October 9, 2014

**OPTION E**New Construction



111 Pine Street, Suite 1315 San Francisco, CA 94111 415.981.9430 phone (main) 415.981.9434 facsmile www.tbdconsultants.com Prepared for: Perkins Will

San Francisco, CA

# **New Construction**Concept Development Phase

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BASIS OF ESTIMATE

OPTION E

#### PROJECT DESCRIPTION

The project involves the new construction of a two story building sitting on top of a one level parking structure podium

( parking structure costs taken with the parking costs)

#### REFERENCE DOCUMENTATION

#### Documents:

Architectural Report
PAE one page summary
Tipping Mar Narrative and sketches

Dated Sept 16,2014

#### **MEETINGS**

Meeting / ongoing discussions with Architect / design team

#### **BASIS FOR PRICING**

This estimate reflects the fair construction value for this project and should not be construed as a prediction of low bid. Prices are based on local prevailing wage construction costs at the time the estimate was prepared. Pricing assumes a procurement process with competitive bidding for all sub-trades of the construction work, which is to mean a minimum of 3 bids for all subcontractors and materials/equipment suppliers. If fewer bids are solicited or received, prices can be expected to be higher.

Subcontractor's markups have been included in each line item unit price. Markups cover the cost of field overhead, home office overhead and subcontractor's profit. Subcontractor's markups typically range from 15% to 25% of the unit price depending on market conditions.

General Contractor's/Construction Manager's Site Requirement costs are calculated on a percentage basis. General Contractor's/Construction Manager's Jobsite Management costs are also calculated on a percentage

General Contractor's/Construction Manager's overhead and fees are based on a percentage of the total direct costs plus general conditions, and covers the contractor's bond, insurance, site office overheads and profit.



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**BASIS OF ESTIMATE** 

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Unless identified otherwise, the cost of such items as overtime, shift premiums and construction phasing are not included in the line item unit price.

This cost estimate is based on standard industry practice, professional experience and knowledge of the local construction market costs. TBD Consultants have no control over the material and labor costs, contractors methods of establishing prices or the market and bidding conditions at the time of bid. Therefore TBD Consultants do not guarantee that the bids received will not vary from this cost estimate.

#### **CONTINGENCY**

**Design Contingency** 

15%

The Design Contingency is carried to cover scope that lacks definition and scope that is *anticipated* to be added to the Design. As the Design becomes more complete the Design Contingency will reduce.

Construction Contingency

N/A

to be carried elsewhere in Owner's Budget

The Construction Contingency is carried to cover the unforeseen during construction execution and Risks that do not currently have mitigation plans. As Risks are mitigated, Construction Contingency can be reduce, but should not be eliminated.

A Market Conditions Factor has not been included to reflect the current bidding climate where we should expect multiple bids for each trade. An owners contingency has not been included in this construction cost estimate, but it is advised that the owner carry additional contingency to cover scope change, claims and delays.

#### **ESCALATION**

Escalation has been included in the estimate -- see summary

#### **EXCLUSIONS**

- Land acquisition, feasibility, and financing costs
- All Owner soft costs
- All professional fees and insurance
- Construction Manager Agency Costs
- Site or existing condition survey investigation costs, including determination of subsoil conditions
- Hazardous materials inspection costs, or accomodations in construction for hazardous materials.
- Overtime, 2nd shift and lost productivity premiums except where specifically identified
- Construction or occupancy phasing (current assumption is a single construction phase in a vacated building)
- Owners Construction Contingency for scope changes and market conditions at time of bid
- Permits



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BASIS OF ESTIMATE

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### ITEMS THAT MAY AFFECT THIS ESTIMATE

Such items include, but are not limited to the following:

Modifications to the scope of work subsequent to the preparation of this estimate

Unforeseen existing conditions

Compression of planned construction schedule (current assumption is approx. 6 months+ duration)

Special requirements for site access, off-hour work or phasing activities

Restrictive technical specifications, excessive contract or non-competitive bid conditions

Sole source specifications for materials, products or equipment

Bid approvals delayed beyond the anticipated project schedule



**AREA TABULATION** 

KEY CRITERIA OPTION E

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# **New Construction**

Location	Enclosed	Perimeter	Height	Area	Comment
	SF			SF	
First Floor	22,000	700	16.00	11,200	
Second floor	22,000	700	15.00	10,500	
Third floor		0			
Subtotal	44,000 SF	1,400 SF	31.00 LF	10,500.00	
Covered Area @ 50%	500 SF			A	llow
TOTAL	44,500 SF				

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OVERALL SUMMARY

OPTION E

	GROSS FLOOR AREA	COST (\$/SF)	COST (\$'s)
New Construction	44,500	\$626	\$27,872,243
Moving cost Rental of interim space for 18 months			\$200,000
22,500 SF at \$5/SF per month	24 months		\$2,700,000
EOC Buildig ON site Hazmat abatement	Allowance		NA \$225,000
Soft costs	25% of direct cost		\$6,968,061
FFE	All new 2	5/SF	\$1,112,500
Construction Contingency	5% of direct cost		\$1,393,612
TOTAL including soft and hard			\$40,471,416



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44,500 **UNIFORMAT II SUMMARY Gross Square Feet:** 

**New Construction** OPTION E

New Construction	OPTION E			
SECTION	%	\$	\$ / SF	COMMENTS
10 FOUNDATIONS	3.2%	572,000	12.85	
20 BASEMENT CONSTRUCTION	1.2%	220,000	4.94	
A SUBSTRUCTURE	4.5%	792,000	17.80	
		·		
10 SUPERSTRUCTURE	12.2%	2,153,650	48.40	
20 EXTERIOR CLOSURE	11.4%	2,013,000	45.24	
30 ROOFING	5.8%	1,027,000	23.08	
B SHELL	29.4%	5,193,650	116.71	
10 INTERIOR CONSTRUCTION	12.6%	2,225,000	50.00	
20 STAIRS	0.7%	120,000	2.70	
30 INTERIOR FINISHES	9.3%	1,636,250	36.77	
C INTERIORS	22.5%	3,981,250	89.47	
10 CONVEYING	1.1%	190,000	4.27	
20 PLUMBING	3.0%	534,000	12.00	
30 HVAC	15.4%	2,714,500	61.00	
40 FIRE PROTECTION	1.4%	244,750	5.50	
50 ELECTRICAL	18.3%	3,227,050	72.52	
D SERVICES	39.1%	6,910,300	155.29	
10 EQUIPMENT	0.5%	90,000	2.02	
20 FURNISHINGS	1.8%	325,000	7.30	
E EQUIPMENT + FURNISHINGS	2.3%	415,000	9.33	
10 SPECIAL CONSTRUCTION				
20 SELECTIVE BUILDING DEMOLITION				
F SPECIAL CONSTRUCTION + DEMOLITION				
10 SITE PREPARATION 20 SITE IMPROVEMENTS	0.60/	100.000	2.25	
	0.6% 0.8%	100,000 150,000	2.25 3.37	
30 SITE MECHANICAL UTILITIES 40 SITE ELECTRICAL UTILITIES	0.7%	120,000	2.70	
50 OTHER SITE CONSTRUCTION	0.7 70	120,000	2.70	
G BUILDING SITEWORK	2.1%	370,000	8.31	
DIRECT COSTS	100%	17,662,200	396.90	
SITE REQUIREMENTS	3.0%	529,866	11.91	
JOBSITE MANAGEMENT	8.0%	1,412,976	31.75	
ESTIMATE SUB-TOTAL		19,605,042	440.56	
INSURANCE + BONDING	2.5%	490,126	11.01	
FEE	5.0%	980,252	22.03	
ESTIMATE SUB-TOTAL		21,075,420	473.60	
	45.00/			
DESIGN CONTINGENCY	15.0%	3,161,313	71.04	O
CONSTRUCTION CONTINGENCY	N/A			Owner to carry
ESTIMATE SUB-TOTAL		24,236,733	544.65	
ESCALATION 3 years to mid point	15.0%	3,635,510	81.70	
ESTIMATE TOTAL	\$	27,872,243	626.34	total add-ons 57.81%



# **NEW CONSTRUCTION**

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REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
1						
2	FOUNDATIONS					
<u>3</u>	Foundation allocation	22,000	SF	16.00	352,000	
5	( allocation of foundation costs and misc. items)	22,000	JI	10.00	332,000	
6	anodation of roundation code and mice. Rome,					
7	Special foundations		NA			
8						
9	Slab on grade topping slab	22,000	SF	10.00	220,000	Including curbs etc.
10						
12	FOUNDATIONS				572,000	\$12.85 / SF
13	TOURDATIONS				372,000	ψ12.03 / GI
14	BASEMENT CONSTRUCTION					
15						
16	Shear walls for elevators etc.	22,000	SF	10.00	220,000	Storage?
17						
18						
19	BASEMENT CONSTRUCTION				220,000	\$4.94 / SF
20	CURERCTRUCTURE					
21	SUPERSTRUCTURE					
23	Floor & Roof Construction					
24	<u></u>					
25	Steel construction					
26						
27	Steel frame	070		4 000 00	4 504 000	
	Structural steel moment frame Fireproofing	376	T NA	4,000.00	1,504,000	
30	Metal deck		INA			
31	Floor	22,000	SF	4.15	91,300	
32	Roof	22,000	SF	3.85	84,700	
33	Concrete fill to metal deck, reinforced	44,000	SF	6.15	270,600	
34	Slab edge closure		NA LS	10 000 00	10.000	incl above
35 36	Form openings in deck	1	LS	10,000.00	10,000	
37	Spray fireproofing to u/side of decks		NA			
38	Curbs at plumbing walls etc	1	LS	4,000.00	4,000	
39	· •					
40	Miscellaneous					
41	Allow for miscellaneous structural supports	1	LS	27,000.00	27,000	Pads etc
42	Structural supports to parapet Allow for miscellaneous metals	1 44,500	LS SF	22,000.00 2.50	22,000 111,250	-
43	Fire stopping	1,600	LF	18.00	28,800	
45						
46						
47	SUPERSTRUCTURE				2,153,650	\$48.4 / SF
48						
49	EXTERIOR CLOSURE			<u> </u>		
50	Exterior Wells					
51 52	Exterior Walls					
53	Above grade ext skin	15,000	SF	80.00	1,200,000	
54	Windows	3,750	SF	95.00	356,250	
55	Soffits	1	LS	110,000.00	110,000	
56	Fins and louvers	1	LS	220,000.00	220,000	
57	Caulking joints ato	44 500	C.L.	1 50	66 750	
58	Caulking joints etc	44,500	SF	1.50	66,750	



# **NEW CONSTRUCTION**

**New Construction**Concept Development Phase

		J				,000
REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
59						
60	Exterior Doors					
61	N. I			00 000 00	20.000	
62	New doors	1	LS	60,000.00	60,000	
63						
65	EXTERIOR CLOSURE				2,013,000	\$45.24 / SF
66	EXTERIOR GEOGRE				2,013,000	\$-10.2-1 / GI
67	ROOFING					
68						
69	Metal sloped roofing	21,300	SF	30.00	639,000	
70		4.000		20.00	20.000	
71 72	Flat roofing	4,000	SF	22.00	88,000	
73	New mechanical pads on roof	1	LS	20,000.00	20,000	
74	New medianical pads on root		LO	20,000.00	20,000	
75	Roof screens	1	LS	80,000.00	80,000	
76						
77	Skylights	1	Loc	200,000.00	200,000	
78						
	DOCENIA				4 007 000	too oo 105
80	ROOFING				1,027,000	\$23.08 / SF
81 82	INTERIOR CONSTRUCTION					
83	INTERIOR CONSTRUCTION					
84	Interior Partitions					
85	New interior partitions and doors and specialties	44,500	SF	50.00	2,225,000	
86						
87						
88	INTERIOR CONSTRUCTION				2,225,000	\$50 / SF
89						
90	STAIRS					
92	Interior stairs					
93	menor stans					
94	New stairs main entry	1	FLT	60,000.00	60,000	
95	New stairs others	2	FLT	30,000.00	60,000	
96						
97						
98	STAIRS				120,000	\$2.7 / SF
99	INTERIOR FINISHES					
100	INTERIOR FINISHES					
102	Floor finishes					
103	Floor protection	44,500	SF	1.00	44,500	641,250
104	Vapor retarder	44,500	SF	4.50	200,250	
105	New Flooring	39,500	SF	7.00	276,500	Carpet
106	Special flooring	5,000	SF	24.00	120,000	CT etc
107	Wall finishes					
109	พนแ แแจแรง					
110	Painting to walls	44,500	SF	4.00	178,000	324,000
111	Finishes to columns	56	EA	1,000.00	56,000	
112	Special wall finishes	1	LS	90,000.00	90,000	
113	Calling finish as					
114	Ceiling finishes					511,500
116	New AT ceiling	41,500	SF	9.00	373,500	511,500
117	Drywall ceiling	3,000	SF	16.00	48,000	
118	Bulkheads	1	LS	90,000.00	90,000	
119	Special ceilings	4,150	SF	30.00	124,500	



# **NEW CONSTRUCTION**

**New Construction**Concept Development Phase

New Construction	OPTION E			GSF:	44,500
REF DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
120					
121 <b>Misc.</b>					
122 Finishes not defined	1	LS	35,000.00	35,000	
123 124					
125 INTERIOR FINISHES				1,636,250	\$36.77 / SF
126				1,030,230	\$30.777 OI
127 CONVEYING					
128					
New elevator and control three stops	1	LS	190,000.00	190,000	
130					
131				400.000	\$4.07.1.CE
132 CONVEYING 133				190,000	\$4.27 / SF
133 134 PLUMBING					
135					
New plumbing system complete	44,500	SF	12.00	534,000	
137					
138					
139 PLUMBING				534,000	\$12 / SF
140					
141 <b>HVAC</b> 142					
All New Mechanical system, VAV air based, plus					
reheat	44,500	SF	45.00	2,002,500	
144					
145 Premium f or geothermal system	44,500	SF	16.00	712,000	
146 147					
				2 714 500	¢c4 / SE
148 HVAC				2,714,500	\$61 / SF
149 150 FIRE PROTECTION					
151					
152 Sprinkler					
153					
154 New sprinkler system	44,500	GSF	5.50	244,750	
155					
156				011.750	
157 FIRE PROTECTION				244,750	\$5.5 / SF
158 159 ELECTRICAL					
160					
161 Distribution ,connections, lighting etc.	44,500	SF	44.00	1,958,000	All new electrical system
162					-
163 Telephone/Data	44,500	SF	8.00	356,000	
164	44 500	C.L.	1.50	66.750	
165 <b>CATV</b>	44,500	SF	1.50	66,750	
167 Security Systems	44,500	SF	2.00	89,000	
168					
169 Audio/Visual Systems	44,500	SF	3.00	133,500	
170	44.500		0.10	454.000	
171 Fire Alarm	44,500	SF	3.40	151,300	



# **NEW CONSTRUCTION**

**New Construction**Concept Development Phase

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
172						
173	Misc. Electrical Testing	44,500	SF	5.00	222,500	
175	Seismic bracing					
176	Supervision					
177	Demolition - safe-off for demolition by others					
178 179	Non manual labor Misc. general requirements, trucks, safety etc.					
180	New emergency generator	1	LS	250,000.00	250,000	
181	Tron officers generate.	·				
182						
183	ELECTRICAL				3,227,050	\$72.52 / SF
184						
185 186	EQUIPMENT					
187	Equipment allowance	1	LS	90,000.00	90,000	Kitchen
188	de la conservación			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , ,	
189						
190	EQUIPMENT				90,000	\$2.02 / SF
191	FURNICUINGS					
192 193	FURNISHINGS					
194	Casework	1	LS	325,000.00	325,000	
195				•	•	
196						
197	FURNISHINGS				325,000	\$7.3 / SF
198	CDECIAL CONCEDUCTION					
199	SPECIAL CONSTRUCTION					
201	No work in this section					
202						
203						
204	SPECIAL CONSTRUCTION					\$0 / SF
205	SELECTIVE BUILDING DEMOLITION					
207	SELECTIVE BOILDING DEMOLITION					
208	Demolition included within sitework costs					
209						
210	OF LEATING DIMEDING DEMOLITION					
211	SELECTIVE BUILDING DEMOLITION					\$0 / SF
212	SITE PREPARATION					_
214	OHE I KEI AKAHON					
215	Site preparation included within sitework costs					
216						
	SITE DDEDADATION					¢0 / SE
218	SITE PREPARATION					\$0 / SF
220	SITE IMPROVEMENTS					
221						
222	Misc. site improvements	1	LS	100,000.00	100,000	
223						
224	SITE IMPROVEMENTS				100,000	\$2.25 / SF
226	OTTE INITIOVENIENTS				100,000	ψ <u>ε.εψ / U</u> I
227	SITE MECHANICAL UTILITIES					
228						
229	Allowance for revisions and hook ups	1	LS	150,000.00	150,000	
230						
	SITE MECHANICAL UTILITIES				150,000	\$3.37 / SF
	OTTE MECHANICAL CHEINED				130,000	<b>43.0.</b> 7 <b>6.</b>



# **NEW CONSTRUCTION**

**New Construction**Concept Development Phase

REF	DESCRIPTION	QUANTITY	UoM	UNIT RATE	TOTAL	COMMENTS
233						
234	SITE ELECTRICAL UTILITIES					
235						
236	Allow for electrical utilities and site lighting	1	LS	120,000.00	120,000	
237						
238						
239	SITE ELECTRICAL UTILITIES				120,000	\$2.7 / SF
240						
241	OTHER SITE CONSTRUCTION					
242						
243	No work in this section					
244						
245						
246	OTHER SITE CONSTRUCTION					\$0 / SF