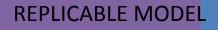
# CREENLEAF COMMUNITY

An Energy Efficient Residential Community

> PRESENTERS NAMRATA HEGDE JORGE RUEDA

## GOALS



MARKET

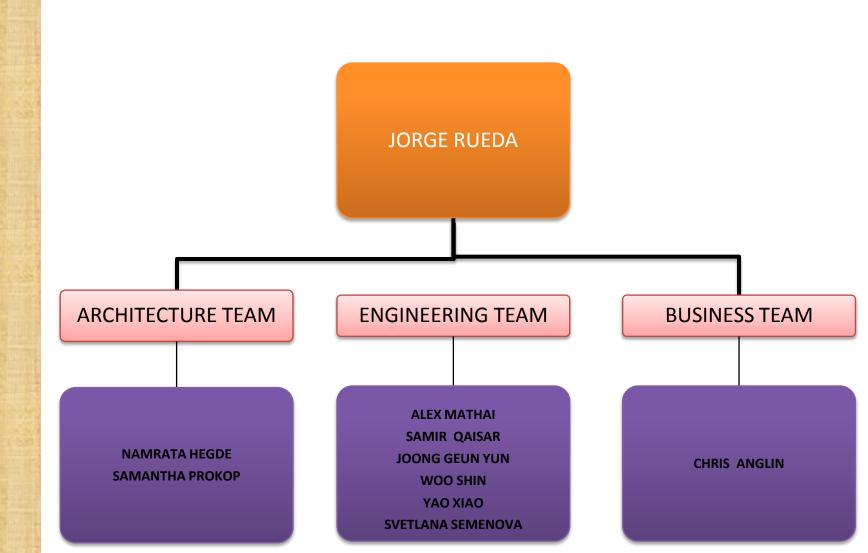
GREENLEAF COMMUNITY MODEL

CONSTRUCTION WITHIN RESONABLE PRICE

ENERGY EFFICIENCY

G R E E N L Е A F C O Μ Μ U Ν Ι т Y

### ORGANIZATION



## MARKET

Evanston Demographics		
Population	74,239	
Number of Households	29,651	
Avg Household Size	2.27	
Avg Family Size	3.03	
Households: Family	15,963	
Households: Non-Family	13,688	
Households: With Children	8,203	
Median Age	32.50	
Median Household Income	\$56,335	
Average Household Income	\$29,675	

## **SCOPE OF PROJECT**

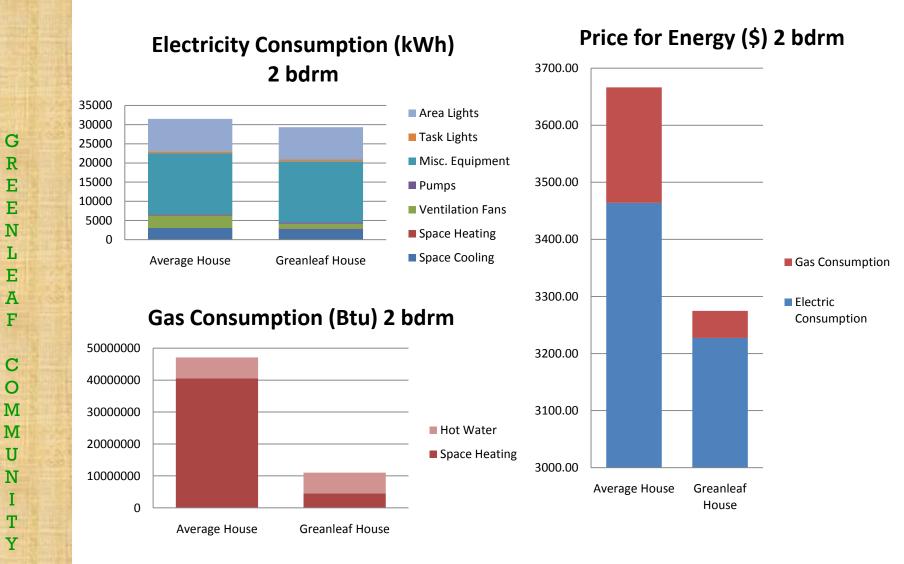
### **Scope of Development**

Size of the Lot	53,482 s.f.
Permitable Lot Coverage	80%
Permitable Square Footage	42,786 s.f.
No. of Allowable Units	10
Height Restriction	3 stories
Required Parking	2 spaces per unit

### **Proposed Development**

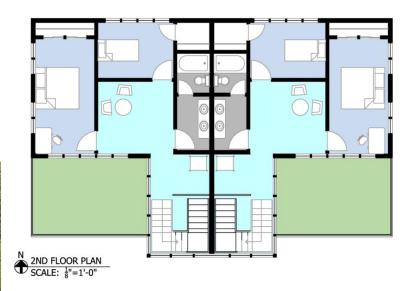
No. of Residential Units	7
Total Residential Square Foot.	24,792 s.f.
Average Residential Unit Size	3,542 s.f.
Height	3
No. of Parking Spaces	14 min.

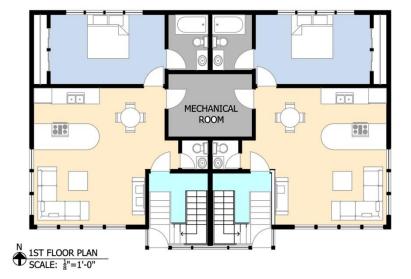


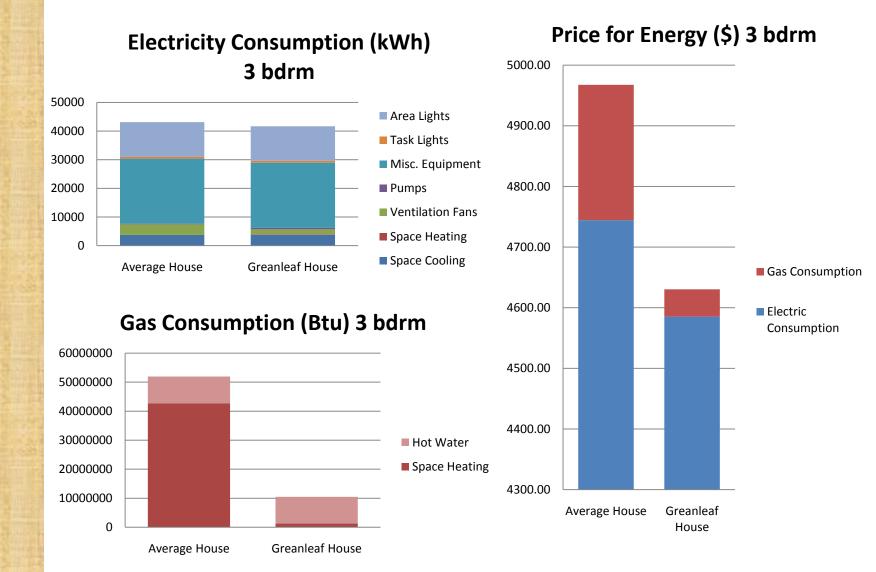












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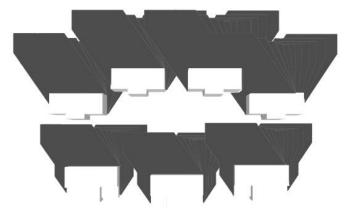
## COMMUNITY



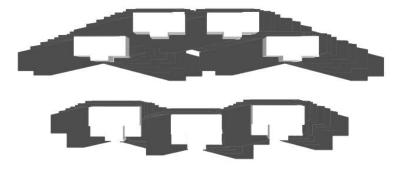
G R E E N L E A F C 0 Μ Μ U Ν I T Y

SITE PLAN

### COMMUNITY



### WINTER SOLAR ENVELOPE



#### SUMMER SOLAR ENVELOPE

## COMMUNITY

### CHILDREN'S PARK



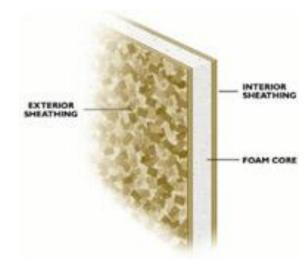


## VIEW FROM THE QUIET GARDEN

## **INNOVATIVE DESIGN**

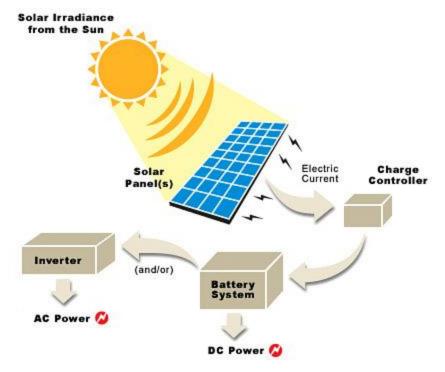
### **Structural Insulated Panels**

Improves energy efficiencySafe and strongReduces labor costs



### **Solar Panels**

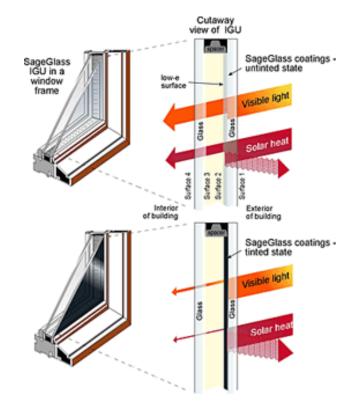
- •Provides half of lighting power
- •Clean and environmentally sound
- Short payback period



## **INNOVATIVE DESIGN**

### Sage<sup>™</sup> Glass

Reduces solar heat gain and UV transmissionNo need for shades or blinds



### **Geothermal Heat Pump**

- •Cost effective
- •Durable
- Low maintenance
- •Quiet
- Short payback period



## FINANCIAL

	2 Bedroom	3 Bedroom
Sell Price	\$ 212,037	\$ 322,536
Constr. Cost	\$ 196,919	\$ 206,749
Profit	+ 15,118	+ 115,787

Project Profit	486,387
Capital	1,125,294
Rate of Return	43%
Annualized Return	26%

## HOW THIS HOUSE IS AIMED AT CHANGING YOUR LIFESTYLE

- •Sharing
- •Space
- •Community
- •Safety
- •Schools, transportation, amenities
- •Cost/Energy savings



## **THANK YOU**

## **INNOVATIVE DESIGN**

## Advanced Energy Saving Systems

	SageGlass	PV panels	Green roof
Energy saving (kWh/yr)	1350	17810	1136
money saving (\$/yr)	\$150	\$1,600	\$125
Additional cost (\$)	\$2,800	\$6,600	\$2,400
Pay back period (yr)	19	5	19
Energy saving (kWh/yr)	1160	12720	1518
money saving (\$/yr)	\$130	\$2,350	\$170
Additional cost (\$)	\$7,000	\$9,400	\$3,200
Pay back period (yr)	54	5	18
	(kWh/yr) money saving (\$/yr) Additional cost (\$) Pay back period (yr) Energy saving (kWh/yr) money saving (\$/yr) Additional cost (\$) Pay back period	Energy saving (kWh/yr)1350money saving (\$/yr)\$150Additional cost (\$)\$2,800Pay back period (yr)19Energy saving (kWh/yr)1160money saving (\$/yr)\$130Additional cost (\$)\$7,000Pay back period (\$)\$54	Energy saving (kWh/yr)135017810money saving (\$/yr)\$150\$1,600Additional cost (\$)\$2,800\$6,600Pay back period (yr)195Energy saving (kWh/yr)116012720money saving (\$/yr)\$130\$2,350Additional cost (\$)\$7,000\$9,400Pay back period545

## FINANCIAL

### Expenses

1	Lot	1,000,000
2	Site Preparation	184,427
3	Construction	1,618,552
4	Lender Inspections	15,000
5	Architecture	62,602
6	Legal/Accounting	10,559
7	Financing/Appraisal	2,500
8	Title Insurance	15,000
9	Insurance	7,040
10	R.E. Taxes/Fees	13,300
11	Marketing	170,000
12	Survey/Testing	5,550
13	Contingency	5,000
14	Developer Fees	49,277
15	Interest	56,317
	Total	3,215,125