

# Construction Cost Estimate

Concept Design Cost Estimate

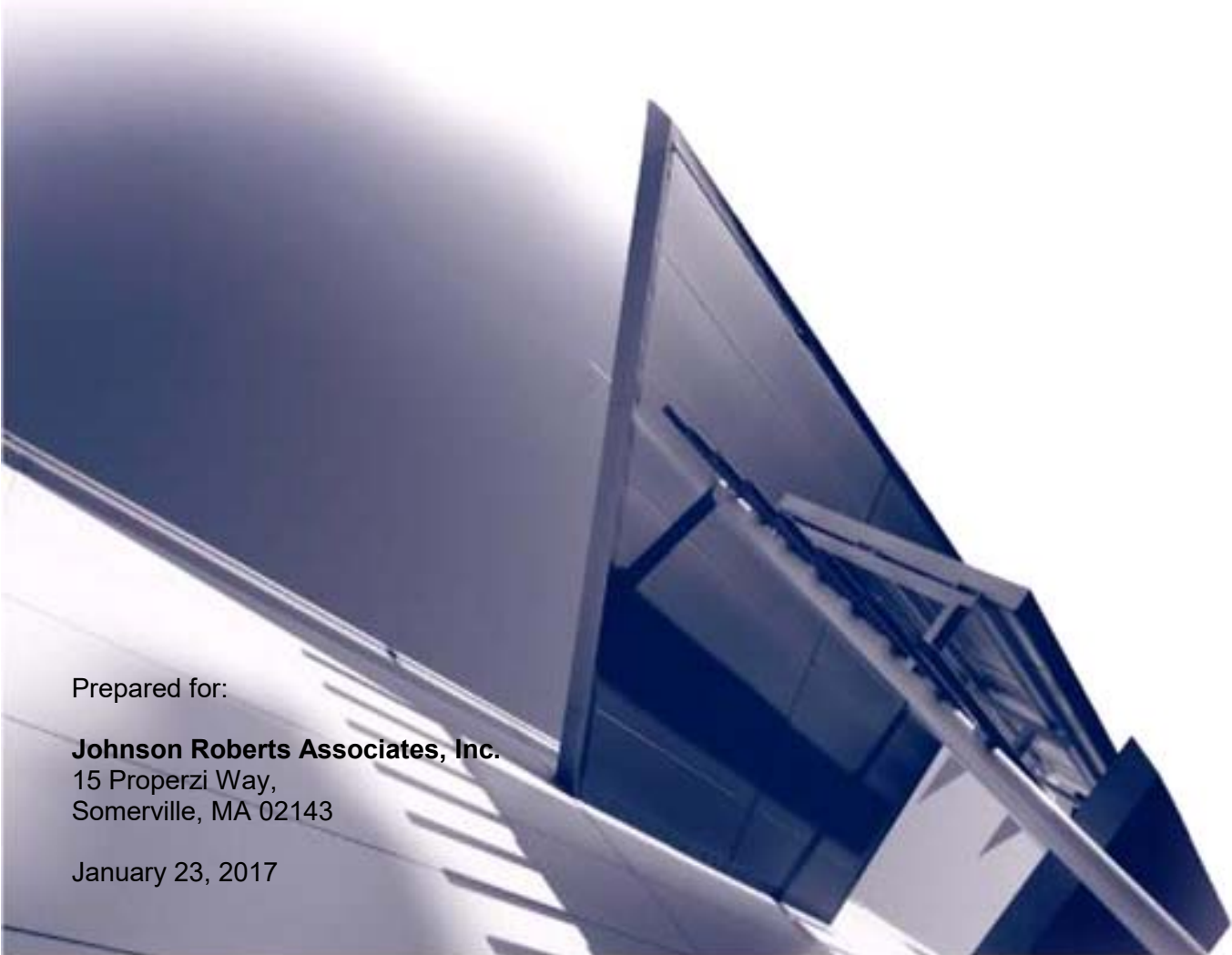
## **Belmont Public Library Option 3 - New Construction**

Belmont, MA

Prepared for:

**Johnson Roberts Associates, Inc.**  
15 Properzi Way,  
Somerville, MA 02143

January 23, 2017



## Belmont Public Library

### Concept Design Cost Estimate - Option 3

#### Project Details

#### Description

##### ***Basis of Estimate***

This estimate has been prepared at the request of the Johnson Roberts Associates and is to provide a Concept Design Cost Study for the demolition and new construction of the Belmont Public Library, located at 336 Concord Ave. in Belmont, MA.

The estimate is based upon measured quantities and built-up rates prepared from the Concept Design drawings and Sketch-Up Model issued to RLB on the 16th of December 2016, prepared by Johnson Roberts Associates.

Where information was insufficient, assumptions and allowances were made based wherever possible on discussions with the architect and engineers.

It is assumed that the project will be competitively bid by four to six general contractors and that the awarded contractor and all subcontractors will be required to pay prevailing wage rates. It is also expected that the project will be competitively bid by four to six subcontractors where filed sub-bids are required.

Unit pricing is based on January 2017 costs. A Design / Estimating Contingency of 15.0% has been included. An allowance for escalation has not been included.

##### ***Items Specifically Included***

- . This estimate is based on a Gross Floor Area of approx. 38,950 sq.ft.

##### ***Items Specifically Excluded***

- . Wiring and equipment to communications systems (estimate includes infrastructure only).
- . Wiring and equipment to security systems (estimate includes infrastructure only).
- . Book security / detection system (assume by Owner).
- . Library storage, racking, and/or shelving (assume by Owner).
- . Interior feature signage.
- . Removal, storage, and re-installation of existing FF&E.
- . Deep foundation systems.
- . Excavation in rock and/or contaminated soils.
- . Excavation within and/or below groundwater table.
- . Hazardous materials abatement, unless noted otherwise.
- . Costs associated with phasing the construction work, including out of hours work.
- . Furniture, Fittings and Equipment (FF&E).
- . Murals and works of art.
- . Mock-ups.
- . Work outside the site boundaries unless noted otherwise.
- . Owner's / Construction contingency.
- . Land and legal costs.
- . Architectural, Engineering and other professional fees.
- . Geotechnical, traffic and all other studies.
- . Items marked as "Excl." in the estimate.

**Belmont Public Library**  
Concept Design Cost Estimate - Option 3

Project Details

**Description**

. Escalation beyond Q1 2017.

**Documents**

Please refer to Basis of Estimate.

**Belmont Public Library**  
**Concept Design Cost Estimate - Option 3**

Location Summary

GFA: Gross Floor Area  
 Rates Current At January 2017

Location	GFA SF	Cost/SF	Total Cost
<b>ALL ALL LOCATIONS</b>	<b>38,950</b>	<b>300.68</b>	<b>11,711,331</b>
<b>ESTIMATED NET COST</b>	<b>38,950</b>	<b>\$300.68</b>	<b>\$11,711,331</b>
<b>MARGINS &amp; ADJUSTMENTS</b>			
Genral Conditions / Requirements	9.0 %		\$1,054,020
Bonds and Insurances	2.7 %		\$344,664
Overhead and Profit	4.0 %		\$524,401
Design / Estimating Contingency	15.0 %		\$2,045,162
Escalation			Excl.
<b>ESTIMATED TOTAL COST</b>	<b>38,950</b>	<b>\$402.56</b>	<b>\$15,679,578</b>

**Belmont Public Library**  
**Concept Design Cost Estimate - Option 3**

Gross Floor Area: 38,950 SF  
 Rates Current At January 2017

Divisions/Elements Summary

Description	Cost/SF	Total Cost
<b>02 Existing Conditions</b>		
F2010 Building Elements Demolition	5.96	232,000
F2020 Hazardous Components Abatement		Excl.
G1020 Site Demolition and Relocations	2.11	82,213
<b>Existing Conditions</b>	<b>\$8.07</b>	<b>\$314,213</b>
<b>03 Concrete</b>		
A1010 Standard Foundations	8.03	312,925
A1030 Slab on Grade	3.99	155,600
B1010 Floor Construction	3.25	126,750
<b>Concrete</b>	<b>\$15.28</b>	<b>\$595,275</b>
<b>04 Masonry</b>		
B2010 Exterior Walls	22.54	877,864
C1010 Partitions	1.07	41,760
<b>Masonry</b>	<b>\$23.61</b>	<b>\$919,624</b>
<b>05 Metals</b>		
B1010 Floor Construction	13.77	536,250
B1020 Roof Construction	12.48	486,111
B2010 Exterior Walls	5.53	215,520
C1030 Fittings	3.09	120,550
C2010 Stair Construction	1.08	42,000
<b>Metals</b>	<b>\$35.95</b>	<b>\$1,400,431</b>
<b>06 Wood, Plastics, and Composites</b>		
B3010 Roof Coverings	0.54	20,908
C1030 Fittings	1.75	68,163
C3010 Wall Finishes	2.50	97,375
E2010 Fixed Furnishings	5.80	225,925
<b>Wood, Plastics, and Composites</b>	<b>\$10.59</b>	<b>\$412,371</b>
<b>07 Thermal and Moisture Protection</b>		
A1010 Standard Foundations	0.27	10,430
A1030 Slab on Grade	1.75	68,075
B1010 Floor Construction	1.50	58,500
B1020 Roof Construction	1.61	62,724
B2010 Exterior Walls	5.12	199,313
B3010 Roof Coverings	11.80	459,578
C1030 Fittings	3.00	116,850
C3020 Floor Finishes		Excl.

**Belmont Public Library**  
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Gross Floor Area: 38,950 SF  
 Rates Current At January 2017

Divisions/Elements Summary

Description	Cost/SF	Total Cost
D2040 Rain Water Drainage	0.29	11,260
<b>Thermal and Moisture Protection</b>		<b>\$25.33</b>
		<b>\$986,730</b>
<b>08 Openings</b>		
B2010 Exterior Walls	16.99	661,810
B2030 Exterior Doors	0.65	25,300
C1010 Partitions	2.17	84,550
C1020 Interior Doors	2.89	112,700
<b>Openings</b>		<b>\$22.71</b>
		<b>\$884,360</b>
<b>09 Finishings</b>		
B2010 Exterior Walls	0.82	31,890
C1010 Partitions	8.32	324,107
C2020 Stair Finishes	0.09	3,414
C3010 Wall Finishes	2.73	106,169
C3020 Floor Finishes	8.48	330,441
C3030 Ceiling Finishes	8.85	344,685
<b>Finishings</b>		<b>\$29.29</b>
		<b>\$1,140,706</b>
<b>10 Specialties</b>		
C1030 Fittings	1.59	61,905
D4030 Fire Protection Specialties	0.07	2,800
<b>Specialties</b>		<b>\$1.66</b>
		<b>\$64,705</b>
<b>11 Equipment</b>		
E1010 Commercial Equipment	0.10	3,800
E1020 Institutional Equipment	0.13	5,000
<b>Equipment</b>		<b>\$0.23</b>
		<b>\$8,800</b>
<b>12 Furnishings</b>		
C3020 Floor Finishes	0.38	14,950
E2010 Fixed Furnishings	1.41	55,040
E2020 Movable Furnishings		Excl.
<b>Furnishings</b>		<b>\$1.80</b>
		<b>\$69,990</b>
<b>14 Conveying Equipment</b>		
D1010 Elevators & Lifts	2.31	90,000
<b>Conveying Equipment</b>		<b>\$2.31</b>
		<b>\$90,000</b>
<b>21 Fire Suppression</b>		
D4010 Sprinklers	5.50	214,225
<b>Fire Suppression</b>		<b>\$5.50</b>
		<b>\$214,225</b>

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Gross Floor Area: 38,950 SF  
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Description	Cost/SF	Total Cost
<b>22 Plumbing</b>		
D2010 Plumbing Fixtures	0.76	29,700
D2020 Domestic Water Distribution	4.00	155,800
D2030 Sanitary Waste	3.00	116,850
D2040 Rain Water Drainage	2.50	97,375
D2090 Other Plumbing Systems	1.99	77,583
	<b>Plumbing</b>	<b>\$12.25 \$477,308</b>
<b>23 Heating, Ventilating, and Air Conditioning</b>		
D3020 Heat Generating Systems	4.00	155,800
D3030 Cooling Generating Systems	4.00	155,800
D3040 Distribution Systems	25.00	973,750
D3060 Controls & Instrumentations	6.00	233,700
D3070 Systems Testing & Balancing	0.75	29,213
D3090 Other HVAC Systems & Equipment	3.02	117,475
	<b>Heating, Ventilating, and Air Conditioning</b>	<b>\$42.77 \$1,665,738</b>
<b>26 Electrical</b>		
D5010 Electrical Service & Distribution	8.50	331,075
D5020 Lighting and Branch Wiring	17.50	681,625
D5090 Other Electrical Systems	3.54	137,900
	<b>Electrical</b>	<b>\$29.54 \$1,150,600</b>
<b>27 Communications</b>		
D5030 Communications & Security	4.75	185,013
	<b>Communications</b>	<b>\$4.75 \$185,013</b>
<b>28 Electronic Safety and Security</b>		
D5030 Communications & Security	5.00	194,750
	<b>Electronic Safety and Security</b>	<b>\$5.00 \$194,750</b>
<b>31 Earthwork</b>		
A1010 Standard Foundations	1.34	52,375
A1030 Slab on Grade	1.26	49,105
G1010 Site Clearing	1.32	51,328
G1030 Site Earthwork	1.04	40,355
G2020 Parking Lots	1.62	63,183
G2030 Pedestrian Paving	0.28	10,813
	<b>Earthwork</b>	<b>\$6.86 \$267,159</b>
<b>32 Exterior Improvements</b>		
G2020 Parking Lots	1.48	57,518

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Description	Cost/SF	Total Cost
G2030 Pedestrian Paving	0.69	26,965
G2040 Site Development	6.42	250,000
G2050 Landscaping	1.67	64,950
<b>Exterior Improvements</b>	<b>\$10.26</b>	<b>\$399,433</b>
<b>33 Utilities</b>		
G3010 Water Supply	1.28	50,000
G3020 Sanitary Water	0.64	25,000
G3030 Storm Sewer	1.67	64,900
G3090 Other Site Mechanical Utilities	0.13	5,000
G4010 Electrical Distribution	1.28	50,000
G4020 Site Lighting	1.28	50,000
G4030 Site Communications & Security	0.64	25,000
<b>Utilities</b>	<b>\$6.93</b>	<b>\$269,900</b>
<b>ESTIMATED NET COST</b>	<b>\$300.68</b>	<b>\$11,711,331</b>
<b>MARGINS &amp; ADJUSTMENTS</b>		
Genral Conditions / Requirements	9.0 %	\$1,054,020
Bonds and Insurances	2.7 %	\$344,664
Overhead and Profit	4.0 %	\$524,401
Design / Estimating Contingency	15.0 %	\$2,045,162
Escalation		Excl.
<b>ESTIMATED TOTAL COST</b>	<b>\$402.56</b>	<b>\$15,679,578</b>



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Divisions/Elements Item

Description		Unit	Qty	Rate	Total Cost
<b>02 Existing Conditions</b>					
<b>F2010 Building Elements Demolition</b>					
1	Demolition of existing building	SF	29,000	8.00	232,000
				<b>Building Elements Demolition</b>	<b>\$5.96/SF \$232,000</b>
<b>F2020 Hazardous Components Abatement</b>					
153	Hazardous materials abatement - Excluded (assume not required)	Item			Excl.
				<b>Hazardous Components Abatement</b>	<b>Excl.</b>
<b>G1020 Site Demolition and Relocations</b>					
194	Sawcut, break-up, and remove existing parking lot	SF	27,060	1.00	27,060
195	Sawcut, break-up, and remove existing pedestrian pavement	SF	3,435	1.50	5,153
154	Allowance for miscellaneous site demolition not identified	Item			50,000
				<b>Site Demolition and Relocations</b>	<b>\$2.11/SF \$82,213</b>
				<b>Existing Conditions</b>	<b>\$8.07/SF \$314,213</b>
<b>03 Concrete</b>					
<b>A1010 Standard Foundations</b>					
3	Concrete perimeter strip footing to foundation walls, allow 3' x 12" deep	LF	745	125.00	93,125
124	Concrete isolated spread footing, allow 6' x 6' x 12" deep (perimeter)	EA	40	750.00	30,000
125	Concrete isolated spread footing, allow 5' x 5' x 12" deep (internal)	EA	25	600.00	15,000
6	Concrete piers, allow 2' x 2'	LF	228	200.00	45,600
4	Concrete perimeter foundation walls, allow 12" thick	SF	2,980	40.00	119,200
123	Concrete elevator pit	Item			10,000
				<b>Standard Foundations</b>	<b>\$8.03/SF \$312,925</b>
<b>A1030 Slab on Grade</b>					
7	Concrete slab on grade, allow 5" thick	SF	19,450	8.00	155,600
				<b>Slab on Grade</b>	<b>\$3.99/SF \$155,600</b>
<b>B1010 Floor Construction</b>					
155	Concrete topping to slab on metal deck, allow 5-1/2" thick overall depth	SF	19,500	6.50	126,750
				<b>Floor Construction</b>	<b>\$3.25/SF \$126,750</b>
				<b>Concrete</b>	<b>\$15.28/SF \$595,275</b>

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Divisions/Elements Item

Description		Unit	Qty	Rate	Total Cost
<b>04</b>	<b>Masonry</b>				
	<b>B2010 Exterior Walls</b>				
8	Brick veneer to exterior walls	SF	14,266	40.00	570,640
9	Brick veneer to exterior columns	SF	2,272	50.00	113,600
204	Precast / cast-stone wall cladding	SF	714	60.00	42,840
202	Precast / cast-stone exterior wall base	SF	1,680	60.00	100,800
197	CMU Back-up to brick veneer column	SF	2,272	22.00	49,984
	<b>Exterior Walls</b>			<b>\$22.54/SF</b>	<b>\$877,864</b>
	<b>C1010 Partitions</b>				
53	CMU Partition, allow 12" thick	SF	660	24.00	15,840
54	CMU Partition, allow 12" thick (elevator shaft)	SF	1,080	24.00	25,920
	<b>Partitions</b>			<b>\$1.07/SF</b>	<b>\$41,760</b>
	<b>Masonry</b>			<b>\$23.61/SF</b>	<b>\$919,624</b>
<b>05</b>	<b>Metals</b>				
	<b>B1010 Floor Construction</b>				
156	Structural steel floor framing, allow 12 psf	T	117.00	3,750.00	438,750
157	Metal floor deck, allow 3" thick	SF	19,500	5.00	97,500
	<b>Floor Construction</b>			<b>\$13.77/SF</b>	<b>\$536,250</b>
	<b>B1020 Roof Construction</b>				
10	Structural steel roof framing, allow 10 psf	T	104.54	3,750.00	392,025
11	Metal roof deck, allow 1-1/2" thick	SF	20,908	4.50	94,086
	<b>Roof Construction</b>			<b>\$12.48/SF</b>	<b>\$486,111</b>
	<b>B2010 Exterior Walls</b>				
12	Metal stud framing to exterior walls	SF	15,945	12.00	191,340
198	Galvanized steel lintel to opening in brick veneer facade	LF	403	60.00	24,180
	<b>Exterior Walls</b>			<b>\$5.53/SF</b>	<b>\$215,520</b>
	<b>C1030 Fittings</b>				
179	Roof access ladder / stair	Item			2,500
180	Elevator pit ladder	EA	1	1,200.00	1,200
159	Allowance for miscellaneous metals	SF	38,950	3.00	116,850
	<b>Fittings</b>			<b>\$3.09/SF</b>	<b>\$120,550</b>

**Belmont Public Library**  
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Gross Floor Area: 38,950 SF  
 Rates Current At January 2017

Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
<b>C2010 Stair Construction</b>				
158 Metal stairs with concrete filled pan and landings, including railings	FT/R	28	1,500.00	42,000
<b>Stair Construction</b>			<b>\$1.08/SF</b>	<b>\$42,000</b>
<b>Metals</b>			<b>\$35.95/SF</b>	<b>\$1,400,431</b>
<b>06 Wood, Plastics, and Composites</b>				
<b>B3010 Roof Coverings</b>				
13 Allowance for roof blocking	SF	20,908	1.00	20,908
<b>Roof Coverings</b>			<b>\$0.54/SF</b>	<b>\$20,908</b>
<b>C1030 Fittings</b>				
14 Allowance for rough carpentry	SF	38,950	0.75	29,213
15 Allowance for wood blocking	SF	38,950	1.00	38,950
<b>Fittings</b>			<b>\$1.75/SF</b>	<b>\$68,163</b>
<b>C3010 Wall Finishes</b>				
206 Allowance for miscellaneous wood window trim	SF	38,950	2.50	97,375
<b>Wall Finishes</b>			<b>\$2.50/SF</b>	<b>\$97,375</b>
<b>E2010 Fixed Furnishings</b>				
16 Casework: Main reception desk	LF	32	700.00	22,400
17 Casework: Children's Area reception desk	LF	30	600.00	18,000
18 Casework: Adult space reference desk	LF	28	600.00	16,800
160 Casework: Children's story room craft base cabinet with plastic laminate countertop	LF	30	400.00	12,000
19 Casework: Base cabinet with plastic laminate countertop	LF	87	400.00	34,800
20 Casework: Overhead wall cabinet	LF	87	250.00	21,750
21 Casework: Solid surface lavatory including supports and brackets	LF	14	200.00	2,800
161 Allowance for miscellaneous casework not identified	SF	38,950	2.50	97,375
<b>Fixed Furnishings</b>			<b>\$5.80/SF</b>	<b>\$225,925</b>
<b>Wood, Plastics, and Composites</b>			<b>\$10.59/SF</b>	<b>\$412,371</b>
<b>07 Thermal and Moisture Protection</b>				
<b>A1010 Standard Foundations</b>				
22 Air and vapor barrier	SF	2,980	0.50	1,490
23 Rigid insulation	SF	2,980	3.00	8,940
<b>Standard Foundations</b>			<b>\$0.27/SF</b>	<b>\$10,430</b>

**Belmont Public Library**  
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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
<b>A1030 Slab on Grade</b>				
24 Air and vapor barrier	SF	19,450	0.50	9,725
25 Rigid insulation	SF	19,450	3.00	58,350
<b>Slab on Grade</b>			<b>\$1.75/SF</b>	<b>\$68,075</b>
<b>B1010 Floor Construction</b>				
184 Spray-applied fire-proofing to structural steel floor framing	SF	19,500	3.00	58,500
<b>Floor Construction</b>			<b>\$1.50/SF</b>	<b>\$58,500</b>
<b>B1020 Roof Construction</b>				
185 Spray-applied fire-proofing to structural steel roof framing	SF	20,908	3.00	62,724
<b>Roof Construction</b>			<b>\$1.61/SF</b>	<b>\$62,724</b>
<b>B2010 Exterior Walls</b>				
31 Air and vapor barrier to exterior walls	SF	15,945	6.00	95,670
27 Gypsum board sheathing to exterior walls	SF	15,945	2.50	39,863
28 Batt insulation to exterior walls	SF	15,945	4.00	63,780
<b>Exterior Walls</b>			<b>\$5.12/SF</b>	<b>\$199,313</b>
<b>B3010 Roof Coverings</b>				
32 Membrane roofing, complete	SF	12,194	20.00	243,880
33 Asphalt shingle roofing	SF	8,714	4.50	39,213
34 Gypsum board sheathing	SF	8,714	3.00	26,142
36 Rigid insulation, allow 2" thick	SF	8,714	4.50	39,213
35 Ice and water protection	SF	8,714	1.25	10,893
37 Allowance for exterior roof soffits	SF	983	45.00	44,235
199 Allowance for exterior entrance canopy	Item			10,000
38 Allowance for miscellaneous roof flashings	SF	20,908	1.50	31,362
162 Allowance for roof walkway	SF	1,220	12.00	14,640
<b>Roof Coverings</b>			<b>\$11.80/SF</b>	<b>\$459,578</b>
<b>C1030 Fittings</b>				
39 Miscellaneous fire-stopping	SF	38,950	0.50	19,475
40 Miscellaneous caulking and sealing	SF	38,950	2.50	97,375
<b>Fittings</b>			<b>\$3.00/SF</b>	<b>\$116,850</b>
<b>C3020 Floor Finishes</b>				
215 Allowance for moisture mitigation - assumed not required	SF	31,149		Excl.
<b>Floor Finishes</b>				<b>Excl.</b>

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
<b>D2040 Rain Water Drainage</b>				
186 Aluminum gutter to pitched roof	LF	36	35.00	1,260
187 Allowance for rain water leaders	Item			10,000
<b>Rain Water Drainage</b>			<b>\$0.29/SF</b>	<b>\$11,260</b>
<b>Thermal and Moisture Protection</b>			<b>\$25.33/SF</b>	<b>\$986,730</b>
<b>08 Openings</b>				
<b>B2010 Exterior Walls</b>				
30 Curtain wall system	SF	5,134	100.00	513,400
29 Storefront system	SF	1,746	85.00	148,410
<b>Exterior Walls</b>			<b>\$16.99/SF</b>	<b>\$661,810</b>
<b>B2030 Exterior Doors</b>				
42 Double leaf glazed aluminum doors including frame, hardware and finish	Pr	3	7,500.00	22,500
43 Single leaf hollow metal doors including frame, hardware and finish	EA	2	1,400.00	2,800
<b>Exterior Doors</b>			<b>\$0.65/SF</b>	<b>\$25,300</b>
<b>C1010 Partitions</b>				
49 Interior glazed aluminum storefront system	SF	912	50.00	45,600
164 Allowance for miscellaneous interior borrowed lights and storefront not identified	SF	38,950	1.00	38,950
<b>Partitions</b>			<b>\$2.17/SF</b>	<b>\$84,550</b>
<b>C1020 Interior Doors</b>				
44 Double leaf glazed aluminum doors including frame, hardware and finish	Pr	4	7,500.00	30,000
45 Double leaf wood doors including frame, hardware and finish	Pr	7	2,900.00	20,300
47 Single leaf wood doors including frame, hardware and finish	EA	32	1,600.00	51,200
48 Single leaf hollow metal doors including frame, hardware and finish	EA	8	1,400.00	11,200
<b>Interior Doors</b>			<b>\$2.89/SF</b>	<b>\$112,700</b>
<b>Openings</b>			<b>\$22.71/SF</b>	<b>\$884,360</b>
<b>09 Finishings</b>				
<b>B2010 Exterior Walls</b>				
165 Gypsum board lining to inside face of exterior wall	SF	15,945	2.00	31,890
<b>Exterior Walls</b>			<b>\$0.82/SF</b>	<b>\$31,890</b>

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
<b>C1010 Partitions</b>				
50 Gypsum board partition	SF	21,416	8.50	182,036
52 Gypsum board partition, plumbing chase	SF	884	6.50	5,746
205 Allowance for miscellaneous drywall, column enclosures, etc	SF	38,950	3.50	136,325
<b>Partitions</b>			<b>\$8.32/SF</b>	<b>\$324,107</b>
<b>C2020 Stair Finishes</b>				
181 Carpet flooring to stair treads and risers	SY	34	75.00	2,550
182 Concrete sealer to stair treads	SF	120	2.50	300
183 Resilient floor base to stair treads and risers	LF	94	6.00	564
<b>Stair Finishes</b>			<b>\$0.09/SF</b>	<b>\$3,414</b>
<b>C3010 Wall Finishes</b>				
119 Ceramic tiles to restroom walls	SF	532	18.00	9,576
120 Allowance for architectural feature wall finishes	Item			25,000
152 Prepare and apply paint to interior walls	SF	59,661	1.20	71,593
<b>Wall Finishes</b>			<b>\$2.73/SF</b>	<b>\$106,169</b>
<b>C3020 Floor Finishes</b>				
207 Terrazzo flooring	SF	2,628	40.00	105,120
143 Carpet flooring	SY	3,203	45.00	144,135
145 Porcelain floor tiling	SF	607	24.00	14,568
144 Resilient flooring	SF	2,327	5.00	11,635
146 Concrete sealer	SF	490	1.20	588
208 Terrazzo floor base	LF	306		Incl.
147 Stained wood base	LF	3,842	12.00	46,104
148 Rubber floor base	LF	730	3.50	2,555
149 Porcelain floor base	LF	239	24.00	5,736
<b>Floor Finishes</b>			<b>\$8.48/SF</b>	<b>\$330,441</b>
<b>C3030 Ceiling Finishes</b>				
150 Acoustic ceiling tile system	SF	18,870	5.50	103,785
166 Gypsum board ceiling system	SF	13,187	9.00	118,683
188 Allowance for decorative ceiling system	SF	2,628	40.00	105,120
209 Prepare and apply paint to gypsum board ceiling	SF	13,187	1.25	16,484
210 Prepare and apply paint to exposed structure	SF	490	1.25	613
<b>Ceiling Finishes</b>			<b>\$8.85/SF</b>	<b>\$344,685</b>
<b>Finishings</b>			<b>\$29.29/SF</b>	<b>\$1,140,706</b>

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Divisions/Elements Item

Description	Unit	Qty	Rate	Total Cost
<b>10 Specialties</b>				
<b>C1030 Fittings</b>				
129 Toilet compartment: Handicap	EA	2	1,400.00	2,800
130 Toilet compartment: Standard	EA	4	1,250.00	5,000
131 Toilet compartment: Urinal screen	EA	2	600.00	1,200
132 Toilet accessories: Paper towel dispenser / waste receptacle	EA	5	750.00	3,750
133 Toilet accessories: Grab bars	EA	10	75.00	750
134 Toilet accessories: Sanitary napkin disposal unit	EA	6	250.00	1,500
135 Toilet accessories: Liquid soap dispenser	EA	9	50.00	450
136 Toilet accessories: Baby changing station	EA	5	550.00	2,750
137 Toilet accessories: Toilet paper holder	EA	9	45.00	405
138 Toilet accessories: Coat hooks	EA	9	25.00	225
139 Toilet accessories: Mirror	EA	9	400.00	3,600
140 Allowance for interior signage	SF	38,950	0.50	19,475
141 Allowance for exterior building signage	Item			20,000
<b>Fittings</b>			<b>\$1.59/SF</b>	<b>\$61,905</b>
<b>D4030 Fire Protection Specialties</b>				
142 Allowance for fire extinguisher and cabinets	EA	8	350.00	2,800
<b>Fire Protection Specialties</b>			<b>\$0.07/SF</b>	<b>\$2,800</b>
<b>Specialties</b>			<b>\$1.66/SF</b>	<b>\$64,705</b>
<b>11 Equipment</b>				
<b>E1010 Commercial Equipment</b>				
170 Refrigerator	EA	2	1,500.00	3,000
171 Microwave	EA	2	400.00	800
<b>Commercial Equipment</b>			<b>\$0.10/SF</b>	<b>\$3,800</b>
<b>E1020 Institutional Equipment</b>				
167 Allowance for book and media through wall drop return including drop cart	Item			5,000
189 Book detection system - Excluded (assume by Owner)	Item			Excl.
190 Projectors and/or project screens - Excluded (assume by Owner)	Item			Excl.
<b>Institutional Equipment</b>			<b>\$0.13/SF</b>	<b>\$5,000</b>
<b>Equipment</b>			<b>\$0.23/SF</b>	<b>\$8,800</b>

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Description	Unit	Qty	Rate	Total Cost
<b>12 Furnishings</b>				
<b>C3020 Floor Finishes</b>				
168 Recessed entry mat	SF	299	50.00	14,950
<b>Floor Finishes</b>			<b>\$0.38/SF</b>	<b>\$14,950</b>
<b>E2010 Fixed Furnishings</b>				
169 Manually operated window shades	SF	6,880	8.00	55,040
<b>Fixed Furnishings</b>			<b>\$1.41/SF</b>	<b>\$55,040</b>
<b>E2020 Movable Furnishings</b>				
192 Library shelving, racks, etc - Excluded (assume by Owner)	Item			Excl.
191 FF&E - Excluded (by Owner)	Item			Excl.
<b>Movable Furnishings</b>				<b>Excl.</b>
<b>Furnishings</b>			<b>\$1.80/SF</b>	<b>\$69,990</b>
<b>14 Conveying Equipment</b>				
<b>D1010 Elevators &amp; Lifts</b>				
121 2-Stop passenger elevator	EA	1	90,000.00	90,000
<b>Elevators &amp; Lifts</b>			<b>\$2.31/SF</b>	<b>\$90,000</b>
<b>Conveying Equipment</b>			<b>\$2.31/SF</b>	<b>\$90,000</b>
<b>21 Fire Suppression</b>				
<b>D4010 Sprinklers</b>				
63 Allowance for fire sprinkler system	SF	38,950	5.50	214,225
<b>Sprinklers</b>			<b>\$5.50/SF</b>	<b>\$214,225</b>
<b>Fire Suppression</b>			<b>\$5.50/SF</b>	<b>\$214,225</b>
<b>22 Plumbing</b>				
<b>D2010 Plumbing Fixtures</b>				
55 Water closet - handicap	EA	5	1,200.00	6,000
56 Water closet - standard	EA	4	1,200.00	4,800
57 Urinal	EA	2	1,000.00	2,000
58 Lavatory sink	EA	9	1,300.00	11,700
59 Kitchen sink	EA	1	1,300.00	1,300
60 Staff lounge sink	EA	1	1,300.00	1,300
61 Mop sink	EA	1	1,600.00	1,600
62 Hose bibb	EA	2	500.00	1,000
<b>Plumbing Fixtures</b>			<b>\$0.76/SF</b>	<b>\$29,700</b>



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Description	Unit	Qty	Rate	Total Cost
<b>D2020 Domestic Water Distribution</b>				
64 Allowance for domestic water distribution system	SF	38,950	4.00	155,800
<b>Domestic Water Distribution</b>			<b>\$4.00/SF</b>	<b>\$155,800</b>
<b>D2030 Sanitary Waste</b>				
65 Allowance for sanitary waste system	SF	38,950	3.00	116,850
<b>Sanitary Waste</b>			<b>\$3.00/SF</b>	<b>\$116,850</b>
<b>D2040 Rain Water Drainage</b>				
172 Allowance for roof drainage systems	SF	38,950	2.50	97,375
<b>Rain Water Drainage</b>			<b>\$2.50/SF</b>	<b>\$97,375</b>
<b>D2090 Other Plumbing Systems</b>				
66 Allowance for gas distribution systems	SF	38,950	1.00	38,950
67 Balancing and testing	SF	38,950	0.35	13,633
68 Subcontractors GC's/GR's	Item			25,000
<b>Other Plumbing Systems</b>			<b>\$1.99/SF</b>	<b>\$77,583</b>
<b>Plumbing</b>			<b>\$12.25/SF</b>	<b>\$477,308</b>
<b>23 Heating, Ventilating, and Air Conditioning</b>				
<b>D3020 Heat Generating Systems</b>				
69 Allowance for heat generation systems	SF	38,950	4.00	155,800
<b>Heat Generating Systems</b>			<b>\$4.00/SF</b>	<b>\$155,800</b>
<b>D3030 Cooling Generating Systems</b>				
70 Allowance for cooling generation systems	SF	38,950	4.00	155,800
<b>Cooling Generating Systems</b>			<b>\$4.00/SF</b>	<b>\$155,800</b>
<b>D3040 Distribution Systems</b>				
71 Allowance for HVAC distribution systems	SF	38,950	25.00	973,750
<b>Distribution Systems</b>			<b>\$25.00/SF</b>	<b>\$973,750</b>
<b>D3060 Controls &amp; Instrumentations</b>				
72 Allowance for controls	SF	38,950	6.00	233,700
<b>Controls &amp; Instrumentations</b>			<b>\$6.00/SF</b>	<b>\$233,700</b>
<b>D3070 Systems Testing &amp; Balancing</b>				
73 Systems testing and balancing	SF	38,950	0.75	29,213
<b>Systems Testing &amp; Balancing</b>			<b>\$0.75/SF</b>	<b>\$29,213</b>

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Description	Unit	Qty	Rate	Total Cost
<b>D3090 Other HVAC Systems &amp; Equipment</b>				
74 Rigging & hoisting	Item			18,000
75 Temporary heating and cooling	SF	38,950	0.50	19,475
76 Subcontractors GC's/GR's	Item			80,000
<b>Other HVAC Systems &amp; Equipment</b>			<b>\$3.02/SF</b>	<b>\$117,475</b>
<b>Heating, Ventilating, and Air Conditioning</b>			<b>\$42.77/SF</b>	<b>\$1,665,738</b>
<b>26 Electrical</b>				
<b>D5010 Electrical Service &amp; Distribution</b>				
77 Allowance for electrical service and distribution	SF	38,950	8.50	331,075
<b>Electrical Service &amp; Distribution</b>			<b>\$8.50/SF</b>	<b>\$331,075</b>
<b>D5020 Lighting and Branch Wiring</b>				
78 Allowance for interior lighting & controls	SF	38,950	14.00	545,300
79 Allowance for branch power and receptacles	SF	38,950	3.50	136,325
<b>Lighting and Branch Wiring</b>			<b>\$17.50/SF</b>	<b>\$681,625</b>
<b>D5090 Other Electrical Systems</b>				
193 Allowance for miscellaneous electrical systems (grounding, lighting protection, etc)	SF	38,950	2.00	77,900
80 Subcontractor GC's/GR's	Item			60,000
<b>Other Electrical Systems</b>			<b>\$3.54/SF</b>	<b>\$137,900</b>
<b>Electrical</b>			<b>\$29.54/SF</b>	<b>\$1,150,600</b>
<b>27 Communications</b>				
<b>D5030 Communications &amp; Security</b>				
81 Allowance for Tel/Data systems - infrastructure only	SF	38,950	1.25	48,688
82 Allowance for AV / Sound systems - infrastructure only	SF	38,950	3.50	136,325
173 Wiring and equipment to Tel/Data systems - Excluded (assume by owner)	Item			Excl.
174 Wiring and equipment to AV / Sound systems - Excluded (assume by owner)	Item			Excl.
<b>Communications &amp; Security</b>			<b>\$4.75/SF</b>	<b>\$185,013</b>
<b>Communications</b>			<b>\$4.75/SF</b>	<b>\$185,013</b>
<b>28 Electronic Safety and Security</b>				
<b>D5030 Communications &amp; Security</b>				
83 Allowance for fire alarm system	SF	38,950	3.00	116,850
84 Allowance for security systems - infrastructure only	SF	38,950	2.00	77,900

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Description	Unit	Qty	Rate	Total Cost
175 Wiring and equipment to security systems - Excluded (assume by Owner)	Item			Excl.
<b>Communications &amp; Security</b>			<b>\$5.00/SF</b>	<b>\$194,750</b>
<b>Electronic Safety and Security</b>			<b>\$5.00/SF</b>	<b>\$194,750</b>
<b>31 Earthwork</b>				
<b>A1010 Standard Foundations</b>				
211 Excavate for building foundations	CY	797	10.00	7,970
212 Remove excavated materials from site	CY	797	25.00	19,925
213 Prepare and compact sub-base	SF	4,300	0.50	2,150
214 Imported foundation backfill	CY	638	35.00	22,330
<b>Standard Foundations</b>			<b>\$1.34/SF</b>	<b>\$52,375</b>
<b>A1030 Slab on Grade</b>				
86 Excavate for slab on grade	CY	661	10.00	6,610
87 Remove and dispose of excavated spoil from site	CY	661	25.00	16,525
88 Prepare and compact sub-base	SF	19,450	0.50	9,725
89 Granular fill below slab on grade	CY	361	45.00	16,245
<b>Slab on Grade</b>			<b>\$1.26/SF</b>	<b>\$49,105</b>
<b>G1010 Site Clearing</b>				
196 Strip existing topsoil and stockpile on-site	CY	166	8.00	1,328
176 Site clearing and grubbing	Item			20,000
90 Temporary construction entrance	EA	1	5,000.00	5,000
177 Allowance for erosion and sediment control	Item			25,000
<b>Site Clearing</b>			<b>\$1.32/SF</b>	<b>\$51,328</b>
<b>G1030 Site Earthwork</b>				
91 Allowance for site earthworks and grading	SF	40,355	1.00	40,355
<b>Site Earthwork</b>			<b>\$1.04/SF</b>	<b>\$40,355</b>
<b>G2020 Parking Lots</b>				
92 Excavate for parking lot sub-base	CY	801	10.00	8,010
93 Remove excavated spoil from site	CY	801	25.00	20,025
94 Prepare and compact sub-base	SF	16,206	0.50	8,103
95 Granular fill to parking pavement	CY	601	45.00	27,045
<b>Parking Lots</b>			<b>\$1.62/SF</b>	<b>\$63,183</b>
<b>G2030 Pedestrian Paving</b>				
96 Excavate for walkways	CY	119	10.00	1,190

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Divisions/Elements Item

Description		Unit	Qty	Rate	Total Cost
97	Remove excavated spoil from site	CY	198	25.00	4,950
98	Prepare and compact sub-base	SF	3,495	0.50	1,748
99	Granular fill to pedestrain walkways	CY	65	45.00	2,925
<b>Pedestrian Paving</b>				<b>\$0.28/SF</b>	<b>\$10,813</b>
<b>Earthwork</b>				<b>\$6.86/SF</b>	<b>\$267,159</b>
<b>32</b>	<b>Exterior Improvements</b>				
	<b>G2020 Parking Lots</b>				
100	Bituminous asphalt top and finish course to parking pavement	SY	1,801	25.00	45,025
101	Concrete curb	LF	609	15.00	9,135
102	Pavement marking, parking lanes	LF	864	2.50	2,160
103	Pavement marking, striping	SF	166	3.00	498
104	Pavement marking, handicap symbol	EA	2	350.00	700
<b>Parking Lots</b>				<b>\$1.48/SF</b>	<b>\$57,518</b>
	<b>G2030 Pedestrian Paving</b>				
105	Concrete walkway, allow 5" thick	SF	3,495	7.00	24,465
200	Allowance to repair existing sidewalk at eliminated driveway	Item			2,500
<b>Pedestrian Paving</b>				<b>\$0.69/SF</b>	<b>\$26,965</b>
	<b>G2040 Site Development</b>				
128	Allowance for site development not identified	Item			250,000
<b>Site Development</b>				<b>\$6.42/SF</b>	<b>\$250,000</b>
	<b>G2050 Landscaping</b>				
110	Allowance for loam and seed	SF	13,300	1.50	19,950
108	Allowance for trees	Item			25,000
109	Allowance for ground covers, shrubs, evergreens, etc.	Item			20,000
178	Irrigation - Excluded (assume not required)	Item			Excl.
<b>Landscaping</b>				<b>\$1.67/SF</b>	<b>\$64,950</b>
<b>Exterior Improvements</b>				<b>\$10.26/SF</b>	<b>\$399,433</b>
<b>33</b>	<b>Utilities</b>				
	<b>G3010 Water Supply</b>				
111	Allowance for re-working existing domestic and fire water utilities	Item			50,000
<b>Water Supply</b>				<b>\$1.28/SF</b>	<b>\$50,000</b>

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Description	Unit	Qty	Rate	Total Cost
<b>G3020 Sanitary Water</b>				
112 Allowance for re-working existing site sanitary sewer service	Item			25,000
<b>Sanitary Water</b>			<b>\$0.64/SF</b>	<b>\$25,000</b>
<b>G3030 Storm Sewer</b>				
113 Allowance for re-working existing site storm drainage systems	Item			50,000
201 Perimeter foundation drain	LF	745	20.00	14,900
<b>Storm Sewer</b>			<b>\$1.67/SF</b>	<b>\$64,900</b>
<b>G3090 Other Site Mechanical Utilities</b>				
114 Gas piping and meter - Excluded (assume by Utility Company)	Item			Excl.
115 Allowance for re-working existing site gas distribution (trenching only)	Item			5,000
<b>Other Site Mechanical Utilities</b>			<b>\$0.13/SF</b>	<b>\$5,000</b>
<b>G4010 Electrical Distribution</b>				
116 Allowance for re-working existing site electrical distribution	Item			50,000
<b>Electrical Distribution</b>			<b>\$1.28/SF</b>	<b>\$50,000</b>
<b>G4020 Site Lighting</b>				
117 Allowance for site lighting	Item			50,000
<b>Site Lighting</b>			<b>\$1.28/SF</b>	<b>\$50,000</b>
<b>G4030 Site Communications &amp; Security</b>				
118 Allowance for re-working existing site communications distribution	Item			25,000
<b>Site Communications &amp; Security</b>			<b>\$0.64/SF</b>	<b>\$25,000</b>
<b>Utilities</b>			<b>\$6.93/SF</b>	<b>\$269,900</b>
<b>ESTIMATED NET COST</b>			<b>\$300.68/SF</b>	<b>\$11,711,331</b>