



phius con

MILWAUKEE 2025





The Rookery /ˈrʊkərē/

The place where a group of birds or social mammals congregate and raise their young.

A dense collection of housing, where women of ill repute or other unsavory's collect.





Vision Statement:

Artisans Group Architecture and Planning is an award winning, women owned design studio, committed to high performance, net zero resilient buildings and communities. As planners, designers and architects, we advocate for healthy, equitable, transformational spaces, and soulful sustainability at every scale of project. Driven by good building science, we put things on the planet with great care, leveraging decades of experience into lasting relationships, and hundreds of realized dreams.

**Roussa Cassel
& Tessa Bradley**
Principal Architects/Owners







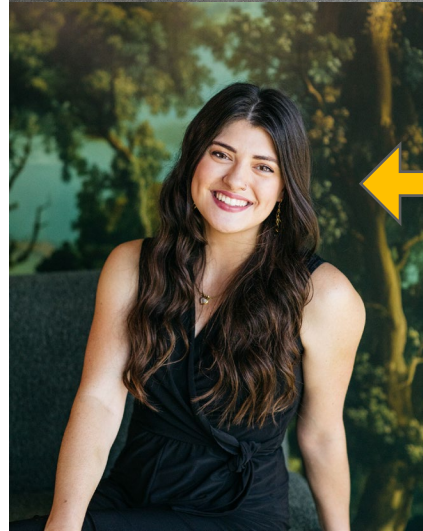
ARTISANS GROUP



Who we are.



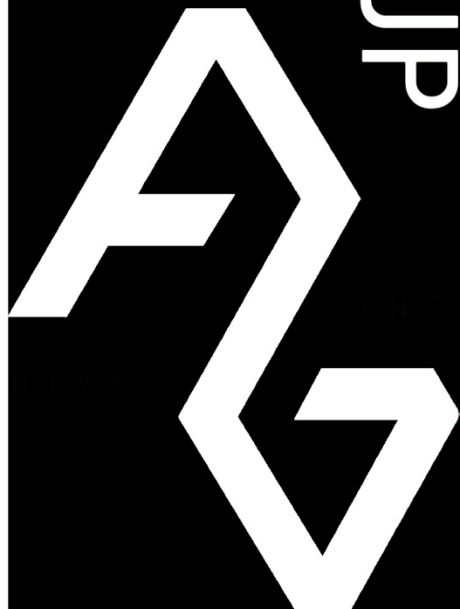
We Are Artisans Group



Fearless Leaders

**CPHC®,
Energy
Modeler,
Almost
Architect,
Future Leader**





Where we started.



We bought a shitty
house February 2021



Low ceilings, lots of cats lived here at some point...also not an office legally.

We went through a change of use, had to maintain less than 25% of the value of the structure in improvements, minus repairs and the ADA improvements

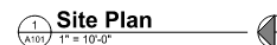


Proposed Areas

NEW TOTAL IMPERVIOUS COVERAGE: = 2313S
 -HOUSE = 1012S
 -GARAGE = 377SF
 -DRIVEWAY = 814SF
 -NEW WALKWAYS = 1106SF

- CONSTRUCTION IMPROVEMENTS OF PHASE 1 WILL BE LESS THAN 25% OF THE TOTAL ASSESSED VALUE. FRONTAGE IMPROVEMENTS WILL BE TRIGGERED AND CONSTRUCTED AS PART OF A FUTURE BUILDING DEVELOPMENT.
- CURRENT ARTISAN'S GROUP BUILDING USES 120CF/MONTH OF WATER. WE EXPECT A PORTION OF THE EXISTING ERU CREDIT WILL GO TO FUTURE BUILDING DEVELOPMENT.
- 4 PARKING SPOTS AS PER CODE MIN. REQUIREMENTS.

#2 DF 2 X 12 RAFTERS, ATTACH TO
EXISTING 2 X 6 RAFTERS W/ (2)
STAGGERED ROWS OF 10D NAILS @
12" OC EACH ROW







Scope creep!



Holy Shit!



We started out with a budget of 100K
We spent 200K, NOT Passive building!





D-Day!



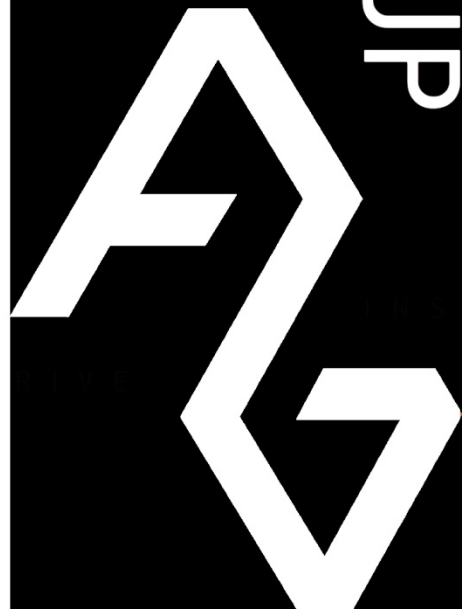
Here was our operating office, where we were feverishly architecting...

...and of course our job hut



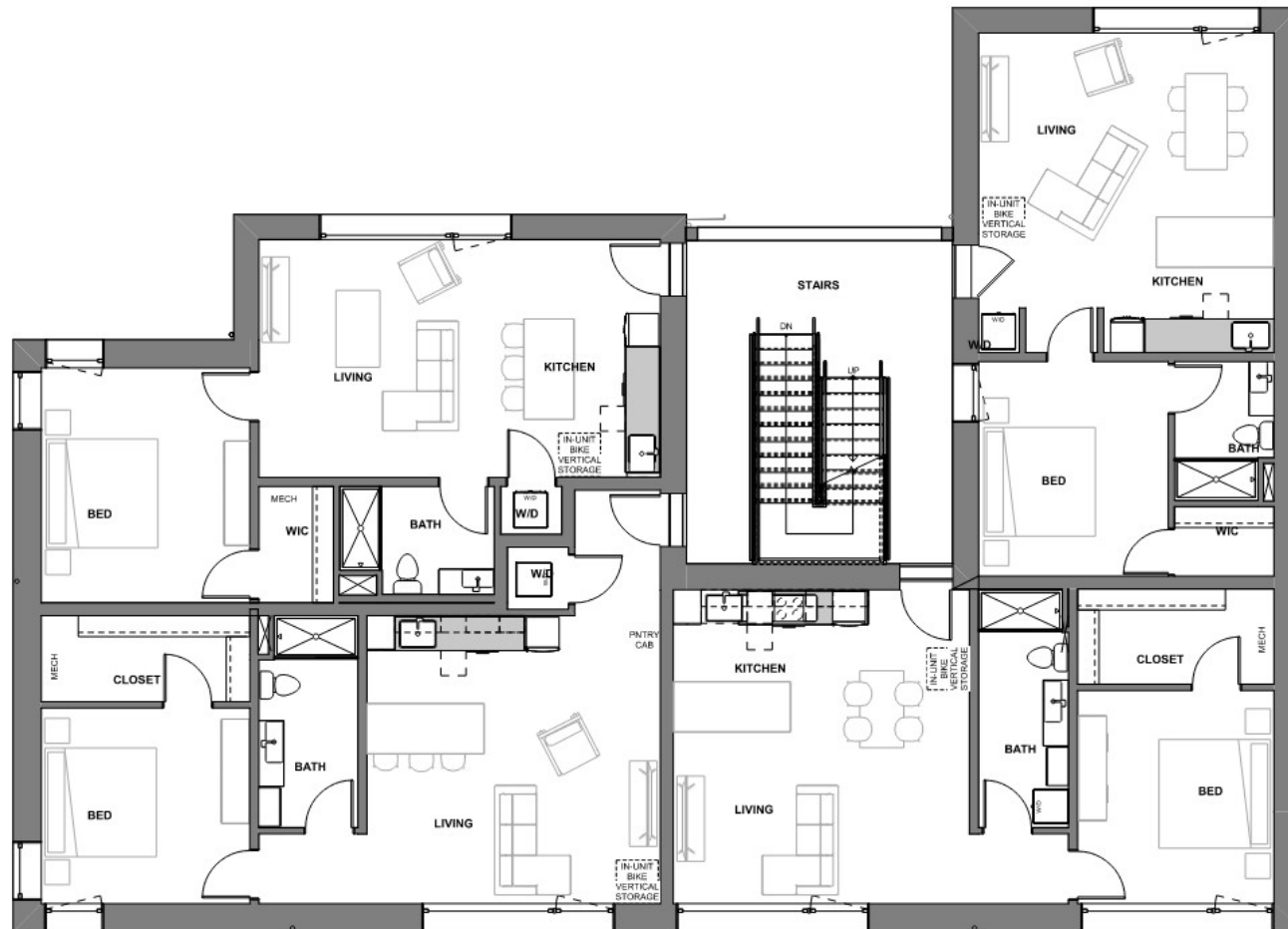


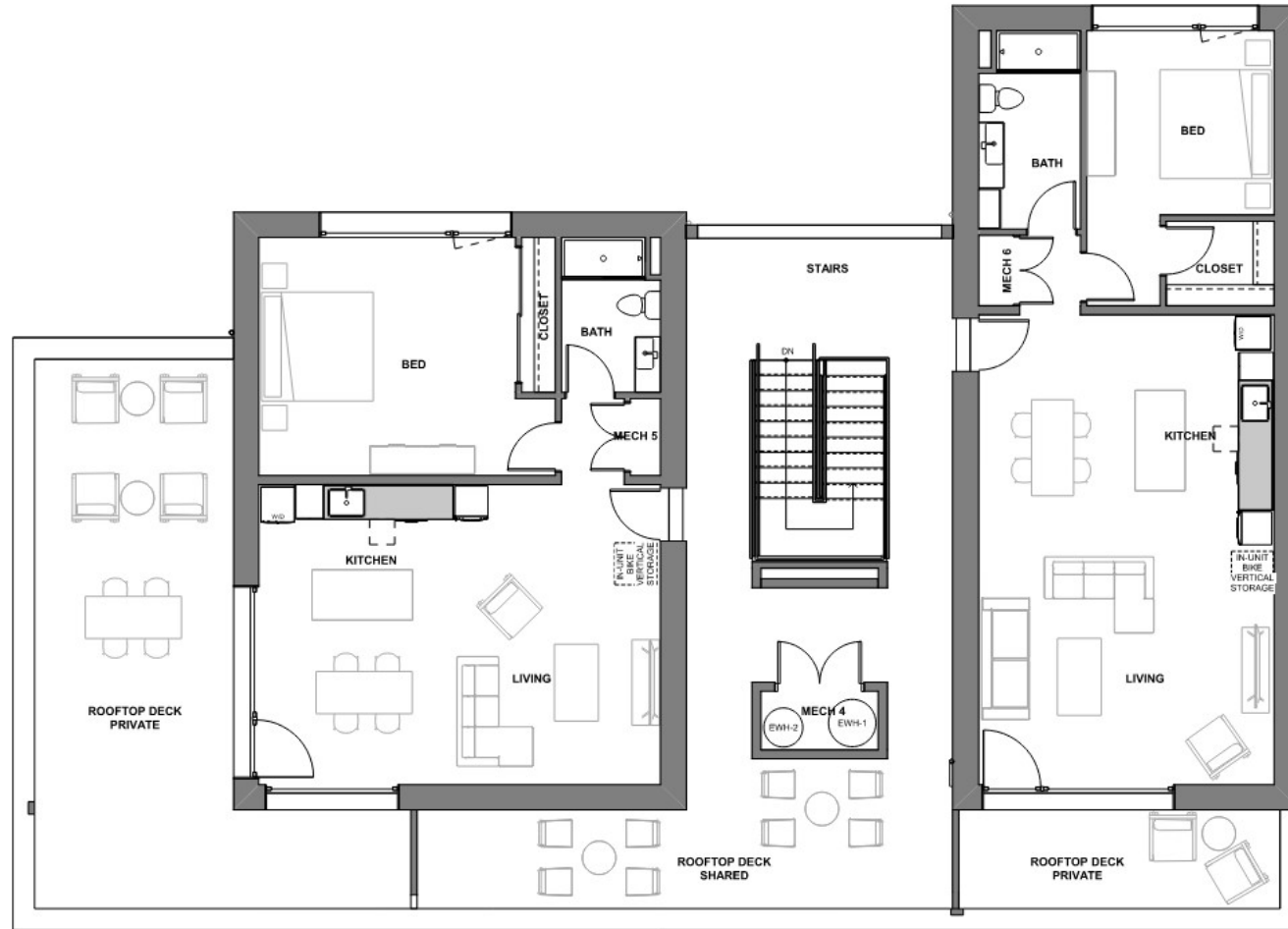
This is how long Land Use took us.....



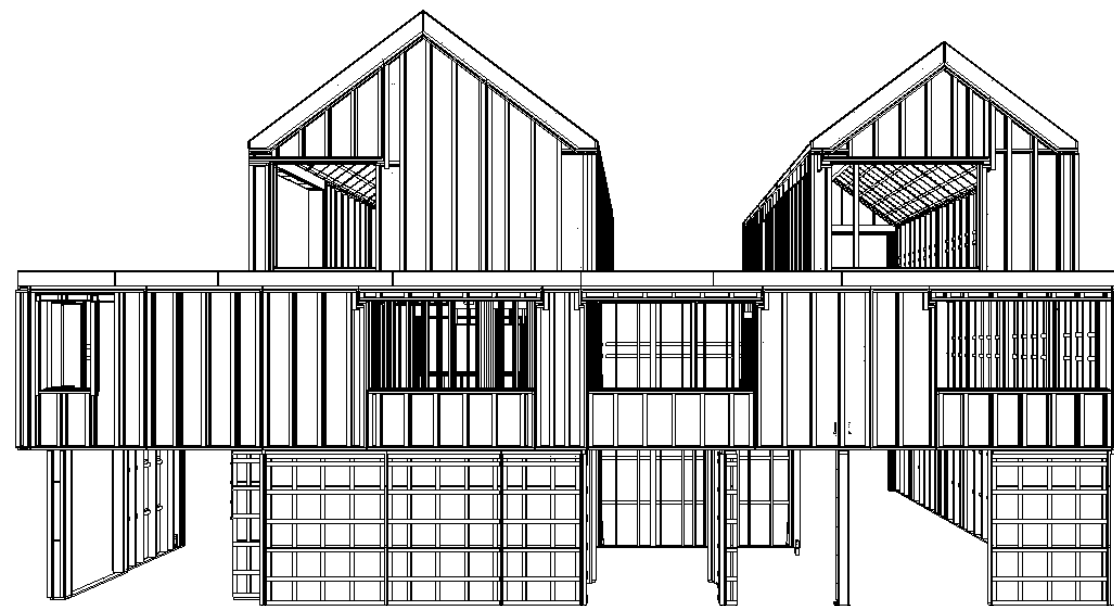
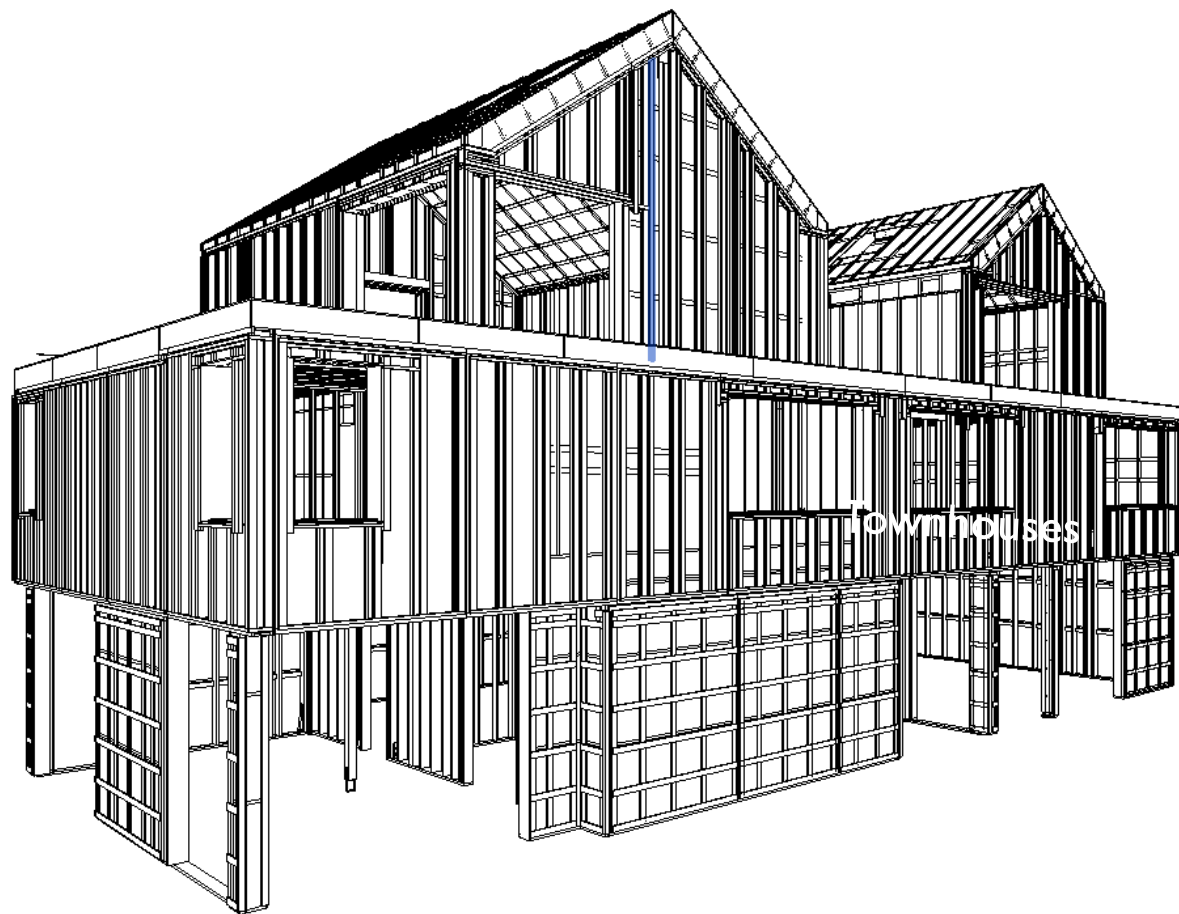
The Design, Assemblies, MEP.

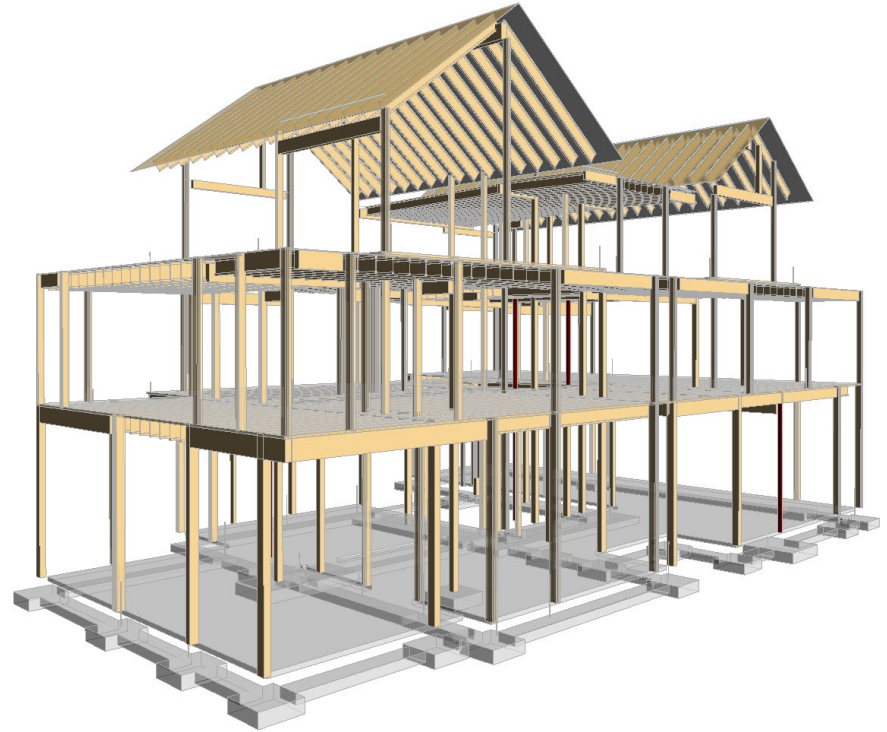
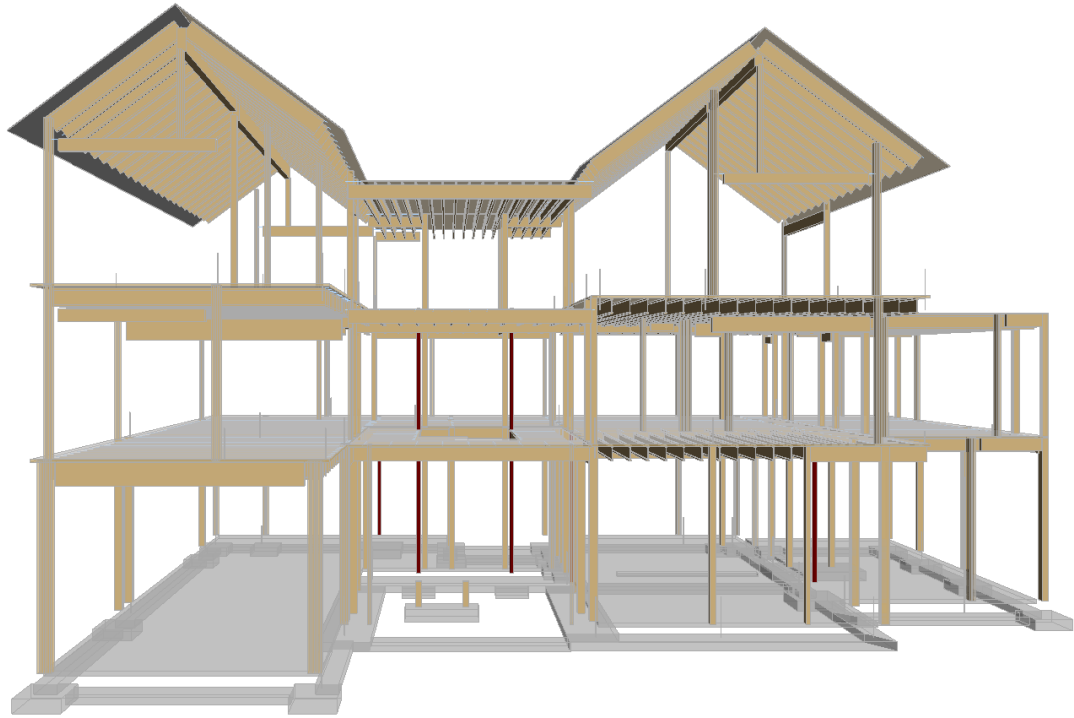






1 3RD FLOOR UNIT PLANS
A732 1/8" = 1'-0"

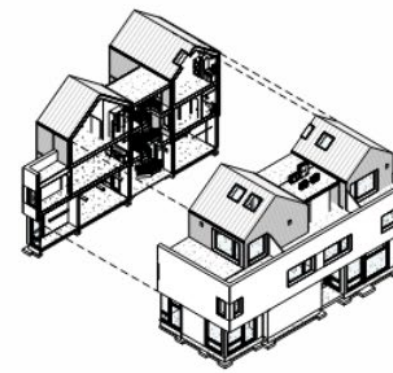




Structural BIM


Structural Solutions

 ARTISANS GROUP
ARCHITECTURE + PLANNING



BUILDING SECTION GENERAL NOTES

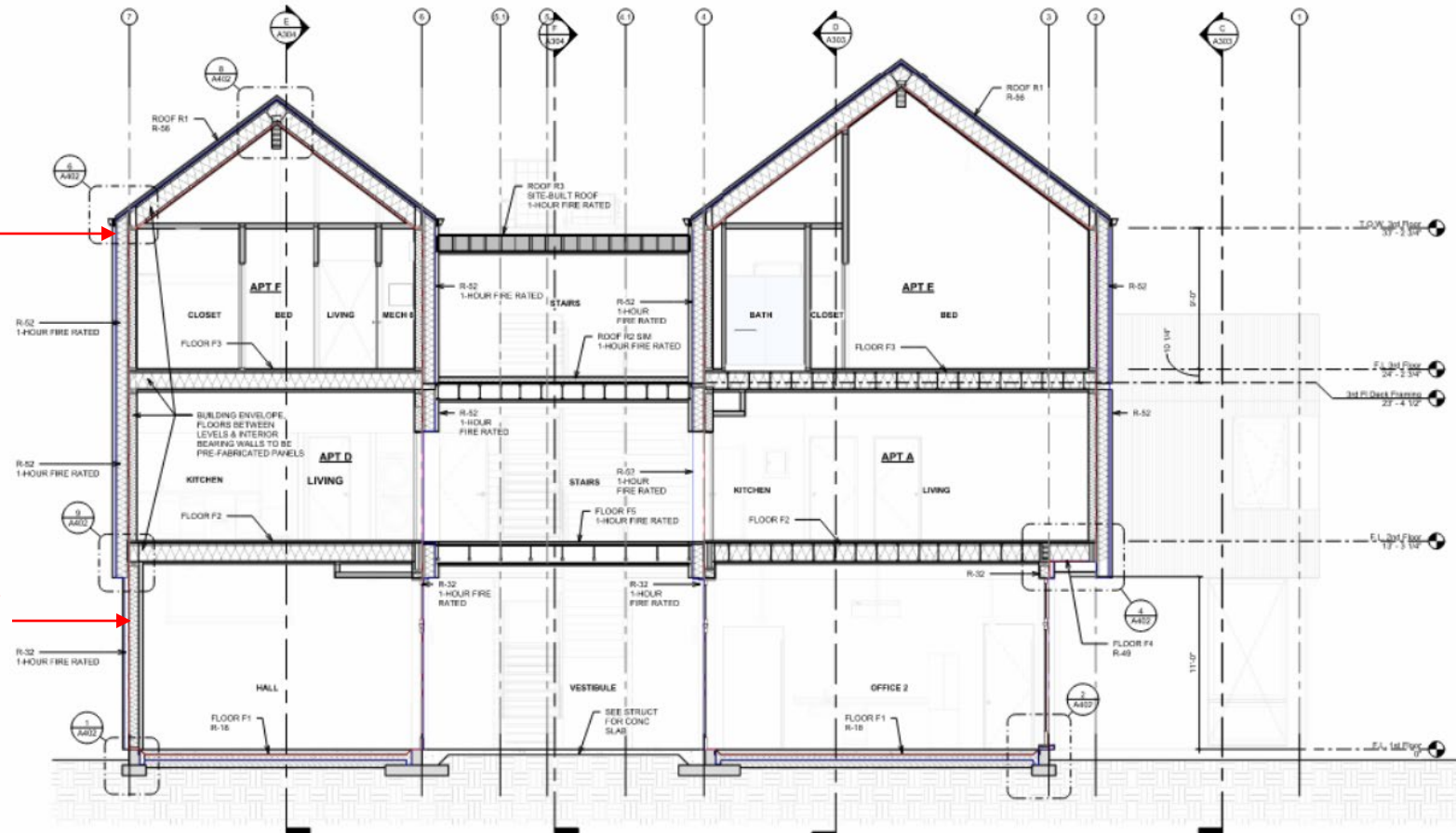
1. SEE SHEET A401 FOR BUILDING ASSEMBLIES, R-VALUES, FIRE-RATINGS AND GA-FIRE ASSEMBLIES.

BUILDING SECTION LEGEND

— OUTLINE OF CONTINUOUS AIR BARRIER
— OUTLINE OF THERMAL INSULATION

9 1/2" TJI O/
2x6 Studs

2x8 Studs Wall W/
2" Rigid



N/S SECTION 1
1/4" = 1'-0"

0' 1' 2' 4' 8'

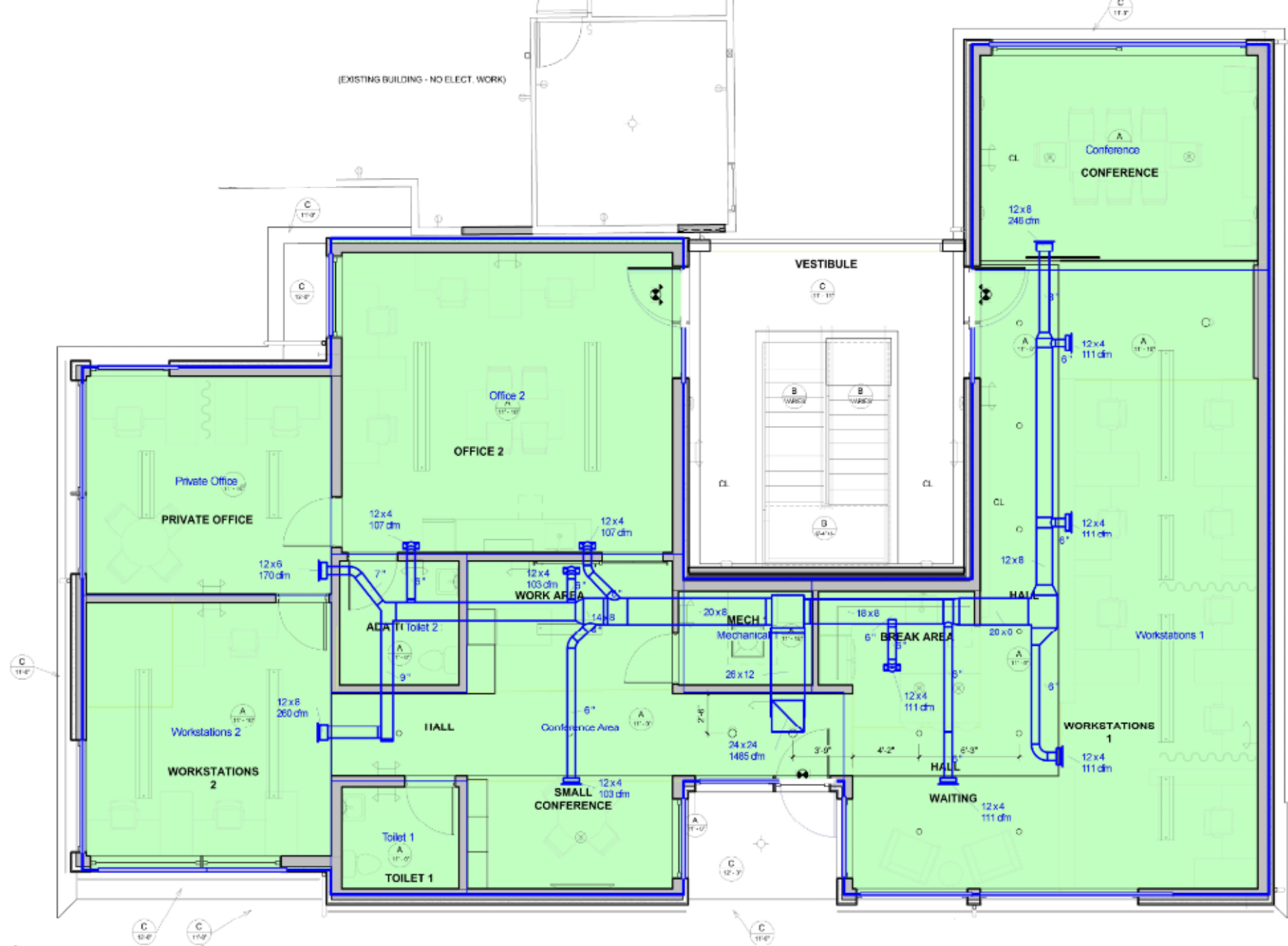
Sections



Aaron Barnett
Build with Balance, LLC



Wesley Van Rite, P.E.
Principal at Engineered Projects Consulting, LLC



The Energy Modeling and Certification.

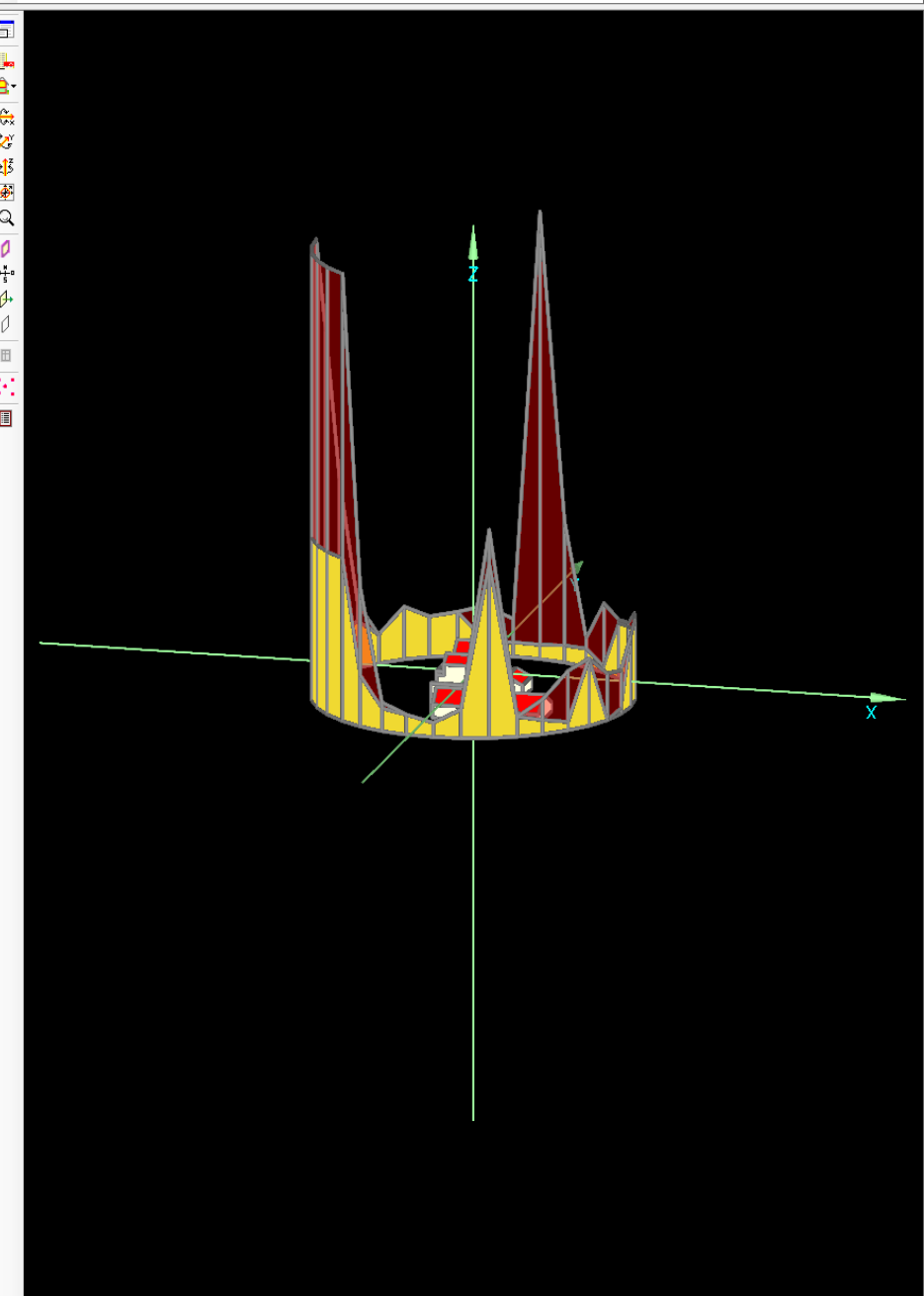


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Table 0.5.3.2.0 Mixed-Use Certification Matrix

Mixed-Use Certification Paths		Whole Building Certification		Partial Building Certification	
		A	B	C	D
Modeling & Certification	Separate energy models for residential & non-residential.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	100% of the building floor area is modeled / certified.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	≥ 50% of the building floor area must be modeled / certified.			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Unknown non-residential spaces may not be certified alone.		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
	Follows UF Protocol outlined in Phius Mixed-Use Approach.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Source Energy Allowance	Determined for building by applying a mix of residential and non-residential allowances to certified spaces.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Determined for building by applying a mix of residential and non-residential allowances to certified spaces.		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Space Conditioning Targets	Apply to the whole / certified portion of the building.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Apply to partial building and must be met in each energy model.		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>





BUILDING INFORMATION

Category:	Residential
Status:	Under construction
Building type:	New construction
Year of construction:	2024
Units:	6
Number of occupants:	12 (Design)
Occupant density:	351.6 ft²/Person



Boundary conditions

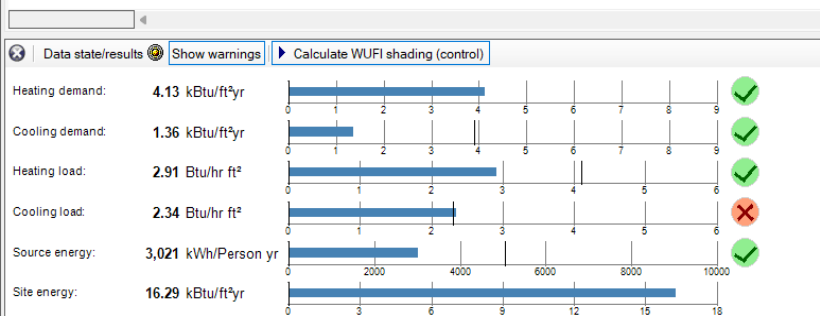
Climate:	OLYMPIA AIRPORT WA
Internal heat gains:	1 Btu/hr ft²
Interior temperature:	68 °F
Overheat temperature:	77 °F

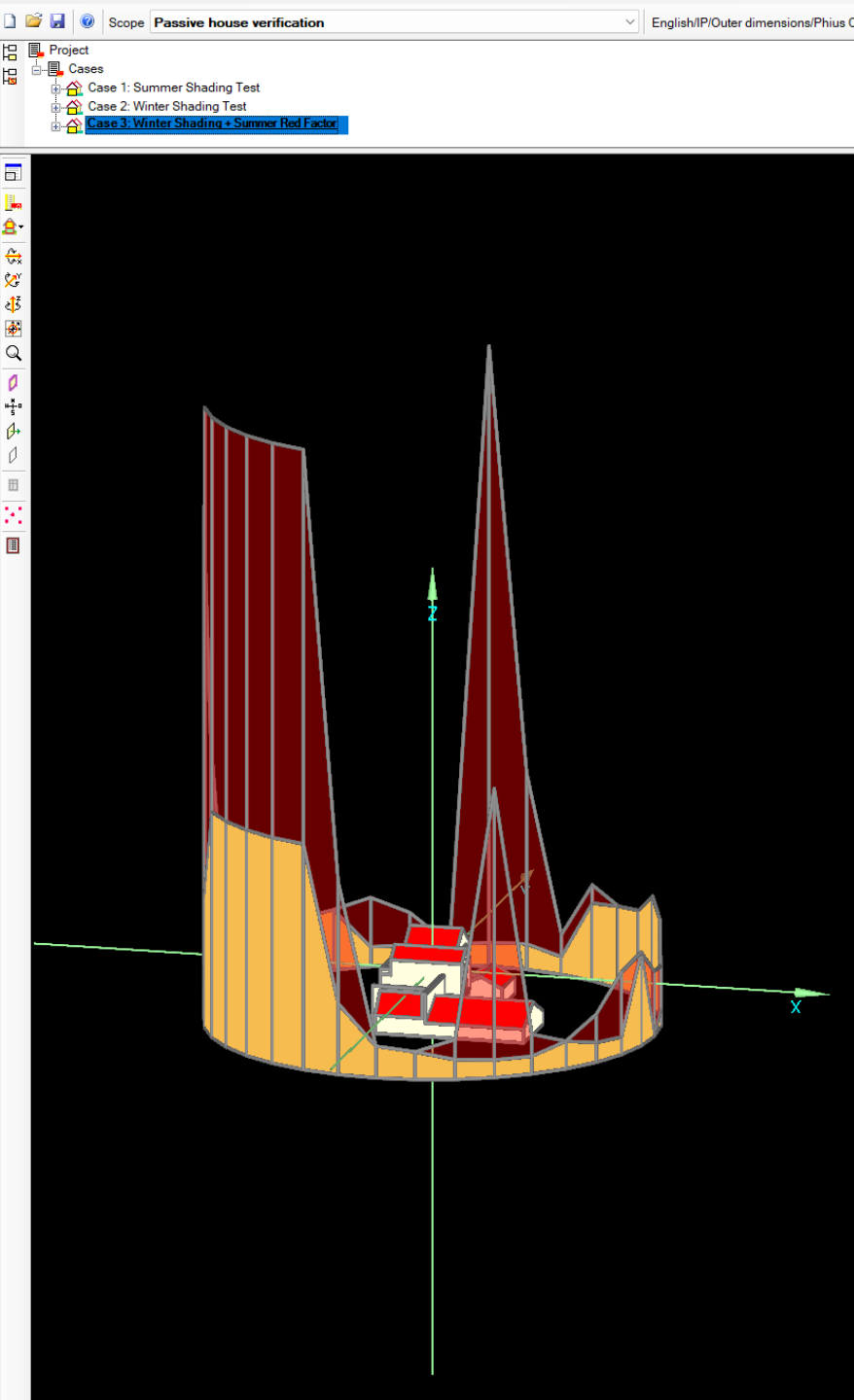
Building geometry

Enclosed volume:	53,618.9 ft³
Net-volume:	40,750.4 ft³
Total area envelope:	10,415.3 ft²
Area/Volume Ratio:	0.2 1/ft
Floor area:	4,219.3 ft²
Envelope area/iCFA:	2.469

PASSIVEHOUSE REQUIREMENTS

Certificate criteria: Phius CORE 2021





BUILDING INFORMATION

Category: **Non-residential**
Status: **In planning**
Building type: **New construction**
Year of construction: **2024**
Units: **1**
Number of occupants: **3 (Design)**
Occupant density: **824.9 ft²/Person**



Boundary conditions

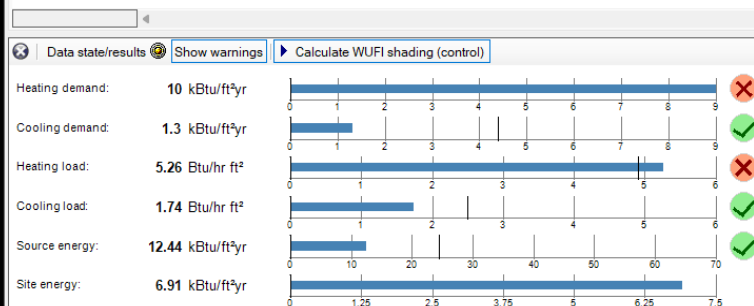
Climate: **OLYMPIA AIRPORT WA**
Internal heat gains: **1.6 Btu/hr ft²**
Interior temperature: **68 °F**
Overheat temperature: **77 °F**

Building geometry

Enclosed volume: **45,582 ft³**
Net-volume: **34,642.3 ft³**
Total area envelope: **6,552 ft²**
Area/Volume Ratio: **0.1 1/ft**
Floor area: **2,474.8 ft²**
Envelope area/iCFA: **2.647**

PASSIVEHOUSE REQUIREMENTS


Certificate criteria: **Phius CORE 2021**



Combined Targets		
Specific Total Heating Demand	9.2	kBtu/sf.yr
Specific Total Cooling Demand	4.1	kBtu/sf.yr
Specific Total Heating Load	4.4	Btu/hr.sf
Specific Total Cooling Load	2.4	Btu/hr.sf
Specific Total Source Energy Limit	39.9	kBtu/sf.yr

Combined Results		
Specific Total Heating Demand	6.4	kBtu/sf.yr
Specific Total Cooling Demand	1.3	kBtu/sf.yr
Specific Total Heating Load	3.8	Btu/hr.sf
Specific Total Cooling Load	2.1	Btu/hr.sf
Specific Total Source Energy	20.1	kBtu/sf.yr



 **Zola European Windows**
Aluminum Frame
Entry Door
Triple Glazing - Argon/Air Filled - Low E
ZWD-K-18-00505-00001
Production pos. no. 21/ Zola pos. no. 23

ENERGY PERFORMANCE RATINGS

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient
0.21	0.17

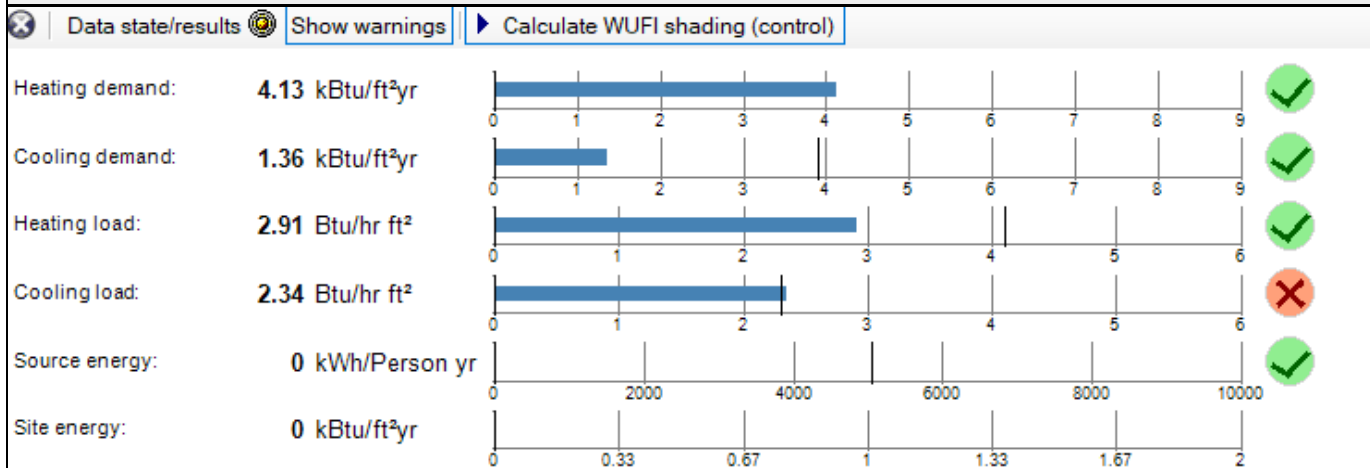
ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance	---
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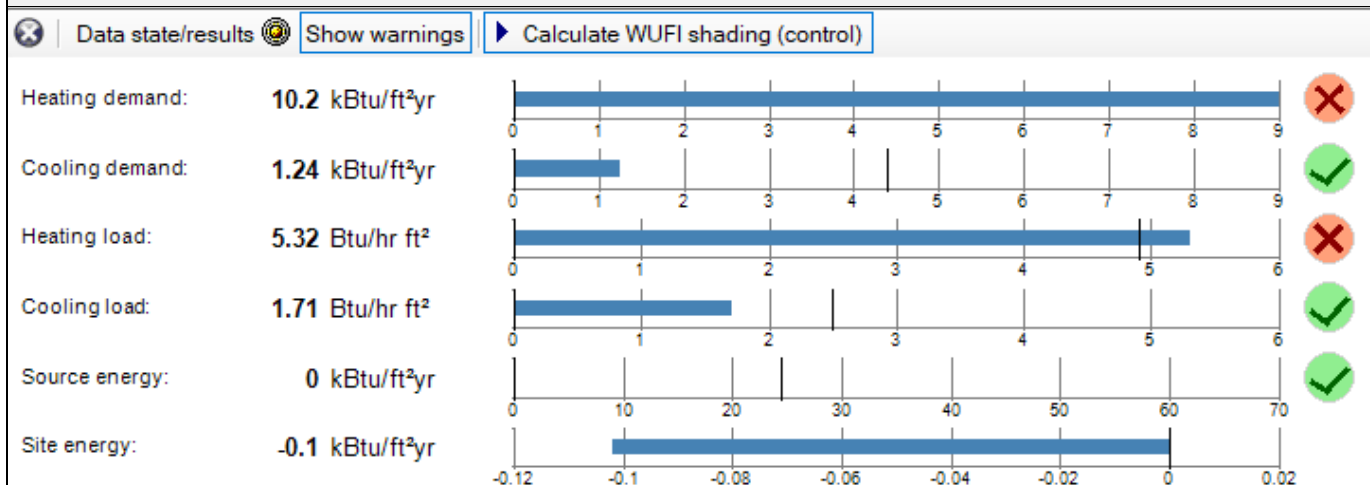
Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information.
www.nfrc.org



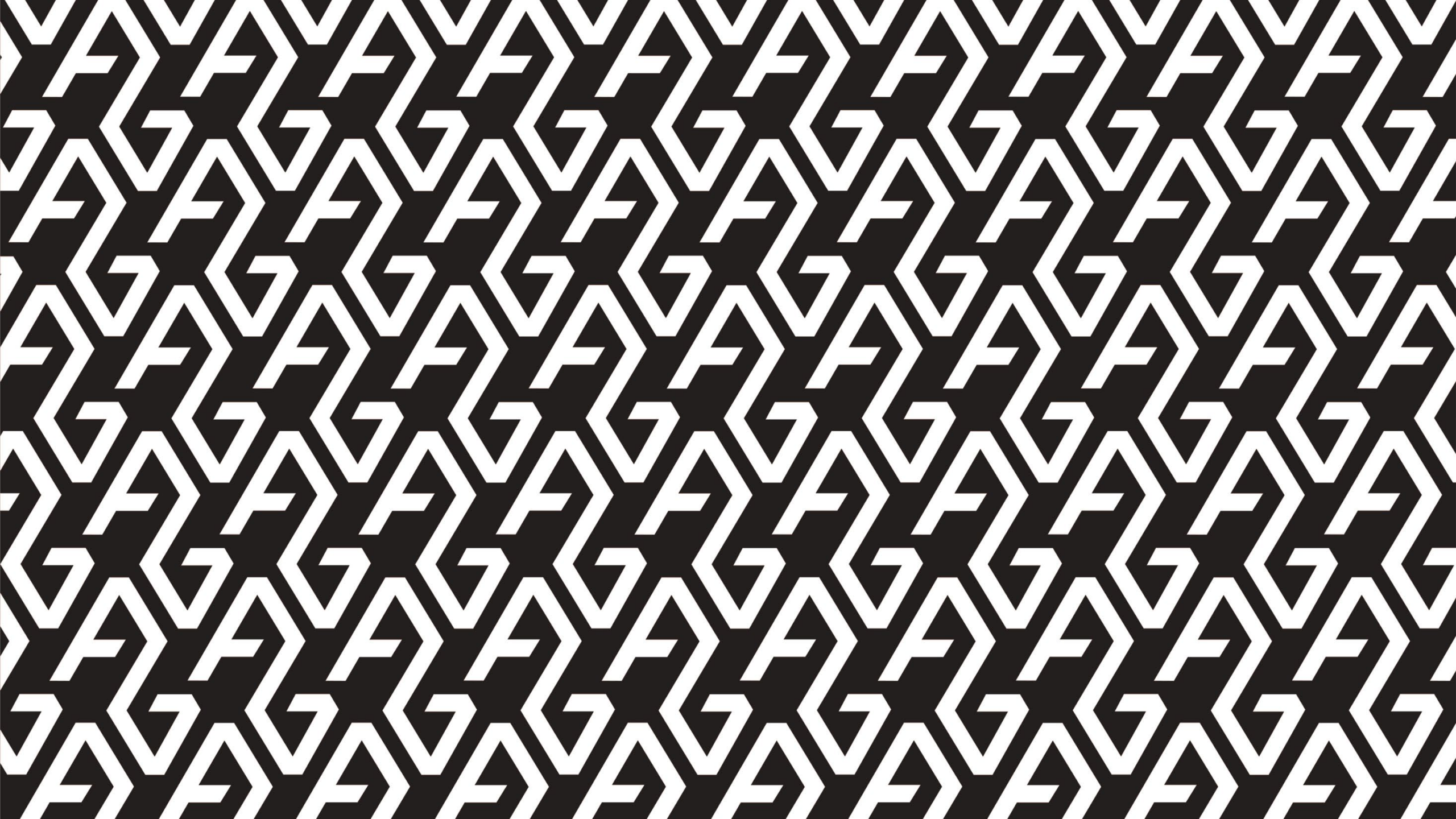
Required data			RESIDENTIAL
Photovoltaic / renewable energy [kWh/yr]		25600	
Utilization factor [-]		1	



Required data			COMMERCIAL
Photovoltaic / renewable energy [kWh/yr]		13800	
Utilization factor [-]		1	



35kW Needed
10kW Installing





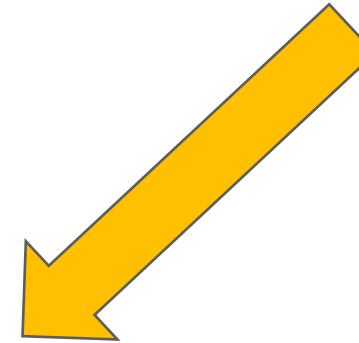
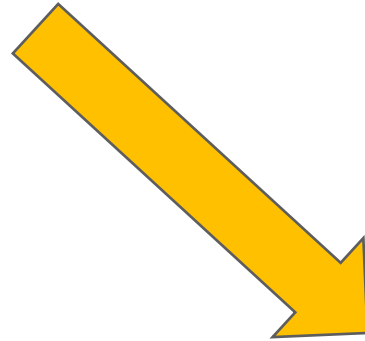
The Proforma And Financing.



30 Year Fixed Home Loan



Banking Strategy- If you are privileged to have bought a home before you understand a 30 year fixed mortgage!



Banking Strategy- Step 2

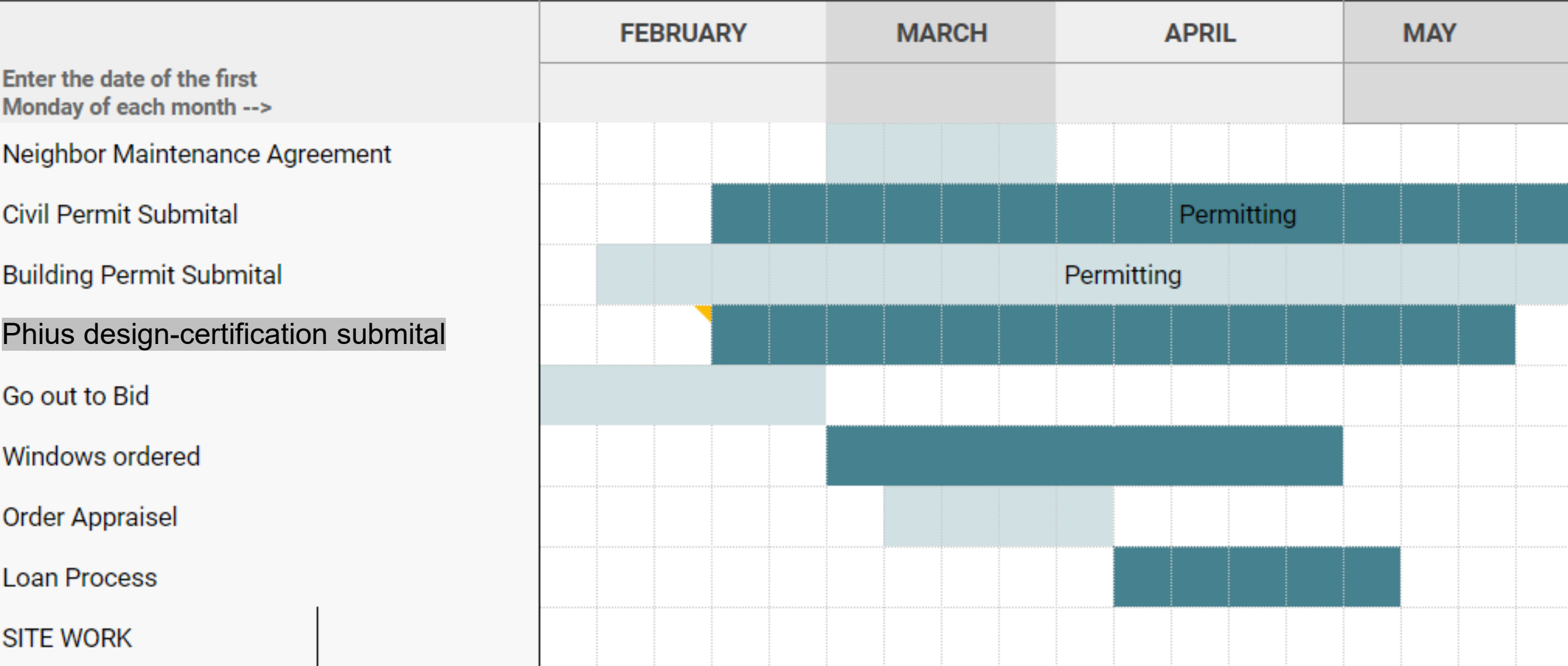


10 year loan with a 25 year
amortization, 5 year fixed 7% rate
commercial construction loan
(construction is prime+ interest only)



**I DON'T KNOW WHAT A FINANCIAL
STATEMENT IS**

**AND AT THIS POINT I'M TOO AFRAID TO
ASK**



The Permitting and Financing Timeline



THIRD FLOOR
1/8" = 1'-0"

Square Footage:

Office Square Footage

New Office	3,123 sf
Existing Office	980 sf
Office Hut	155 sf
Courtyard	500 sf
Rooftop Deck	463 sf

**Total Owner
Occupied Space 5,221 sf**

Apartment Square Footage

Apartment A	760 sf
Apartment B	797 sf
Apartment C	758 sf
Apartment D	727 sf
Apartment E	945 sf
Apartment F	971 sf

Total Apartment 4,958 sf

**Owner Occupied 51%
Tenant Occupied 49%**

Rent Calculation:

Leasable Office Space
3,730 sf x \$3 sf = **\$11,190**

Leasable Apartments	
Apartment A	760 sf x \$2.75 = \$2,080
Apartment B	797 sf x \$2.75 = \$2,192
Apartment C	758 sf x \$2.75 = \$2,085
Apartment D	727 sf x \$2.75 = \$1,999
Apartment E	945 sf x \$2.75 = \$2,599
Apartment F	971 sf x \$2.75 = \$2,670

Total Apartment Rents
4,958 sf x \$2.75 sf = **\$13,635**

**Total Rents for the building:
\$24,825**



SECOND FLOOR
1/8" = 1'-0"



FIRST FLOOR
1/8" = 1'-0"

**	Rookery Investments, Other **			
	Civil Engineering		\$85,000.00	paid
	Survey and Staking, Easment		\$7,100.00	paid
	Soil Testing		\$3,995.00	paid
	Landscape Architect		\$2,000.00	paid
	Structural Engineering	  	\$22,500.00	3/4 paid
	Interior Design Services		\$50,000.00	paid
	Architectural Services	    	\$200,000.00	paid
	Consutling		\$15,000.00	1/2 paid
	Easement legal		\$1,275.00	paid
	BEE Consulting		\$15,120.00	not paid/included
	Appraisal		\$4,700.00	paid
	PHIUS		\$4,550.00	paid
	Permitting Costs		\$128,048.34	paid
	TOTAL		\$524,168.34	

The Rookery

Projection Date: 04-10-24

PROJECT INFORMATION:

Current Equity in Subject Property	\$530,000
Current Debt on Subject Property	\$220,000
Current Value of Subject Property	\$750,000
Permitting, A&E, etc.	\$422,000.00
Construction Costs Total, including tax	\$2,425,861
Construction Contingency Funds	\$210,000.00
TOTAL PROJECT VALUE	\$3,807,861

Rookery Investments, Construction Costs *	81,264
Rookery Investments, Other **	\$422,000

Loan Amount	\$2,774,597
Loan to Value Ratio	72.9%
Loan Term, Years	25
Interest Rate	7.00%

ANNUAL GROSS INCOME

Base Rent Income ***	\$297,894
Vacancy, assuming 5% of Base Rent Income	-\$14,895
ADJUSTED GROSS INCOME	\$282,999

ANNUAL EXPENSES

Property tax	\$10,000
Insurance	\$5,000
Repairs and Maintenance	\$8,000
TOTAL OPERATING EXPENSES	\$23,000

NET OPERATING INCOME	\$259,999
DEBT SERVICE, PRINCIPAL & INTEREST	-\$235,323
ANNUAL CASH FLOW	\$24,676

Cash Flow Ratio: Net Operating Income / Debt Service	1.10
--	------

Capitalization Rate: Net Operating Income / Project Value	6.8%
---	------

\$1,350,000
Appraised Value

\$4,800,000
Total Appraised Value

Multi Family Tax
Exemption

How profitable will
depend on actual rents!

The Rookery

Projection Date 9.15.2025

PROJECT INFORMATION:		
Current Equity in Subject property		\$530,000
Current debt on subject property		\$216,009
Current value of subject property		\$746,009
Permitting, A&E, Etc.		\$396,120
Construction Costs Total, Including Tax		\$2,422,255
Construction Contingency Funds		\$214,000
<hr/>		
TOTAL PROJECT VALUE (plus overrides)		\$4,036,384
Rookery Investments, Construction Costs *		\$110,000
Rookery Investments, Other (overrides total \$258K)		\$654,120
Loan Amount		\$2,771,000
Loan to Value Ratio		68.7%
Loan Term, Years		25
Interest Rate		6.32%
<hr/>		
ANNUAL GROSS INCOME		
Base Rent Income ***		\$285,456
Vacancy, assuming 5% of Base Rent Income		\$14,273
ADJUSTED GROSS INCOME		\$299,729
<hr/>		
ANNUAL EXPENSES		
Property Tax		\$10,000
Insurance		\$5,000
Repairs & Maintenance & Utilities		\$8,500
TOTAL OPERATING EXPENSES		\$23,500
NET OPERATING INCOME		\$276,229
DEBT SERVICE, PRINCIPAL & INTEREST		\$220,716
ANNUAL CASH FLOW		\$55,513
Cash Flow Ratio: Net Operating Income / Debt Service		1.25
Capitilization Rate: Net Operating Income / Project Value		6.8%

Builder's Cost Breakdown

DATE:	3.08.24
BORROWER: The Rookery Olympia, LLC	
CONTRACTOR:	
PROPERTY ADDRESS:	6504 Capitol Blvd SE, Tumwater, WA 98501



ITEM	COST BREAKDOWN	REMARKS
1 Plans/Arch/Surveys & Engineering		
2 Road bore	\$ 11,660.00	
3 Temp. Power/Excavation	\$ 187,904.00	
0 Footings & Foundation/Concrete	\$ 65,725.00	
3 Framing Material/ Insulation	\$ 640,000.00	
6 gypcrete float	\$ 20,000.00	
7 Interior Framing Labor and Materials	\$ 40,000.00	
8 Roofing	\$ 57,200.00	
9 Windows/Sliders/	\$ 17,000.00	
10 Plumbing (rough)	\$ 139,745.00	
11 Electrical (rough)	\$ 209,360.00	
12 Sprinkler sys.	\$ 21,450.00	
13 Masonry Veneer & Chimney	\$ -	
14 Prefab Fireplace	\$ -	
15 WINDOW SET LABOR	\$ 25,000.00	
16 Siding & Soffits/MATERIAL & LABOR	\$ 192,396.00	
17 Heating/Air Conditioning	\$ 102,007.41	
18 Rigid Insulation (under slab, roof)/ Blown-in (1st	\$ 31,200.00	
19 Drywall/Tape/Texture	\$ 50,000.00	
20 Sewer Hook-up	\$ -	
21 Water Hook-up	\$ -	
22 STEEL / STAIRS, POSTS	\$ 45,000.00	
23 Downspouts & Gutters	\$ 5,000.00	
24 Exterior Painting	\$ 20,000.00	
25 Interior Painting	\$ 20,000.00	
26 Wallpaper/Paneling/Trim Stairs	\$ -	
27 Millwork	\$ 21,458.79	
28 Cabinets/Hardware	\$ 64,000.00	
29 Countertops - Quartz	\$ 10,890.00	
30 Plumbing Fixtures		
31 Linoleum, Polished Concrete (1st Floor)	\$ 67,262.11	
32 Tile	\$ 13,200.00	
33 Exterior Doors	\$ 7,866.00	
34 Electrical Fixtures	\$ -	

35	door hardware	\$ 5,584.10
36	Hardwood Floors	\$ -
37	Interior Doors	\$ 15,240.00
38	Finish Labor	\$ -
39	Finish Hardware	\$ -
40	Appliances	\$ 44,000.00
41	Solar	\$ -
42	Patios/ Paver	\$ 19,250.00
43	Cleanup, security fencing	\$ 6,000.00
44	Landscaping/fencing	\$ 40,000.00
45	Flashing and Sheetmetal	\$ -
46	Demolition	\$ -
47	Other:	\$ -
48	Other:	\$ -
49	Other:	\$ -
50	Contingency Fund	
51	Subtotal no contingency	
52	SUB-TOTAL HARDCOSTS	\$ 2,215,398.41
53	Contingency Fund	\$ 210,000.00
54	BUILDER PROFIT & OVERHEAD	\$ -
55	SALES TAX	\$ 210,462.85
56	SUB-TOTAL CONSTRUCTION COSTS	\$ 2,635,861.26
57		
58	LAND VALUE	720,000.00
1		2,425,861.26
60		-
61		-
62	TOTAL	5,781,722.52

Signed

Borrower's	Date
Contractor's	Date

Washington Business Bank is an "Equal Housing Lender"

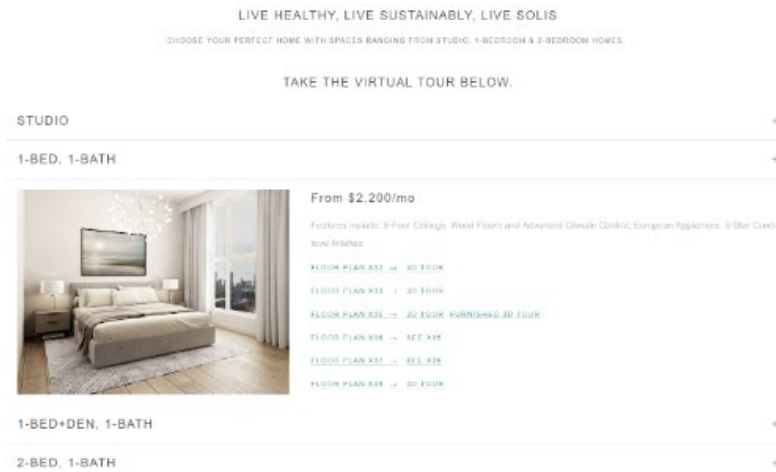
Example Projects:

Solis, Seattle Washington

www.livesolis.com



The largest one bedroom unit is approximately 100-300 sf smaller than our units. Rents for \$2,200/Mo plus utilities

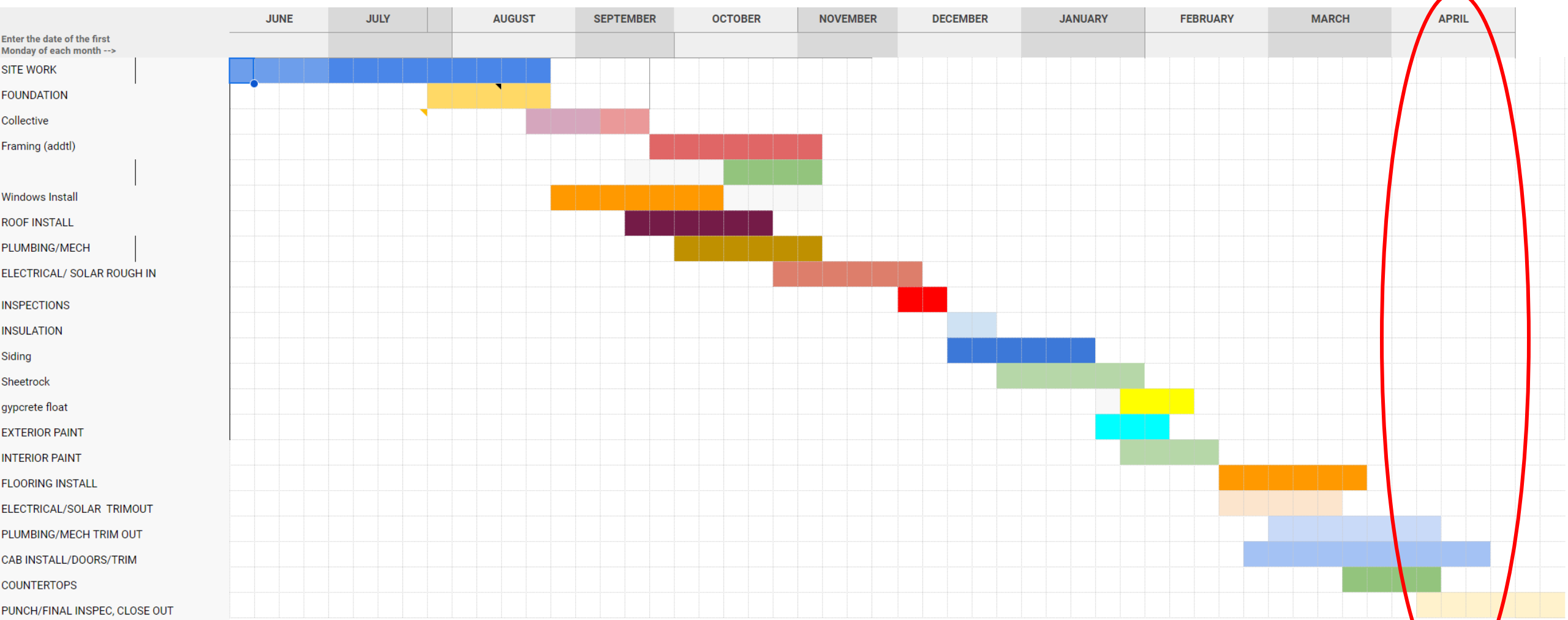


Unique, Upgraded Features will include:

- Triple Paned, thermally broken tilt turn aluminum windows from Europe
- Prefabricated, super insulated walls, floors and roofs
- Advanced climate control and cooling
- Purified air system, HRV
- Quiet interiors due to airtight construction
- Industrial height ceilings
- Extreme temperature comfort
- European and local custom FSC Cabinets
- Luxury appliances
- Solid surface countertops
- Designer wall paper and lighting
- Tile showers
- Solid designer marmoleum floors & polished concrete floors
- Large common and private penthouse rooftop decks and planted courtyard



The Construction.







Baby's first tree felling..







Construction





Rane Wardwell
CFO/ Co-Owner/ Head of Production



High performance building
+ Off-site construction

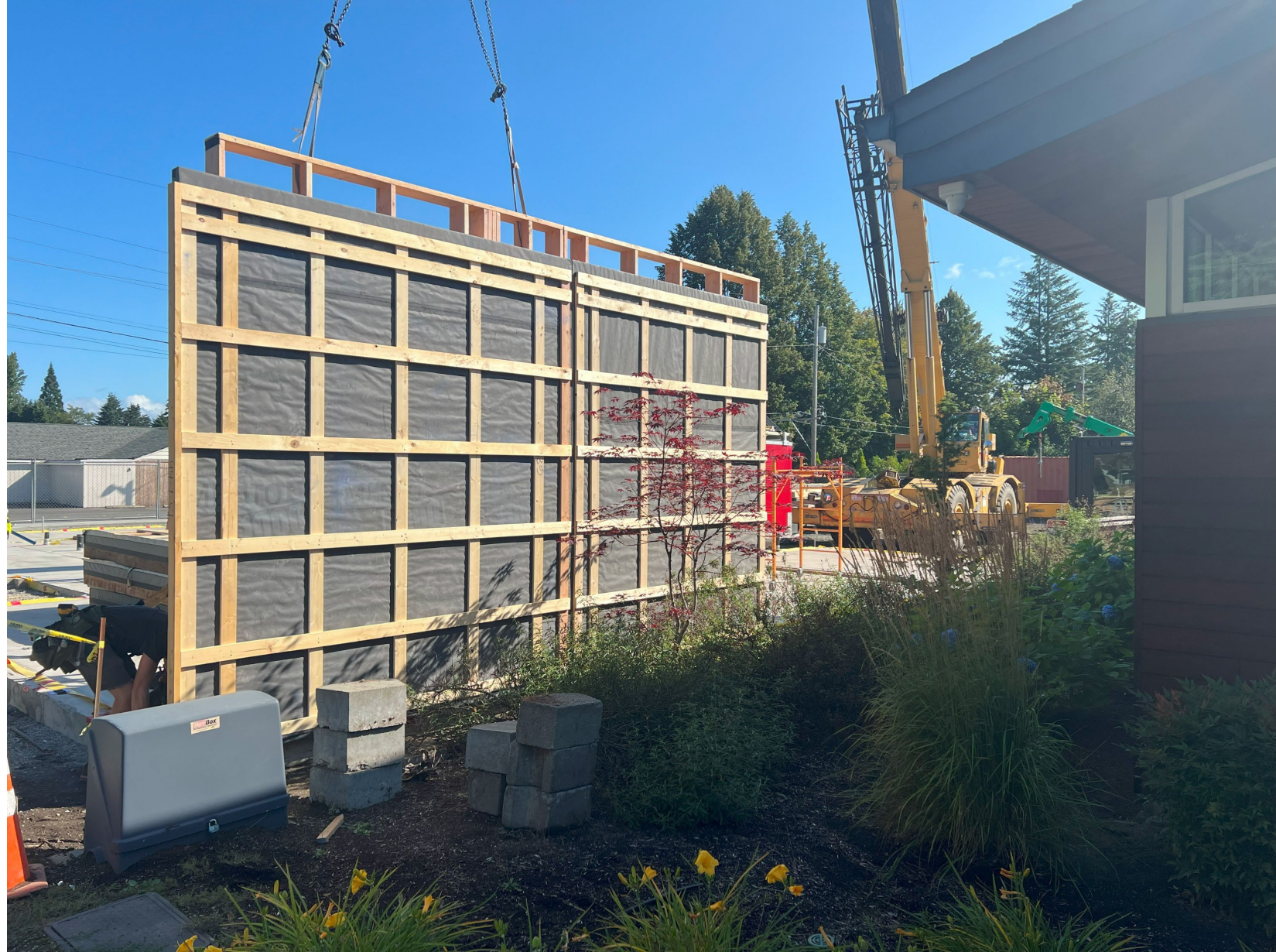
Jan Pratschke
CEO/ Co-Owner/ Head of Design



Collective Carpentry is an Canadian 8 person PH prefab company, offering full services and Installation, located in Southeast British Columbia.

















COLLECTIVE

CARPENTRY

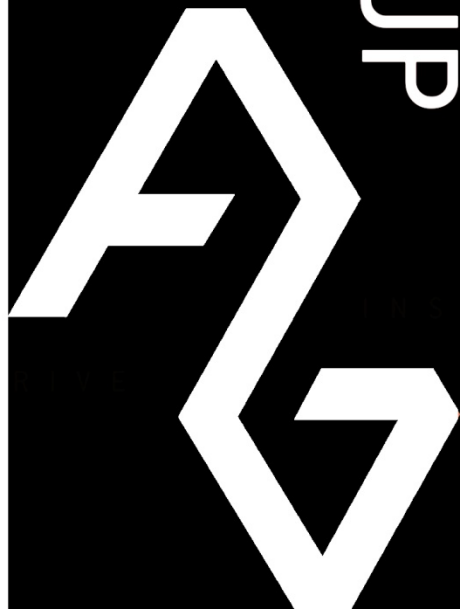
High performance building
+ Off-site construction











Lessons Learned.



Lessons Learned: Time is money, so if you can't make things cheaper can you make them faster? (this in fact makes them cheaper)



This is how long it takes to get a project planned and executed...escalation is the killer of dreams.

Lessons Learned:

- Labor & Material Cost escalating faster than the process can proceed, bids are only good 30-90 days.
- Operating our business on site was disruptive, hard on moral for employees and us. It was a like second full time jobs for Roussa and I, so we operated our firm with limited bandwidth, which affected us and employees.
- We used up our 10% contingency and spent another 10% we hadn't financed. 20% contingency in the future.
- We did not, because we could not devote the time and care to the design and drawings we would have for a client, we paid for those oversights and we had a lot to figure out, that combined with the mixed use code and Phius requirements were murky and tricky.
- Self performing the work while acting as general contractor created critical path challenges and scopes of work all needing to be performed at once, we suffered schedule slip and cost overruns. Time would have been money.
- Personal cost to families and quality of life in general to pull it off, some dads almost died, bonding, but also potential death.



Finished Project.



ARTISANS GROUP
ARCHITECTURE + PLANNING

TUMWA
EYE CL









The Good Of It All. Probably.



ARTISANS GROUP

What we hope to get out of this building:

- A great space to work, and cashflow improved by apartment rentals.
- Longevity and a low maintenance asset, equity over time vs. immediate cashflow, at the intersection of the rising cost of money, materials and labor what is the holding potential of a building that lasts? The new front of asset management will definitely include the cost of repairs and operation, ever becoming out of reach...
- Case study to show how you can use passive house strategies and pre-fab in multifamily and larger scale development.
- Allow clients to experience a passive house directly, maybe even rent a space to try it.
- Continue to prove our firm's ability to do large scale projects, with a deep understanding of the pressures of development.
- Apply our hard won and at times expensive lessons to higher profit future developments that are still in keeping with our firm's passion and focus.

