

Lincoln Community Center

Design Options Concept Cost Estimates

Lincoln, Ma

Prepared by:



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Prepared for:

ICON Architecture

September 11, 2023

MAIN SUMMARY

Option	New Buildings	SF	\$/SF	Estimated Cost (2025)
Option 1	100% Courtyard Scheme	19,500	\$818	\$15,953,914
Option 2	75% Compact Scheme	13,400	\$793	\$10,627,607
Option 3	50% Adaptive Re-use Scheme	4,485	\$760	\$3,410,302

Option	Sitework	Estimated Cost (2025)
Option 1	Sitework & 87 Spaces	\$3,586,123
Option 2	Sitework & 87 Spaces	\$2,333,783
Option 3	Sitework & 87 Spaces	\$2,325,077

Option	Renovations	Estimated Cost (2025)
Option 1	Demolish 3 Pods	\$470,253
Option 2	Demolish 2 Pods, Renovate 1 Pod	\$3,033,842
Option 3	Renovate 2 Pods, 1 Pod ETR	\$5,705,354

Option	Total Construction Costs	SF	\$/SF	Estimated Cost (2025)
Option 1	All scope above	19,500	\$1,026	\$20,010,290
Option 2	All scope above	18,365	\$871	\$15,995,232
Option 3	All scope above	14,300	\$800	\$11,440,733

Option	Total Project Costs	SF	\$/SF	Estimated Cost (2025)
Option 1	Construction			\$20,010,290
	20% soft costs (design, technology, testing, OPM & FF&E)			\$4,002,058
	Option 1 - Total Project Cost	19,500	\$1,231	\$24,012,348
Option 2	Construction			\$15,995,232
	20% soft costs (design, technology, testing, OPM & FF&E)			\$3,199,046
	Option 2 - Total Project Cost	18,365	\$1,045	\$19,194,278
Option 3	Construction			\$11,440,733
	20% soft costs (design, technology, testing, OPM & FF&E)			\$2,288,147
	Option 3 - Total Project Cost	14,300	\$960	\$13,728,880

Alternates

Option 1 Maintenance	add	\$900,000
Bridge and add bike path	add	\$150,000

QUALIFICATIONS

NOTE: Within the last 24 months, bids have been affected with uncontrollable material and equipment costs and lack of labor. Contractors are at risk of overages on materials due to lack of supplies and longer leads caused by supply chain back-up. Additionally, labor shortages have been another issue to contend with this summer with the heated market. These conditions have resulted in increases and lack of bids for all trades and general bids anywhere from 10% to 15% depending on project type and materials.

This cost estimate was produced from August 2023 design documents received by ICON Architecture. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, contractor make-ups and contingencies. Cost escalation per main summary.

Bidding conditions are expected to be Chapter 149 public bidding

The estimate is based on Massachusetts prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

- Land acquisition, feasibility, and financing costs
- Items identified in the design as Not In Contract (NIC)
- Items identified in the design as by others
- Utility company back charges, including work required off-site
- Work to City streets and sidewalks, (except as noted in this estimate)
- Rock excavation; special foundations (unless indicated by design engineers)
- Contaminated or unsuitable soils removal or replacement
- Mold and hazardous material abatement
- Building Permits
- Temporary facilities
- Occupied areas and phasing
- Chapter 149A bidding
- FFE, soft costs and A/E fees (see summary)

Recommendations For Cost Control

TCI recommends that the Owner and Architect carefully review this document, including line item descriptions, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation and mark-ups. Request for modifications of any apparent errors or omissions to this document must be made to TCI with in ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

It is recommended that TCI using bid documents produce a final update estimate, to determine overall costs changes which have occurred since the preparation of the estimate. The final update estimate will address changes and additions to the document, as well as addenda issued during bidding process. TCI cannot reconcile bid results to an estimate not produced from bid documents.

Statement Of Probable Cost

TCI has no control over the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices, or competitive bidding and market conditions. The opinion of construction is made on the basis of the experience, qualifications, and best judgment of the professional estimator familiar with the industry. TCI does not guarantee that bids will not vary from this estimate.

TCI staff of professional cost estimators has prepared this estimate in accordance with generally accepted principles and practices.

Acceptance of Report

With acceptance of this report, the holder shall indemnify and hold harmless Tortora Consulting from and against all claims, damages, losses and expenses, including but not limited to attorney fees and court costs arising out of or as a result of the performance of this work, including third party claims.

UNIFORMAT CONSTRUCTION COST							
		19,500	<i>sf</i>	13,400	<i>sf</i>	4,485	<i>sf</i>
NEW BUILDING SYSTEM		Option 1		Option 2		Option 3	
A10	FOUNDATIONS AND SLABS	\$1,066,865	\$54.71	\$561,810	\$41.93	\$315,668	\$70.38
B10	SUPERSTRUCTURE	\$1,556,125	\$79.80	\$1,227,200	\$91.58	\$319,557	\$71.25
B20	EXTERIOR CLOSURE	\$2,114,300	\$108.43	\$1,033,500	\$77.13	\$665,435	\$148.37
B30	ROOFING	\$750,650	\$38.49	\$268,250	\$20.02	\$125,580	\$28.00
C10	INTERIOR CONSTRUCTION	\$637,950	\$32.72	\$459,650	\$34.30	\$22,471	\$5.01
C20	STAIRCASES	\$0	\$0.00	\$87,750	\$6.55	\$0	\$0.00
C30	INTERIOR FINISHES	\$773,540	\$39.67	\$617,700	\$46.10	\$123,687	\$27.58
D10	CONVEYING SYSTEMS	\$0	\$0.00	\$200,000	\$14.93	\$0	\$0.00
D20	PLUMBING	\$487,500	\$25.00	\$335,000	\$25.00	\$4,485	\$1.00
D30	HVAC	\$1,383,050	\$70.93	\$956,660	\$71.39	\$346,957	\$77.36
D40	FIRE PROTECTION	\$251,500	\$12.90	\$178,300	\$13.31	\$53,820	\$12.00
D50	ELECTRICAL	\$912,325	\$46.79	\$641,790	\$47.89	\$196,834	\$43.89
E10	EQUIPMENT	\$195,000	\$10.00	\$195,000	\$14.55	\$5,000	\$1.11
E20	FURNISHINGS	\$67,200	\$3.45	\$29,400	\$2.19	\$0	\$0.00
TOTAL DIRECT COST (Trade Costs)		\$10,196,005	<i>\$522.87</i>	\$6,792,010	<i>\$506.87</i>	\$2,179,494	<i>\$485.95</i>
GENERAL CONDITIONS & REQUIREMENTS	15%	\$1,529,401		\$1,018,802		\$326,924	
GL INSURANCE	1.4%	\$142,744		\$95,088		\$30,513	
BONDS	1.5%	\$152,940		\$101,880		\$32,692	
PERMIT		waived		waived		waived	
OVERHEAD & PROFIT	4%	\$480,844		\$320,311		\$102,785	
DESIGN AND PRICING CONTINGENCY	15%	\$1,875,290		\$1,249,214		\$400,861	
ESCALATION & MARKET BIDDING CONTINGENCY (2023 to 2024)	8%	\$1,150,178		\$766,184		\$245,862	
ESCALATION & MARKET BIDDING CONTINGENCY (2024 to 2025)	8%	\$426,512		\$284,118		\$91,171	
TOTAL CONSTRUCTION COST (2025 Dollars)		\$15,953,914	<i>\$818</i>	\$10,627,607	<i>\$793</i>	\$3,410,302	<i>\$760</i>

UNIFORMAT CONSTRUCTION COST

SITWORK		Option 1	Option 2	Option 3
G10	SITWORK	\$2,287,780	\$1,488,845	\$1,483,290
TOTAL DIRECT COST (Trade Costs)		\$2,287,780	\$1,488,845	\$1,483,290
GENERAL CONDITIONS & REQUIREMENTS	15%	\$343,167	\$223,327	\$222,494
GL INSURANCE	1.4%	\$32,029	\$20,844	\$20,766
BONDS	1.7%	\$38,892	\$25,310	\$25,216
PERMIT		waived	waived	waived
OVERHEAD & PROFIT	4%	\$108,075	\$70,333	\$70,071
DESIGN AND PRICING CONTINGENCY	15%	\$421,491	\$274,299	\$273,276
ESCALATION & MARKET BIDDING CONTINGENCY (2023 to 2024)	8%	\$258,515	\$168,237	\$167,609
ESCALATION & MARKET BIDDING CONTINGENCY (2024 to 2025)	8%	\$96,174	\$62,588	\$62,355
TOTAL CONSTRUCTION COST (2025 Dollars)		\$3,586,123	\$2,333,783	\$2,325,077

UNIFORMAT CONSTRUCTION COST

PODS		Option 1	Option 2	Option 3
H10	PODS	\$300,000	\$1,935,450	\$3,639,750
TOTAL DIRECT COST (Trade Costs)		\$300,000	\$1,935,450	\$3,639,750
GENERAL CONDITIONS & REQUIREMENTS	15%	\$45,000	\$290,318	\$545,963
GL INSURANCE	1.4%	\$4,200	\$27,096	\$50,957
BONDS	1.7%	\$5,100	\$32,903	\$61,876
PERMIT		waived	waived	waived
OVERHEAD & PROFIT	4%	\$14,172	\$91,431	\$171,942
DESIGN AND PRICING CONTINGENCY	15%	\$55,271	\$356,580	\$670,573
ESCALATION & MARKET BIDDING CONTINGENCY (2023 to 2024)	8%	\$33,899	\$218,702	\$411,285
ESCALATION & MARKET BIDDING CONTINGENCY (2024 to 2025)	8%	\$12,611	\$81,362	\$153,008
TOTAL CONSTRUCTION COST (2025 Dollars)		\$470,253	\$3,033,842	\$5,705,354

Option 1

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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AREA CALCULATIONS

Level 1 19,500

TOTAL GROSS FLOOR AREA (GFA)	19,500	GSF
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A10 BUILDING FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Footings & walls

Footings and walls	407	cy	1,100.00	447,700	
Column and misc strip footings	110	cy	1,200.00	132,000	
Insulation and waterproofing at foundation walls	8,800	sf	16.00	140,800	
SUBTOTAL					720,500

A1030 LOWEST FLOOR CONSTRUCTION

Slabs Lower and Upper

Vapor barrier	19,500	sf	0.50	9,750	
Rebar	22,425	sf	2.00	44,850	
Concrete - 5" thick	379	cy	165.00	62,535	
Placing concrete	379	cy	30.00	11,370	
Finishing and curing concrete	19,500	sf	1.00	19,500	
Control joints - saw cut	19,500	sf	0.10	1,950	
Isolation joints at columns	500	lf	2.50	1,250	
<u>Miscellaneous</u>					
R-10 Rigid insulation underslabs	19,500	sf	8.00	156,000	
Thickened slabs	100	cy	165.00	16,500	
Moisture mitigation mix	379	cy	40.00	15,160	
Equipment pads and curbs	1	ls	7,500.00	7,500	
SUBTOTAL					346,365

TOTAL - FOUNDATIONS						\$1,066,865
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B10 SUPERSTRUCTURE

B1010 FLOOR & ROOF CONSTRUCTION

Structure

Wood/steel framed and sheathed (passive house framing (R55 roof, 2x6 exterior walls, truss, roof systems and sheathing)	19,500	sf	75.00	1,462,500	
Covered entry	1	ls	40,000.00	40,000	
<u>Miscellaneous</u>					
Misc metals	19,500	sf	1.00	19,500	
Fireproofing	19,500	sf	1.00	19,500	
Fire stopping floors	19,500	sf	0.75	14,625	
SUBTOTAL					1,556,125

TOTAL - SUPERSTRUCTURE						\$1,556,125
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Option 1

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
B20 EXTERIOR CLOSURE						
B2010 EXTERIOR WALLS						
<u>Facade</u>						
Interior paint	8,736	sf	2.00	24,960		
Interior gwb finish of passive house exterior walls	12,480	sf	6.00	74,880		
Air/Vapor barrier	12,480	sf	8.00	99,840		
R-30 insulation	12,480	sf	12.00	149,760		
2" mineral wool with Z furring insulation	12,480	sf	7.00	87,360		
Base and panels - 65%	12,480	sf	60.00	748,800		
Facade detail - fins and misc	5,000	sf	25.00	125,000		
<u>Miscellaneous</u>						
Caulking and sealants	19,500	sf	1.00	19,500		
SUBTOTAL					1,330,100	
B2020 WINDOWS						
Window systems - fiberglass double and triple glazed - 35%	6,720	sf	110.00	739,200		
Louvers	1	ls	15,000.00	15,000		
SUBTOTAL					754,200	
B2030 EXTERIOR DOORS						
Fiberglass entry doors, frames and HW	2	pr	7,500.00	15,000		
Fiberglass egress doors, frame and HW	6	lvs	2,500.00	15,000		
SUBTOTAL					30,000	
TOTAL - EXTERIOR CLOSURE						\$2,114,300
B30 ROOFING						
B3010 ROOF COVERINGS						
<u>Roofing systems</u>						
Metal roofing, flashing and trim	10,000	sf	45.00	450,000		
Membrane roofing, flashing and trim	10,500	sf	28.00	294,000		
<u>Accessories</u>						
Skylights allowance					NIC	
Roof hatch	1	ea	4,800.00	4,800		
Roof ladders	1	ea	1,850.00	1,850		
SUBTOTAL					750,650	
TOTAL - ROOFING						\$750,650
C10 INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
Interior partitions (rated and non rated)	19,500	sf	10.00	195,000		
Sealants & caulking at partitions	19,500	sf	0.50	9,750		
Rough blocking	19,500	sf	1.00	19,500		
SUBTOTAL					224,250	
C1020 INTERIOR DOORS						
Interior doors, frames and HW	30	lvs	1,200.00	36,000		
SUBTOTAL					36,000	
C1030 SPECIALTIES / MILLWORK						
Restrooms - Toilet partitions and accessories	4	rms	8,500.00	34,000		
Finishing carpentry and millwork	19,500	sf	9.00	175,500		
Rough carpentry	19,500	sf	1.00	19,500		
Foldable partition	80	lf	600.00	48,000		
Interior and Exterior Signage	1	ls	15,000.00	15,000		
Fire extinguisher cabinets	8	ea	275.00	2,200		
Misc glass and glazing	1	ls	25,000.00	25,000		
Miscellaneous metals throughout building	19,500	sf	2.00	39,000		
Miscellaneous sealants throughout building	19,500	sf	1.00	19,500		
SUBTOTAL					377,700	
TOTAL - INTERIOR CONSTRUCTION						\$637,950

Option 1

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
C20 STAIRCASES						
C2010 STAIR CONSTRUCTION						
N/A						
SUBTOTAL					-	
C2020 STAIR FINISHES						
N/A						
SUBTOTAL					-	
TOTAL - STAIRCASES						\$0
C30 INTERIOR FINISHES						
C3010 WALL FINISHES						
Paint to GWB	34,920	sf	2.00	69,840		
Tile to restrooms	2,600	sf	28.00	72,800		
SUBTOTAL					142,640	
C3020 FLOOR FINISHES						
Tile to restrooms	1,800	sf	28.00	50,400		
Flooring allowance	17,700	sf	15.00	265,500		
Base	3,950	lf	12.00	47,400		
SUBTOTAL					363,300	
C3030 CEILING FINISHES						
ACT ceilings	11,700	sf	8.00	93,600		
GWB ceilings	7,800	sf	15.00	117,000		
GWB soffits	500	lf	65.00	32,500		
Paint to GWB ceilings and soffits	9,800	sf	2.50	24,500		
SUBTOTAL					267,600	
TOTAL - INTERIOR FINISHES						773,540
D10 CONVEYING SYSTEMS						
D2010 ELEVATORS						
N/A						
SUBTOTAL					-	
TOTAL - CONVEYING SYSTEMS						\$0
D20 PLUMBING						
D20 PLUMBING						
Plumbing	19,500	sf	25.00	487,500		
SUBTOTAL					487,500	
TOTAL - PLUMBING						\$487,500

Option 1

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
D30 HVAC						
D30 HVAC						
<u>Systems</u>						
HVAC systems (VRF and distributions)	19,500	sf	\$60.00	1,170,000		
<u>Controls</u>						
ATC	19,500	sf	\$7.00	136,500		
Alarming, Scheduling, Trending & Logging	19,500	sf	\$1.00	19,500		
<u>Commissioning</u>						
Start up	19,500	sf	\$0.75	14,625		
Balancing	19,500	sf	\$0.65	12,675		
3rd Party Assist	19,500	sf	\$0.50	9,750		
<u>Miscellaneous</u>						
Coordination	1	ls	\$10,000.00	10,000		
Crane and Rigging	1	ls	\$10,000.00	10,000		
SUBTOTAL					1,383,050	
TOTAL - HVAC						\$1,383,050
D40 FIRE PROTECTION						
D40 FIRE PROTECTION						
Sprinkler system piping and heads	19,500	sf	12.00	234,000		
Service Equipment	1	ls	17,500.00	17,500		
SUBTOTAL					251,500	
TOTAL - FIRE PROTECTION						\$251,500
D50 ELECTRICAL						
D5010 SERVICE & DISTRIBUTION						
<u>Power Circuitry& Equipment</u>						
Service, main switchboard, feeds and panels	19,500	sf	12.00	234,000		
Generator				NIC		
SUBTOTAL					234,000	
D5020 LIGHTING & POWER						
Lighting and branch circuitry	19,500	sf	15.00	292,500		
Power and branch circuitry	19,500	sf	6.00	117,000		
SUBTOTAL					409,500	
D5030 COMMUNICATION & SECURITY SYSTEMS						
<u>Telecommunications System</u>						
Full telecommunications	19,500	sf	3.00	58,500		
<u>Fire Alarm</u>						
Fire Alarm system	19,500	sf	4.50	87,750		
<u>Security</u>						
Security	19,500	sf	1.50	29,250		
<u>Special Systems</u>						
PV system ready (no PV panels)	1	ls	30,000.00	30,000		
AV systems rough-in	19,500	sf	0.75	14,625		
SUBTOTAL					220,125	
D5040 OTHER ELECTRICAL SYSTEMS						
<u>Lightning protection</u>						
UL Master label lightning protection	19,500	sf	1.00	19,500		
<u>Miscellaneous</u>						
Temp services	19,500	sf	0.60	11,700		
Seismic restraints	1	ls	10,000.00	10,000		
Coring & firestopping	1	ls	7,500.00	7,500		
SUBTOTAL					48,700	
TOTAL - ELECTRICAL						\$912,325

Option 1

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
E10 EQUIPMENT						
E10 EQUIPMENT						
Kitchen equipment allowance	1	ls	180,000.00	180,000		
Other residential appliances	1	ls	15,000.00	15,000		
SUBTOTAL					195,000	
TOTAL - EQUIPMENT						\$195,000
E20 FURNISHINGS						
E2010 FIXED FURNISHINGS						
Window Treatment	6,720	sf	10.00	67,200		
SUBTOTAL					67,200	
TOTAL - FURNISHINGS						\$67,200
G10 SITEWORK						
Earthwork						
<u>Site Demolition</u>						
Site prep and demo	230,000	sf	0.20	46,000		
<u>Site Prep</u>						
Compost filter / Silt fence	2,500	lf	15.00	37,500		
Top soil strip and stockpile	5,500	cy	5.00	27,500		
Tracking pads	2	ea	6,500.00	13,000		
<u>Site and structural excavation and backfill</u>						
Cut, fill, swales earthwork allowance	15,000	cy	5.00	75,000		
Excavate and backfill foundation walls	1,800	cy	30.00	54,000		
Excavate and backfill column footings	600	cy	40.00	24,000		
Import underslab base for slabs	722	cy	55.00	39,710		
<u>Paving and walks prep</u>						
Bitum. Paving 12" subbase	1,889	cy	55.00	103,895		
Pedestrian Paving 6" subbase	185	cy	55.00	10,175		
Paving & Curbing						
Asphalt Roadway & parking	51,000	sf	5.50	280,500		
Concrete Sidewalks	5,000	sf	12.00	60,000		
Cast Iron Detectible Tiles at Curb Cuts	6	ea	500.00	3,000		
Vehicular Pavement Markings	87	ea	200.00	17,400		
Granite Curbing and Edging (combo granite and berm)	1,500	lf	35.00	52,500		
SUBTOTAL					844,180	

Option 1

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Utilities						
<u>Drainage</u>						
Allowance site piping and structures	1	ls	375,000.00	375,000		
<u>Water</u>						
Allowance for 6" FP main and domestic	1	ls	80,000.00	80,000		
<u>Gas</u>						
Allowance for piping					NIC	
<u>Sewer</u>						
Allowance for septic system	1	ls	85,000.00	85,000		
<u>Electrical</u>						
Primary and secondary services	1	ls	75,000.00	75,000		
Roadway and parking fixtures and circuitry	12	ea	6,500.00	78,000		
Walkway fixtures and circuitry	6	ea	4,000.00	24,000		
E&B Elec/communication duct banks	500	lf	150.00	75,000		
Encase duct banks in concrete	148	cy	450.00	66,600		
SUBTOTAL					858,600	
Site Improvements						
10' x 50' Ped Bridge	1	ea	35,000.00	35,000		
Boardwalks & bike paths	1,400	lf	125.00	175,000		
Retaining walls - modular					N/A	
Site improvements (flag pole, benches, bike racks, signs and misc)	1	ls	50,000.00	50,000		
SUBTOTAL					260,000	
Landscaping						
Landscaping lawns and plantings	1	ls	100,000.00	100,000		
Outdoor courtyards	2	ea	75,000.00	150,000		
Playground and courts	1	ls	75,000.00	75,000		
SUBTOTAL					325,000	
TOTAL - SITEWORK						\$2,287,780
H10 PODS						
H10 PODS						
Demolish 3 pods	15,000	sf	20.00	300,000		
SUBTOTAL					300,000	
TOTAL - PODS						\$300,000

Option 2

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
AREA CALCULATIONS						
Level 1				7,200		
Level 2				6,200		
TOTAL GROSS FLOOR AREA (GFA)				13,400	GSF	

A10 BUILDING FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Footings & walls

Footings and walls	164	cy	1,100.00	180,400		
Column and misc strip footings	100	cy	1,200.00	120,000		
Insulation and waterproofing at foundation walls	2,880	sf	16.00	46,080		
Site stair at foundation to porch	40	cy	1,100.00	44,000		
Elevator pit	20	cy	1,100.00	22,000		
Waterproofing at pit	1	ls	5,500.00	5,500		
SUBTOTAL						417,980

A1030 LOWEST FLOOR CONSTRUCTION

Slabs Lower and Upper

Vapor barrier	7,200	sf	0.50	3,600		
Rebar	8,280	sf	2.00	16,560		
Concrete - 5" thick	140	cy	165.00	23,100		
Placing concrete	140	cy	30.00	4,200		
Finishing and curing concrete	7,200	sf	1.00	7,200		
Control joints - saw cut	7,200	sf	0.10	720		
Isolation joints at columns	500	lf	2.50	1,250		
<u>Miscellaneous</u>						
R-10 Rigid insulation underslabs	7,200	sf	8.00	57,600		
Thickened slabs	100	cy	165.00	16,500		
Moisture mitigation mix	140	cy	40.00	5,600		
Equipment pads and curbs	1	ls	7,500.00	7,500		
SUBTOTAL						143,830

TOTAL - FOUNDATIONS					\$561,810
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B10 SUPERSTRUCTURE

B1010 FLOOR & ROOF CONSTRUCTION

Structure

Wood/steel framed and sheathed (passive house framing (R55 roof, 2x6 exterior walls, truss, 2nd floor and roof systems and sheathing)	13,400	sf	75.00	1,005,000		
Porch roof/columns	900	sf	90.00	81,000		
Vertical PV support system	2,087	sf	50.00	104,350		
<u>Miscellaneous</u>						
Misc metals	13,400	sf	1.00	13,400		
Fireproofing	13,400	sf	1.00	13,400		
Fire stopping floors	13,400	sf	0.75	10,050		
SUBTOTAL						1,227,200

TOTAL - SUPERSTRUCTURE					\$1,227,200
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Option 2

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
B20 EXTERIOR CLOSURE						
B2010 EXTERIOR WALLS						
<u>Facade</u>						
Interior paint	4,802	sf	2.00	13,720		
Interior gwb finish of passive house exterior walls	6,860	sf	6.00	41,160		
Air/Vapor barrier	6,860	sf	8.00	54,880		
R-30 insulation	6,860	sf	12.00	82,320		
2" mineral wool with Z furring insulation	6,860	sf	7.00	48,020		
Base, panels - 70%	6,860	sf	60.00	411,600		
<u>Miscellaneous</u>						
Caulking and sealants	13,400	sf	1.00	13,400		
SUBTOTAL						665,100
B2020 WINDOWS						
Window systems - fiberglass double and triple glazed - 30%	2,940	sf	110.00	323,400		
Louvers	1	ls	15,000.00	15,000		
SUBTOTAL						338,400
B2030 EXTERIOR DOORS						
Fiberglass entry doors, frames and HW	2	pr	7,500.00	15,000		
Fiberglass egress doors, frame and HW	6	lvs	2,500.00	15,000		
SUBTOTAL						30,000
TOTAL - EXTERIOR CLOSURE						\$1,033,500
B30 ROOFING						
B3010 ROOF COVERINGS						
<u>Roofing systems</u>						
Membrane roofing, flashing and trim	7,200	sf	28.00	201,600		
<u>Accessories</u>						
Skylights						NIC
Skylight monitor	1	ls	60,000.00	60,000		
Roof hatch	1	ea	4,800.00	4,800		
Roof ladders	1	ea	1,850.00	1,850		
SUBTOTAL						268,250
TOTAL - ROOFING						\$268,250
C10 INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
Interior partitions (rated and non rated)	13,400	sf	11.00	147,400		
Sealants & caulking at partitions	13,400	sf	0.75	10,050		
Rough blocking	13,400	sf	1.00	13,400		
SUBTOTAL						170,850
C1020 INTERIOR DOORS						
Interior doors, frames and HW	32	lvs	1,200.00	38,400		
SUBTOTAL						38,400
C1030 SPECIALTIES / MILLWORK						
Restrooms - Toilet partitions and accessories	4	rms	8,500.00	34,000		
Finishing carpentry and millwork	13,400	sf	9.00	120,600		
Rough carpentry	13,400	sf	1.00	13,400		
Interior and Exterior Signage	1	ls	15,000.00	15,000		
Fire extinguisher cabinets	8	ea	275.00	2,200		
Misc glass and glazing	1	ls	25,000.00	25,000		
Miscellaneous metals throughout building	13,400	sf	2.00	26,800		
Miscellaneous sealants throughout building	13,400	sf	1.00	13,400		
SUBTOTAL						250,400
TOTAL - INTERIOR CONSTRUCTION						\$459,650

Option 2

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
C20 STAIRCASES						
C2010 STAIR CONSTRUCTION						
Lobby Stair	1	ft	45,000.00	45,000		
Rails at floor openings	90	lf	375.00	33,750		
SUBTOTAL					78,750	
C2020 STAIR FINISHES						
Flooring to treads/landings	1	flts	5,500.00	5,500		
Paint to staircases	1	ft	3,500.00	3,500		
SUBTOTAL					9,000	
TOTAL - STAIRCASES						\$87,750
C30 INTERIOR FINISHES						
C3010 WALL FINISHES						
Paint to GWB	39,340	sf	2.00	78,680		
Tile to restrooms	2,600	sf	28.00	72,800		
SUBTOTAL					151,480	
C3020 FLOOR FINISHES						
Tile to restrooms	1,800	sf	28.00	50,400		
Flooring allowance	11,600	sf	15.00	174,000		
Base	3,850	lf	12.00	46,200		
SUBTOTAL					270,600	
C3030 CEILING FINISHES						
ACT ceilings	8,040	sf	8.00	64,320		
GWB ceilings	5,360	sf	15.00	80,400		
GWB soffits	500	lf	65.00	32,500		
Paint to GWB ceilings and soffits	7,360	sf	2.50	18,400		
SUBTOTAL					195,620	
TOTAL - INTERIOR FINISHES						617,700
D10 CONVEYING SYSTEMS						
D2010 ELEVATORS						
Passenger elevator	2	stp	100,000.00	200,000		
SUBTOTAL					200,000	
TOTAL - CONVEYING SYSTEMS						\$200,000
D20 PLUMBING						
D20 PLUMBING						
Plumbing	13,400	sf	25.00	335,000		
SUBTOTAL					335,000	
TOTAL - PLUMBING						\$335,000

Option 2

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
D30 HVAC						
D30 HVAC						
<u>Systems</u>						
HVAC systems (VRF and distributions)	13,400	sf	\$60.00	804,000		
<u>Controls</u>						
ATC	13,400	sf	\$7.00	93,800		
Alarming, Scheduling, Trending & Logging	13,400	sf	\$1.00	13,400		
<u>Commissioning</u>						
Start up	13,400	sf	\$0.75	10,050		
Balancing	13,400	sf	\$0.65	8,710		
3rd Party Assist	13,400	sf	\$0.50	6,700		
<u>Miscellaneous</u>						
Coordination	1	ls	\$10,000.00	10,000		
Crane and Rigging	1	ls	\$10,000.00	10,000		
SUBTOTAL					956,660	
TOTAL - HVAC						\$956,660
D40 FIRE PROTECTION						
D40 FIRE PROTECTION						
Sprinkler system piping and heads	13,400	sf	12.00	160,800		
Service Equipment	1	ls	17,500.00	17,500		
SUBTOTAL					178,300	
TOTAL - FIRE PROTECTION						\$178,300
D50 ELECTRICAL						
D5010 SERVICE & DISTRIBUTION						
<u>Power Circuitry & Equipment</u>						
Service, main switchboard, feeds and panels	13,400	sf	12.00	160,800		
Generator				NIC		
SUBTOTAL					160,800	
D5020 LIGHTING & POWER						
Lighting and branch circuitry	13,400	sf	15.00	201,000		
Power and branch circuitry	13,400	sf	6.00	80,400		
SUBTOTAL					281,400	
D5030 COMMUNICATION & SECURITY SYSTEMS						
<u>Telecommunications System</u>						
Full telecommunications	13,400	sf	3.00	40,200		
<u>Fire Alarm</u>						
Fire Alarm system	13,400	sf	4.50	60,300		
<u>Security</u>						
Security	13,400	sf	1.50	20,100		
<u>Special Systems</u>						
PV system ready (no PV panels)	1	ls	30,000.00	30,000		
AV systems rough-in	13,400	sf	0.75	10,050		
SUBTOTAL					160,650	
D5040 OTHER ELECTRICAL SYSTEMS						
<u>Lightning protection</u>						
UL Master label lightning protection	13,400	sf	1.00	13,400		
<u>Miscellaneous</u>						
Temp services	13,400	sf	0.60	8,040		
Seismic restraints	1	ls	10,000.00	10,000		
Coring & firestopping	1	ls	7,500.00	7,500		
SUBTOTAL					38,940	
TOTAL - ELECTRICAL						\$641,790

Option 2

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
E10 EQUIPMENT						
E10 EQUIPMENT						
Kitchen equipment allowance	1	ls	180,000.00	180,000		
Other residential appliances	1	ls	15,000.00	15,000		
SUBTOTAL					195,000	
TOTAL - EQUIPMENT						\$195,000
E20 FURNISHINGS						
E2010 FIXED FURNISHINGS						
Window Treatment	2,940	sf	10.00	29,400		
SUBTOTAL					29,400	
TOTAL - FURNISHINGS						\$29,400
G10 SITEWORK						
Earthwork						
<u>Site Demolition</u>						
Site prep and demo	175,000	sf	0.20	35,000		
<u>Site Prep</u>						
Compost filter / Silt fence	1,500	lf	15.00	22,500		
Top soil strip and stockpile	2,500	cy	5.00	12,500		
Tracking pads	1	ea	6,500.00	6,500		
<u>Site and structural excavation and backfill</u>						
Cut, fill, swales earthwork allowance	7,500	cy	5.00	37,500		
Excavate and backfill foundation walls	800	cy	30.00	24,000		
Excavate and backfill column footings	200	cy	40.00	8,000		
Import underslab base for slabs	267	cy	55.00	14,685		
<u>Paving and walks prep</u>						
Bitum. Paving 12" subbase	1,111	cy	55.00	61,105		
Pedestrian Paving 6" subbase	111	cy	55.00	6,105		
Paving & Curbing						
Asphalt Roadway & parking	30,000	sf	5.50	165,000		
Concrete Sidewalks	3,000	sf	12.00	36,000		
Cast Iron Detectible Tiles at Curb Cuts	6	ea	500.00	3,000		
Vehicular Pavement Markings	87	ea	200.00	17,400		
Granite Curbing and Edging (combo granite and berm)	1,200	lf	40.00	48,000		
SUBTOTAL					497,295	

Option 2

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Utilities						
<u>Drainage</u>						
Allowance site piping and structures	1	ls	225,000.00	225,000		
<u>Water</u>						
Allowance for 6" FP main and domestic	1	ls	75,000.00	75,000		
<u>Gas</u>						
Allowance for piping					NIC	
<u>Sewer</u>						
Allowance for septic system	1	ls	85,000.00	85,000		
<u>Electrical</u>						
Primary and secondary services	1	ls	65,000.00	65,000		
Roadway and parking fixtures and circuitry	8	ea	6,500.00	52,000		
Walkway fixtures and circuitry	4	ea	4,000.00	16,000		
E&B Elec/communication duct banks	400	lf	150.00	60,000		
Encase duct banks in concrete	119	cy	450.00	53,550		
SUBTOTAL						631,550
Site Improvements						
10' x 50' Ped Bridge	1	ea	35,000.00	35,000		
Boardwalks & bike paths	1,200	lf	125.00	150,000		
Retaining walls - modular					N/A	
Site improvements (flag pole, benches, bike racks, signs and misc)	1	ls	25,000.00	25,000		
SUBTOTAL						210,000
Landscaping						
Landscaping lawns and plantings	1	ls	75,000.00	75,000		
Playground and courts	1	ls	75,000.00	75,000		
SUBTOTAL						150,000
TOTAL - SITEWORK						\$1,488,845
H10 PODS						
H10 PODS						
Demolish 2 pods	9,885	sf	20.00	197,700		
Renovate 1 pod	4,965	sf	350.00	1,737,750		
SUBTOTAL						1,935,450
TOTAL - PODS						\$1,935,450

Option 3

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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AREA CALCULATIONS

Level 1 4,485

TOTAL GROSS FLOOR AREA (GFA)	4,485	GSF
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A10 BUILDING FOUNDATIONS

A1010 STANDARD FOUNDATIONS

Footings & walls

Footings and walls	126	cy	1,100.00	138,600	
Column and misc strip footings	50	cy	1,200.00	60,000	
Insulation and waterproofing at foundation walls	1,800	sf	16.00	28,800	
Elevator pit				NIC	
Waterproofing at pit				NIC	
SUBTOTAL					227,400

A1030 LOWEST FLOOR CONSTRUCTION

Slabs Lower

Vapor barrier	4,485	sf	0.50	2,243	
Rebar	5,158	sf	2.00	10,316	
Concrete - 5" thick	87	cy	165.00	14,355	
Placing concrete	87	cy	30.00	2,610	
Finishing and curing concrete	4,485	sf	1.00	4,485	
Control joints - saw cut	4,485	sf	0.10	449	
Isolation joints at columns	500	lf	2.50	1,250	
<u>Miscellaneous</u>					
R-10 Rigid insulation underslabs	4,485	sf	8.00	35,880	
Thickened slabs	80	cy	165.00	13,200	
Moisture mitigation mix	87	cy	40.00	3,480	
SUBTOTAL					88,268

TOTAL - FOUNDATIONS					\$315,668
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B10 SUPERSTRUCTURE

B1010 FLOOR & ROOF CONSTRUCTION

Structure

1 Story - framing (R55 roof structure/columns/walls)	4,485	sf	60.00	269,100	
Overhangs premiums	4,485	sf	10.00	44,850	
<u>Miscellaneous</u>					
Misc metals	4,485	sf	0.50	2,243	
Fireproofing	4,485	sf	0.50	2,243	
Fire stopping floors	4,485	sf	0.25	1,121	
SUBTOTAL					319,557

TOTAL - SUPERSTRUCTURE					\$319,557
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Option 3

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
B20 EXTERIOR CLOSURE						
B2010 EXTERIOR WALLS						
<u>Facade</u>						
Interior paint	1,250	sf	2.00	3,570		
Interior gwb finish of passive house exterior walls	1,785	sf	6.00	10,710		
Air/Vapor barrier	1,785	sf	8.00	14,280		
R-30 insulation	1,785	sf	12.00	21,420		
2" mineral wool with Z furring insulation	1,785	sf	7.00	12,495		
Facade - 30%	1,785	sf	60.00	107,100		
<u>Miscellaneous</u>						
Caulking and sealants	4,485	sf	1.00	4,485		
SUBTOTAL						174,060
B2020 WINDOWS						
Window systems - Glazing - 40%	2,380	sf	110.00	261,800		
Window systems - Poly - 30%	1,785	sf	95.00	169,575		
External sun controls	1	ls	40,000.00	40,000		
SUBTOTAL						471,375
B2030 EXTERIOR DOORS						
Fiberglass entry doors, frames and HW	2	pr	7,500.00	15,000		
Fiberglass egress doors, frame and HW	2	lvs	2,500.00	5,000		
SUBTOTAL						20,000
TOTAL - EXTERIOR CLOSURE						\$665,435
B30 ROOFING						
B3010 ROOF COVERINGS						
<u>Roofing systems</u>						
Membrane roofing, flashing and trim	4,485	sf	28.00	125,580		
SUBTOTAL						125,580
TOTAL - ROOFING						\$125,580
C10 INTERIOR CONSTRUCTION						
C1010 PARTITIONS						
SUBTOTAL					NIC	-
C1020 INTERIOR DOORS						
Interior doors, frames and HW	2	lvs	1,200.00	2,400		
SUBTOTAL						2,400
C1030 SPECIALTIES / MILLWORK						
Rough carpentry	4,485	sf	0.50	2,243		
Interior and Exterior Signage	1	ls	10,000.00	10,000		
Fire extinguisher cabinets	4	ea	275.00	1,100		
Miscellaneous metals throughout building	4,485	sf	1.00	4,485		
Miscellaneous sealants throughout building	4,485	sf	0.50	2,243		
SUBTOTAL						20,071
TOTAL - INTERIOR CONSTRUCTION						\$22,471

Option 3

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
C20 STAIRCASES						
C2010 STAIR CONSTRUCTION						
Lobby Stair						
Egress Stair						
Rails at floor openings						
SUBTOTAL						-
C2020 STAIR FINISHES						
Flooring to treads/landings						
Paint to staircases						
SUBTOTAL						-
TOTAL - STAIRCASES						\$0
C30 INTERIOR FINISHES						
C3010 WALL FINISHES						
Paint to GWB				NIC		
SUBTOTAL						-
C3020 FLOOR FINISHES						
Flooring allowance	4,485	sf	15.00	67,275		
Base	1,000	lf	12.00	12,000		
SUBTOTAL						79,275
C3030 CEILING FINISHES						
ACT ceilings	3,588	sf	8.00	28,704		
GWB ceilings	897	sf	15.00	13,455		
Paint to GWB ceilings and soffits	901	sf	2.50	2,253		
SUBTOTAL						44,412
TOTAL - INTERIOR FINISHES						123,687
D10 CONVEYING SYSTEMS						
D2010 ELEVATORS						
Passenger elevator						
SUBTOTAL						-
TOTAL - CONVEYING SYSTEMS						\$0
D20 PLUMBING						
D20 PLUMBING						
Plumbing	4,485	sf	1.00	4,485		
SUBTOTAL						4,485
TOTAL - PLUMBING						\$4,485

Option 3

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
D30 HVAC						
D30 HVAC						
<u>Systems</u>						
HVAC systems (VRF and distributions)	4,485	sf	\$63.00	282,555		
<u>Controls</u>						
ATC	4,485	sf	\$7.00	31,395		
Alarming, Scheduling, Trending & Logging	4,485	sf	\$1.00	4,485		
<u>Commissioning</u>						
Start up	4,485	sf	\$0.75	3,364		
Balancing	4,485	sf	\$0.65	2,915		
3rd Party Assist	4,485	sf	\$0.50	2,243		
<u>Miscellaneous</u>						
Coordination	1	ls	\$10,000.00	10,000		
Crane and Rigging	1	ls	\$10,000.00	10,000		
SUBTOTAL					346,957	
TOTAL - HVAC						\$346,957
D40 FIRE PROTECTION						
D40 FIRE PROTECTION						
Sprinkler system piping and heads	4,485	sf	12.00	53,820		
SUBTOTAL					53,820	
TOTAL - FIRE PROTECTION						\$53,820
D50 ELECTRICAL						
D5010 SERVICE & DISTRIBUTION						
<u>Power Circuitry& Equipment</u>						
Service, main switchboard, feeds and panels	4,485	sf	13.00	58,305		
Generator				NIC		
SUBTOTAL					58,305	
D5020 LIGHTING & POWER						
Lighting and branch circuitry	4,485	sf	15.00	67,275		
Power and branch circuitry	4,485	sf	6.00	26,910		
SUBTOTAL					94,185	
D5030 COMMUNICATION & SECURITY SYSTEMS						
<u>Telecommunications System</u>						
Full telecommunications					NIC	
<u>Fire Alarm</u>						
Fire Alarm system	4,485	sf	4.50	20,183		
<u>Security</u>						
Security	4,485	sf	1.00	4,485		
<u>Special Systems</u>						
PV system ready (no PV panels)					N/A	
AV systems rough-in					N/A	
SUBTOTAL					24,668	
D5040 OTHER ELECTRICAL SYSTEMS						
<u>Lightning protection</u>						
UL Master label lightning protection	4,485	sf	1.00	4,485		
<u>Miscellaneous</u>						
Temp services	4,485	sf	0.60	2,691		
Seismic restraints	1	ls	7,500.00	7,500		
Coring & firestopping	1	ls	5,000.00	5,000		
SUBTOTAL					19,676	
TOTAL - ELECTRICAL						\$196,834

Option 3

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
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E10 EQUIPMENT

E10 EQUIPMENT						
Other residential appliances	1	ls	5,000.00	5,000		
SUBTOTAL					5,000	

TOTAL - EQUIPMENT						\$5,000
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E20 FURNISHINGS

E2010 FIXED FURNISHINGS						
Window Treatment				NIC		
SUBTOTAL					-	

TOTAL - FURNISHINGS						\$0
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G10 SITEWORK

Earthwork

Site Demolition

Site prep and demo	175,000	sf	0.20	35,000		
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Site Prep

Compost filter / Silt fence	1,500	lf	15.00	22,500		
Top soil strip and stockpile	2,500	cy	5.00	12,500		
Tracking pads	1	ea	6,500.00	6,500		

Site and structural excavation and backfill

Cut, fill, swales earthwork allowance	7,500	cy	5.00	37,500		
Excavate and backfill foundation walls	800	cy	30.00	24,000		
Excavate and backfill column footings	200	cy	40.00	8,000		
Import underslab base for slabs	166	cy	55.00	9,130		

Paving and walks prep

Bitum. Paving 12" subbase	1,111	cy	55.00	61,105		
Pedestrian Paving 6" subbase	111	cy	55.00	6,105		

Paving & Curbing

Asphalt Roadway & parking	30,000	sf	5.50	165,000		
Concrete Sidewalks	3,000	sf	12.00	36,000		
Cast Iron Detectible Tiles at Curb Cuts	6	ea	500.00	3,000		
Vehicular Pavement Markings	87	ea	200.00	17,400		
Granite Curbing and Edging (combo granite and berm)	1,200	lf	40.00	48,000		
SUBTOTAL					491,740	

Option 3

DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
Utilities						
<u>Drainage</u>						
Allowance site piping and structures	1	ls	225,000.00	225,000		
<u>Water</u>						
Allowance for 6" FP main and domestic	1	ls	75,000.00	75,000		
<u>Gas</u>						
Allowance for piping					NIC	
<u>Sewer</u>						
Allowance for septic system	1	ls	85,000.00	85,000		
<u>Electrical</u>						
Primary and secondary services	1	ls	65,000.00	65,000		
Roadway and parking fixtures and circuitry	8	ea	6,500.00	52,000		
Walkway fixtures and circuitry	4	ea	4,000.00	16,000		
E&B Elec/communication duct banks	400	lf	150.00	60,000		
Encase duct banks in concrete	119	cy	450.00	53,550		
SUBTOTAL						631,550
Site Improvements						
10' x 50' Ped Bridge	1	ea	35,000.00	35,000		
Boardwalks & bike paths	1,200	lf	125.00	150,000		
Retaining walls - modular					N/A	
Site improvements (flag pole, benches, bike racks, signs and misc)	1	ls	25,000.00	25,000		
SUBTOTAL						210,000
Landscaping						
Landscaping lawns and plantings	1	ls	75,000.00	75,000		
Playground and courts	1	ls	75,000.00	75,000		
SUBTOTAL						150,000
TOTAL - SITEWORK						\$1,483,290
H10 PODS						
H10 PODS						
Renovate 2 pods	9,885	sf	350.00	3,459,750		
Kitchen premium	1	ls	180,000.00	180,000		
1 pod ETR						
SUBTOTAL						3,639,750
TOTAL - PODS						\$3,639,750