of Building and Structures				
Demo and removal of existing building within the limit of work; including city offices, police station, building department, permit center, library and one maintenance building	24,690	SF	\$8.00	\$197,520
Demo and removal of all hardscape features surrounding the building to be removed	221,654	SF	\$1.50	\$332,481
Remove existing heritage trees	8	EA	\$750.00	\$6,000
Site Protective Construction				
Protect existing landscape and heritage trees to remain	1	LS	\$35,000.00	\$35,000
Erosion control/SWPPP	221,654	SF	\$0.50	\$110,827
Earthwork				
Site clearing and grading/balancing earthwork within the site	221,654	SF	\$1.00	\$221,654
Excavate and offhaul unsuitable materials	1,000	CY	\$25.00	\$25,000
30" thick compacted engineered fill, extend pad 5' beyond edge of building on all sides				
New Admin/CC/PD	2,159	CY	\$35.00	\$75,574
New library	1,250	CY	\$35.00	\$43,750
6~12" thick scarified/moisture conditioned/compacted native soil				
New Admin/CC/PD	23,320	SF	\$1.50	\$34,980
New library	13,500	SF	\$1.50	\$20,250
Hazardous Materials Abatement				NIC
Subtotal For Site Preparation:				\$1,103,036

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Vehicular Paving				
Vehicular asphalt paving				
New Roadways	2,000	SF	\$6.00	\$12,000
Secure PD parking lot				<i>included with PD parking</i>
Vehicular paving and parking	87,042	SF	\$5.50	\$478,731
Pavement marking and striping	89,042	SF	\$0.35	\$31,165
Concrete curb and gutter	5,000	LF	\$30.00	\$150,000
Wheelstop	275	EA	\$100.00	\$27,500

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Pedestrian Paving				
Pedestrian pathways and hardscape				
CIP concrete path/sidewalk	18,700	SF	\$20.00	\$374,000
Brick pavers	3,500	SF	\$35.00	\$122,500
Composite deck, including railings and built-in seating	4,700	SF	\$85.00	\$399,500
Stabilized decomposed granite paving	4,800	SF	\$4.00	\$19,200
Patio pavers	1,200	SF	\$30.00	\$36,000
Concrete curb - allowance	4,500	LF	\$25.00	\$112,500
Site Structures				
Seat walls, stone veneer	350	LF	\$500.00	\$175,000
Freestanding wall	280	LF	\$300.00	\$84,000
Ancillary Building				
Structural				
Reinforced concrete foundation	1,900	GSF	\$20.00	\$38,000
Reinforced concrete slab on grade	1,900	GSF	\$15.00	\$28,500
Vertical Structure/Post	1,900	GSF	\$10.00	\$19,000
Roof framing and plywood sheathing	1,900	GSF	\$25.00	\$47,500
Exterior Enclosure				
Perimeter cmu wall	2,618	SF	\$30.00	\$78,540
Interior finish to exterior wall, painted gypwall	2,618	SF	\$7.50	\$19,635
Exterior Window, ballistic rated	75	SF	\$125.00	\$9,375
Exterior Doors				
Single leaf	4	EA	\$2,000.00	\$8,000
Double leaf	3	PR	\$3,200.00	\$9,600
Garage door				
At stolen vehicle garage, 22'-6" wide x 8'-0" high	1	EA	\$18,000.00	\$18,000
At motorcycle garage, 8'-0" wide x 8'-0" high	1	EA	\$6,400.00	\$6,400
Ancillary Building				
Roofing				
Built-up roof including rigid insulation, flat roof area	1,900	SF	\$20.00	\$38,000
Roof flashing, gutters and downspouts	1,900	SF	\$2.00	\$3,800

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Ancillary Building				
Interior Construction				
Interior cmu wall	1,012	SF	\$30.00	\$30,360
Interior gypwall	671	SF	\$20.00	\$13,420
Interior doors	3	EA	\$1,800.00	\$5,400
General casework	1,900	GSF	\$5.00	\$9,500
Chalkboards and graphics; including directional/wayfinding signs, door signage, chalkboard and tackboards, flagpole, and building signs	1,900	GSF	\$5.00	\$9,500
Floor, Wall and Ceiling Finishes	1,900	GSF	\$5.00	\$9,500
Miscellaneous, rough carpentry	1,900	GSF	\$2.00	\$3,800
Plumbing, roof drainage	1,900	GSF	\$2.00	\$3,800
HVAC	1,900	GSF	\$10.00	\$19,000
Electrical	1,900	GSF	\$21.00	\$39,900
Fire Protection	1,900	GSF	\$8.00	\$15,200
Equipment and Furnishings	1,900	GSF	\$2.00	\$3,800
Police Secure Parking and Trash Area				
Wall footing	320	LF	\$75.00	\$24,000
CMU fence, 8'-0" high	2,560	SF	\$30.00	\$76,800
Sliding gate, 20'-0" wide	2	EA	\$10,000.00	\$20,000
Emergency generator pad	475	SF	\$20.00	\$9,500
Trash area pad	228	SF	\$20.00	\$4,560
Chain link fence and gate	12	LF	\$200.00	\$2,400
Secure PD parking, asphalt paving	9,915	SF	\$6.00	\$59,490
Striping and pavement marking	9,915	SF	\$0.50	\$4,958
Wheelstop	24	EA	\$100.00	\$2,400
Landscaping				
Over-excavation	2,889	CY	\$25.00	\$72,222
Amended soil mixture, assume 18" thick	2,889	CY	\$35.00	\$101,111
24" thick structural soil	741	CY	\$75.00	\$55,556
Variety of water tolerant plantings; from grasses to bushes and trees	52,000	SF	\$5.00	\$260,000
Landscaping				
New trees	69	EA	\$750.00	\$51,750
Large transplant trees, over 25' tall	2	EA	\$20,000.00	\$40,000
Medium transplant trees, 15' ~ 25 tall	1	EA	\$10,000.00	\$10,000
Biofiltration basin	5,000	SF	\$50.00	\$250,000

SITE IMPROVEMENT	Quantity	Unit	Rate	Total (\$)
Fencing and miscellaneous site furnishing				
New fountain	1	EA	\$150,000.00	\$150,000
New play feature, including boulders and Moveable furniture, including chairs, picnic tables, hammocks, etc.	1	LS	\$100,000.00	\$100,000
Allowance for miscellaneous site furnishing; such as trash receptacles, benches, bicycle rack, bollards, etc.	1	LS	\$40,000.00	\$40,000
	1	LS	\$50,000.00	\$50,000
Subtotal For Site Improvement:				\$3,894,372

SITE MECHANICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Site Drainage				
Water service pipe	1,000	LF	\$48.00	\$48,000
SFPUC water pipe	700	LF	\$45.00	\$31,500
Storm drainage pipe	1,500	LF	\$60.00	\$90,000
Sanitary waste pipe	1,000	LF	\$55.00	\$55,000
Gas pipe	500	LF	\$75.00	\$37,500
Sub drainage pipe	1,600	LF	\$24.00	\$38,400
Irrigation pipe	1,000	LF	\$20.00	\$20,000
Ditching & backfill	1	LS	\$50,000.00	\$50,000
Connection to existing pipe	1	LS	\$40,000.00	\$40,000
Valves & accessories	1	LS	\$55,000.00	\$55,000
Rain harvesting filtration system	1	LS	\$20,000.00	\$20,000
Rain harvesting disinfection system	1	LS	\$15,000.00	\$15,000
Rain harvesting peewssurization system	1	LS	\$10,000.00	\$10,000
10,000 Gallon rain harvesting cistern	1	EA	\$40,000.00	\$40,000
Drain inlet	15	EA	\$5,000.00	\$75,000
Rainwater pump	1	EA	\$25,000.00	\$25,000
Well	1	EA	\$50,000.00	\$50,000
Other Site Mechanical Utilities				
Above ground and below grade site utilities and drainage inlet grates to be adjusted, relocated or abandoned - allowance	1	LS	\$150,000.00	\$150,000
SFPUC Waterline				NIC, by SFPUC
Subtotal For Site Mechanical Utilities:				\$850,400

SITE ELECTRICAL UTILITIES	Quantity	Unit	Rate	Total (\$)
Electrical Service and Distribution				
Pole Riser				NIC, Existing to remain
Primary ductbank includes 2-5" PVC conduits, concrete encased				
Primary ductbank to Police Building (allow)				NIC, Existing to remain
Primary ductbank to Library Building (allow)				NIC, Existing to remain
Padmount transformers assume ETR				NIC, Existing to remain
Connection to existing transformers	1	LS	\$10,000.00	\$10,000
Secondary Ductbank				
1600A feed from existing padmount transformer to Police Station (allow)	50	LF	\$595.00	\$29,750
600A feed from existing padmount transformer to Library (allow)	50	LF	\$235.00	\$11,750
Site Communications and Security				
Communications ductbank 4-4 conduits with inner duct				
Communication ductbank to Police Building (allow)	150	LF	\$203.00	\$30,450
Communication ductbank to Police Building (allow)	150	LF	\$203.00	\$30,450
Site Lighting, allowance	1	LS	\$85,000.00	\$85,000
Site Security				
Site security, allow	1	LS	\$15,000.00	\$15,000
Other Site Work				
Site demolition and relocation	1	LS	\$25,000.00	\$25,000
Subtotal For Site Electrical Utilities:				\$237,400

Summary Comparison	Job #14443
	May 11, 2016

**New Police Department, City Hall, Council Chamber & Ancillary Building
New Library
Renovate existing Heritage/MPR
Site Development**

	DELTA	mack5 May 11, 2016			mack5 Conceptual Estimated dated 9/14/2015			Notes	
		7,120 SF	45,648 SF	38,528 SF					
GROSS FLOOR AREA	18%								
CSI UniFormat Summary									
Foundations	\$589	4%	\$30.23	\$1,380	2%	\$20.52	\$791	+ drilled pier \$344K + \$76K, etc. +Excavation & removal for sog \$140K	
Superstructure	\$949	9%	\$70.10	\$3,200	7%	\$58.42	\$2,251	+ increased tonnage/sf \$400K + \$90K + increased roof area by 5,600sf = \$310K + miscellaneous \$73K	
Enclosure	(\$129)	10%	\$75.80	\$3,460	11%	\$93.17	\$3,590	reduced height of Civic Center	
Roofing	\$143	3%	\$21.58	\$985	3%	\$21.85	\$842	increased roof area	
Interior Construction	(\$21)	6%	\$46.92	\$2,142	7%	\$56.13	\$2,162	ok	
Stairs		0%	\$1.75	\$80	0%	\$2.08	\$80	ok	
Interior Finishes	\$220	3%	\$25.86	\$1,181	3%	\$24.93	\$961	increased gfa	
Conveying		0%	\$2.08	\$95	0%	\$2.47	\$95	ok	
Plumbing	\$105	3%	\$20.81	\$950	3%	\$21.94	\$845	pending Mechanical review	
Heating, Ventilation, & Air Conditioning	\$168	7%	\$50.85	\$2,321	6%	\$55.88	\$2,153	pending Mechanical review	
Fire Protection	\$32	1%	\$8.00	\$365	1%	\$8.65	\$333	pending Mechanical review	
Electrical	\$176	9%	\$71.77	\$3,276	9%	\$80.47	\$3,100	reduced unit rate of PV = \$625K	
Equipment		0%	\$1.64	\$75	0%	\$1.95	\$75	ok	
Furnishings	(\$86)	0%	\$3.51	\$160	1%	\$6.40	\$247	ok	
Selective Building Demolition		0%	\$0.00	\$0	0%	\$0.00	\$0	ok	
Subtotal - Building Construction	12%	\$2,146	56%	\$430.91	\$19,670	53%	\$454.84	\$17,524	
Site Preparation	\$105	3%	\$24.16	\$1,103	3%	\$25.90	\$998	+30" compacted engineered fill	
Site Improvement	\$1,931	11%	\$85.31	\$3,894	6%	\$50.97	\$1,964	+ roadway \$12K + increased in pedestrian paving \$561K + more seatwall \$100K + ancillary building & secured parking \$687K + increased area of new landscaping \$586K	
Site Mechanical Utilities	\$48	2%	\$18.63	\$850	2%	\$20.82	\$802	pending Mechanical review	
Site Electrical Utilities	(\$91)	1%	\$5.20	\$237	1%	\$8.53	\$329	ok	
Subtotal - Sitework	49%	\$1,993	17%	\$133.31	\$6,085	12%	\$106.22	\$4,092	increase site area by 12%
Total - Building and Sitework Construction	19%	\$4,139	73%	\$564.22	\$25,755	65%	\$561.06	\$21,616	
Bonds & Insurance	\$83	1%	\$11.28	\$515	1%	\$11.22	\$432	% of Direct cost	
General Conditions	\$200	4%	\$34.56	\$1,578	4%	\$35.77	\$1,378	% of Direct cost	
Contractor's Overhead & Profit	\$199	4%	\$27.45	\$1,253	3%	\$27.36	\$1,054	% of Direct cost	
Contingency for Design Development	(\$27)	8%	\$63.75	\$2,910	9%	\$76.25	\$2,938	Reduced Contingency from 12% to 10% Reduced Escalation 7.5% for 2016 & 6% for 2017 -	
Cost Escalation (to start of construction)	(\$1,741)	7%	\$56.30	\$2,570	13%	\$111.89	\$4,311	calculated to start in lieu of midpt	
Renovate existing Heritage/MPR	(\$686)			\$831			\$1,517	More information at SD	
TOTAL CONSTRUCTION BUDGET	7%	\$2,166	100%	\$775.77	\$35,412	100%	\$862.91	\$33,246	