PHASE 3: THE BATTERY 2017: reflecting the sky

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PHASE 3: THE BATTERY 2017

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PHASE 3: THE BATTERY 2017: Thermal Image

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ACTUAL RENTS ACHEIVED

PROJECT REVENUE					
CAPITAL FLATS II					
	Residential	1 BR			
		2 BR			
		Inclu			
		Out	Proposed	Proposed	Proposed
		W	29-Jun	29-Jun	29-Jun
	BEDS	UNIT #	$/SF	PRICING	YEAR
	1	101	$2.93	$1,300.00	15,600.00
	2	102	$2.74	$1,800.00	21,600.00
	1	103	$2.90	$1,300.00	15,600.00
	1	201	$2.89	$1,600.00	19,200.00
	1	202	$3.14	$1,400.00	16,800.00
	1	203	$3.21	$1,400.00	16,800.00
	1	204	$2.75	$1,500.00	18,000.00
	1	205	$2.73	$1,500.00	18,000.00
	1	206	$2.69	$1,400.00	16,800.00
	1	207	$2.69	$1,400.00	16,800.00
	1	208	$2.52	$1,600.00	19,200.00
	1	301	$2.89	$1,600.00	19,200.00
	2	302	$2.76	$2,500.00	30,000.00
	1	303	$2.75	$1,500.00	18,000.00
	1	304	$2.73	$1,500.00	18,000.00
	1	305	$2.69	$1,400.00	16,800.00
	1	306	$2.69	$1,400.00	16,800.00
	1	307	$2.52	$1,600.00	19,200.00
	1	401	$2.89	$1,600.00	19,200.00
	2	402	$2.76	$2,500.00	30,000.00
	1	403	$2.75	$1,500.00	18,000.00
	1	404	$2.73	$1,500.00	18,000.00
	1	405	$2.69	$1,400.00	16,800.00
	1	406	$2.69	$1,400.00	16,800.00
	1	407	$2.52	$1,600.00	19,200.00
Parking units @ $150/m. per spa	13	$150	$2.77	$39,200.00	$493,800.00
Gross Revenue					$493,800.00
Less Vacancy	8.0%				-$32,092
Gross Rent					$461,708.40
Taxes		(during 10			
Insurance					
Maintenance Reserve		3%			
Snow Removal					
Grounds & Landscaping					
Trash Collection					
Common Area Utilities					
Accounting / Taxes					
Management Fee		3%			
Total Expenses					$55,552
Operating Ratio	14.16%				
Cash Flow Before Debt Service					$406,155.94
Permanent Debt Service					
Beginning Loan Balance			$3,664,986		
Loan Term (Years)			25		
Interest Rate			4.25%		
Payments per Year			12		
Annual Debt Service Payment			$238,256		$238,256
Net Cash Flow					$167,900.43
Project Value at Stabilization					$8,123,118.72
Debt Service Coverage Ratio	1.41				1.70
LTV Stabilized	50.90%				43.56%

Average Rent : $2.77sf

AS-BUILT EXPENSES

CAPITAL 2 COSTS	15-Jun
DESCRIPTION OF WORK	ACTUAL VALUE
Concrete/Site/Excavation	$172,000.00
Windows/Doors/Panelized	$336,778.76
Rough Carpentry	$195,032.69
Finish Carpentry	$37,296.00
Cabinetry/Appliances/Fixtures	$284,284.77
Insulation	$39,500.00
Roofing Greenroof	$119,400.00
Exterior Cladding	$221,619.51
Drywall, Metal Studs	$118,630.95
Interior Doors/Frames/Hardware	$43,142.86
Flooring	$151,625.40
Paint	$48,000.00
Specialties: Steel	$55,500.00
Fire Sprinklers	$44,000.00
Plumbing	$130,000.00
HVAC: Air-sourced	$0.00
HVAC Geothermal, VRF	*$312,208.00*
Electric	$158,379.00
General Reqs	$234,860.00
OH& Profit	$176,227.23
Soft Costs	$314,560.77
Contingencies	$221,940.50
SOLAR: structure, panels, racking	*$250,000.00*
TOTAL	*$3,664,986.44*

Total Sf: 17910 sf
COSTS: Hard $169/sf

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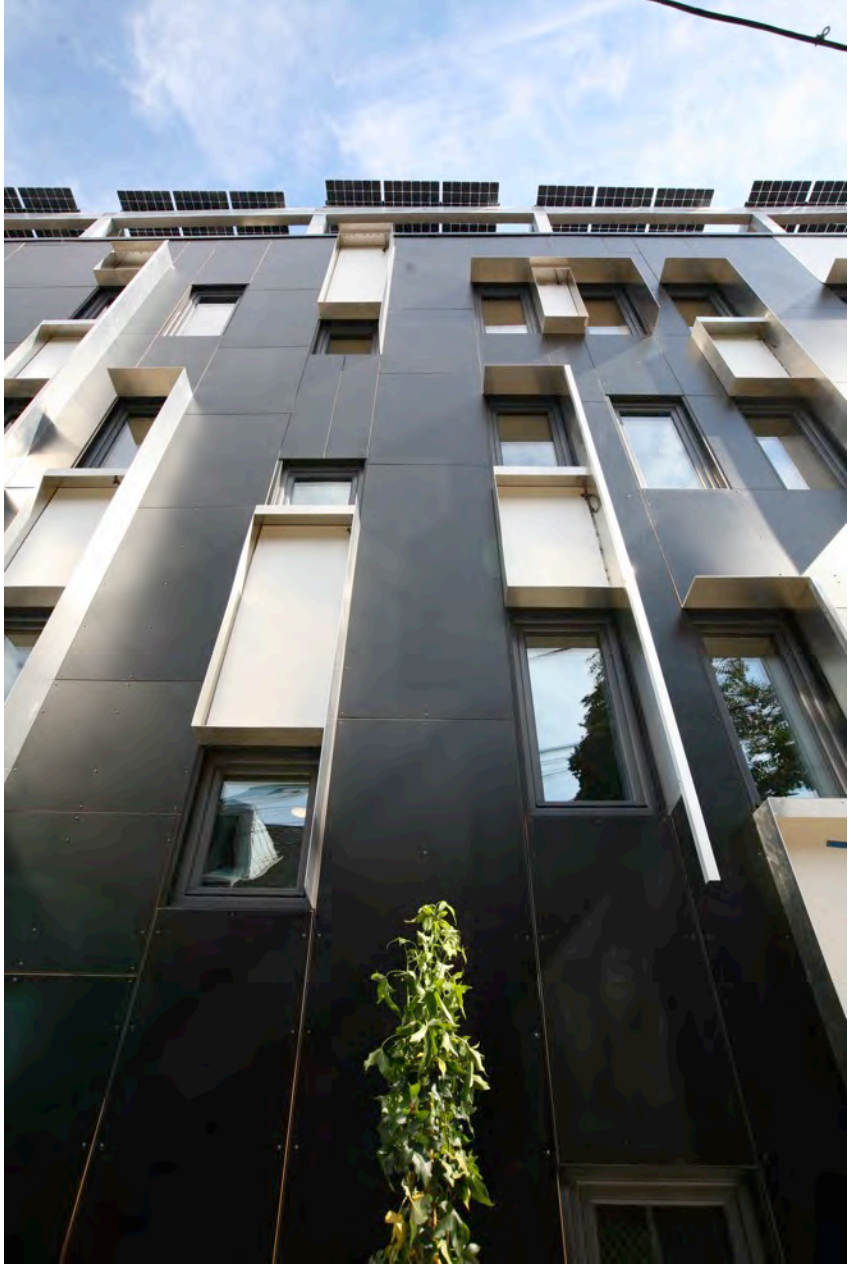

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Passive House verification

Passive House Institute US

Building:	Capital Flats II		
Street Address:	152-158 W Laurel Street / 935-937 N Hancock Street		
City, State, Zip:	Philadelphia, PA		
Country:	USA		
Building type:	apartment building		
Climate:	PHILA INT AP PA	Altitude of building site (feet above sea level):	17
Home owner / Client:			
Street Address:			
City, State, Zip:			
Architecture:	Onion Flats | Architecture		
Street Address:	111 W Norris Street		
City, State, Zip:	Philadelphia, PA 19122		
Mechanical system:			
Street Address:			
City, State, Zip:			

Year of construction:	2016		Interior temperature winter:	68.0	°F	Enclosed volume V_e ft³:	128293
No. of dwelling units:	25		Interior temperature summer:	77.0	°F	Mechanical cooling:	x
No. of occupants:	53.0		Internal heat sources winter:	1.40	BTU/h.ft²		
Spec. capacity:	11	BTU/F per ft² TFA	Ditto summer:	1.72	BTU/h.ft²		

Specific building demands with reference to the treated floor area

						Requirements		Fulfilled?*
	Treated floor area	16782	ft²					
Space heating	Heating demand	2.35	kBTU/(ft²yr)	52%	of	4.50	kBTU/(ft²yr)	yes
	Heating load	2.97	BTU/(hr.ft²)	71%	of	4.20	BTU/(hr.ft²)	yes
Space cooling	Overall specif. space cooling demand	6.11	kBTU/(ft²yr)	98%	of	6.26	kBTU/(ft²yr)	yes
	Cooling load	2.75	BTU/(hr.ft²)	59%	of	4.70	BTU/(hr.ft²)	yes
	Frequency of overheating (> 77 °F)		%			-		-
Primary energy	Heating, cooling, auxiliary electricity, dehumidification, DHW, lighting, electrical appliances	45.2	kBTU/(ft²yr)	68%	of	66.8	kBTU/(ft²yr)	yes
	DHW, space heating and auxiliary electricity	24.6	kBTU/(ft²yr)			-		-
	Specific primary energy reduction through solar electricity		kBTU/(ft²yr)			-		-
Airtightness	Pressurization test result n_{50}	0.53	1/h			0.53	1/h	yes

* empty field: data missing; '-': no requirement

Passive House?	yes

PHIUS+ 2015 Multi-Family Calculator	
*Results in green	
$iCFA_{TOTAL}$ (ft²)	16,782

PV Utilization	
Site electricity (kWh/yr)	84085
Output from PV Watts (kWh/yr)	98554
http://pvwatts.nrel.gov	
Annual PV Output/Annual Electricity Demand	1.17
Utilization fraction from utilization curve	0.334
Primary Energy offset by PV (kBTU/ft²yr)	21.15

Primary Energy 45 kBTU/sf/yr

Site Energy: 84,085 kWh/yr

PHASE 3: THE BATTERY 2017

Passive House Institute US

ONION FLATS

Passive House verification

PHIUS
Passive House Institute US

Building:	Capital Flats II
Street Address:	152-158 W Laurel Street / 935-937 N Hancock Street
City, State, Zip:	Philadelphia, PA
Country:	USA
Building type:	apartment building
Climate:	PHILA INT AP PA — Altitude of building site (feet above sea level): 17
Home owner / Client:	
Street Address:	
City, State, Zip:	
Architecture:	Onion Flats | Architecture
Street Address:	111 W Norris Street
City, State, Zip:	Philadelphia, PA 19122
Mechanical system:	
Street Address:	
City, State, Zip:	

Year of construction:	2016	Interior temperature winter:	68.0 °F	Enclosed volume V_e ft³:	128293
No. of dwelling units:	25	Interior temperature summer:	77.0 °F	Mechanical cooling:	x
No. of occupants:	53.0	Internal heat sources winter:	1.40 BTU/h.ft²		
Spec. capacity:	11 BTU/F per ft² TFA	Ditto summer:	1.72 BTU/h.ft²		

Specific building demands with reference to the treated floor area

Treated floor area: 16782 ft²

				Requirements	Fulfilled?*
Space heating	Heating demand	2.35	kBTU/(ft²yr)	52% of 4.50 kBTU/(ft²yr)	yes
	Heating load	2.97	BTU/(hr.ft²)	71% of 4.20 BTU/(hr.ft²)	yes
Space cooling	Overall specif. space cooling demand	6.11	kBTU/(ft²yr)	98% of 6.26 kBTU/(ft²yr)	yes
	Cooling load	2.75	BTU/(hr.ft²)	59% of 4.70 BTU/(hr.ft²)	yes
	Frequency of overheating (> 77 °F)		%	-	-
Primary energy	Heating, cooling, auxiliary electricity, dehumidification, DHW, lighting, electrical appliances	45.2	kBTU/(ft²yr)	68% of 66.8 kBTU/(ft²yr)	yes
	DHW, space heating and auxiliary electricity	24.6	kBTU/(ft²yr)	-	-
	Specific primary energy reduction through solar electricity		kBTU/(ft²yr)	-	-
Airtightness	Pressurization test result n_{50}	0.53	1/h	0.53 1/h	yes

* empty field: data missing; '-': no requirement

Passive House?	yes

PHASE 3: THE BATTERY 2017

210 mods x 370 watts = 77 kW system

PHIUS+ 2015 Multi-Family Calculator	
*Results in green	
$iCFA_{TOTAL}$ (ft²)	16,782

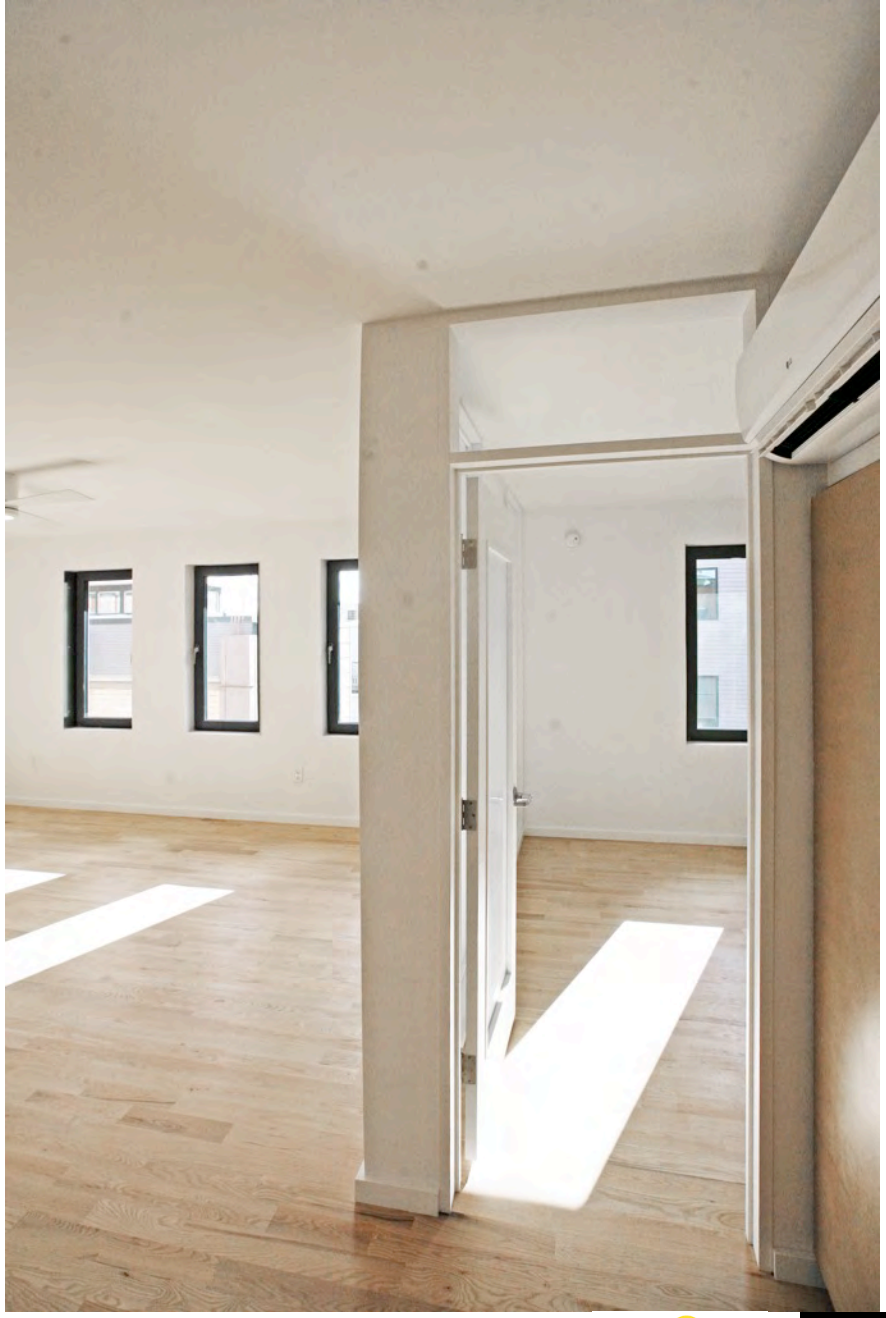
PV Utilization	
Site electricity (kWh/yr)	84085
Output from PV Watts (kWh/yr)	98554
http://pvwatts.nrel.gov	
Annual PV Output/Annual Electricity Demand	1.17
Utilization fraction from utilization curve	0.334
Primary Energy offset by PV (kBTU/ft²yr)	21.15

Primary Energy
45 kBTU/sf/yr

Site Energy: 84,085 kWh/yr
Output from PV: 98,554 kWh/yr

NET-POSITIVE! 🤞

ONION FLATS



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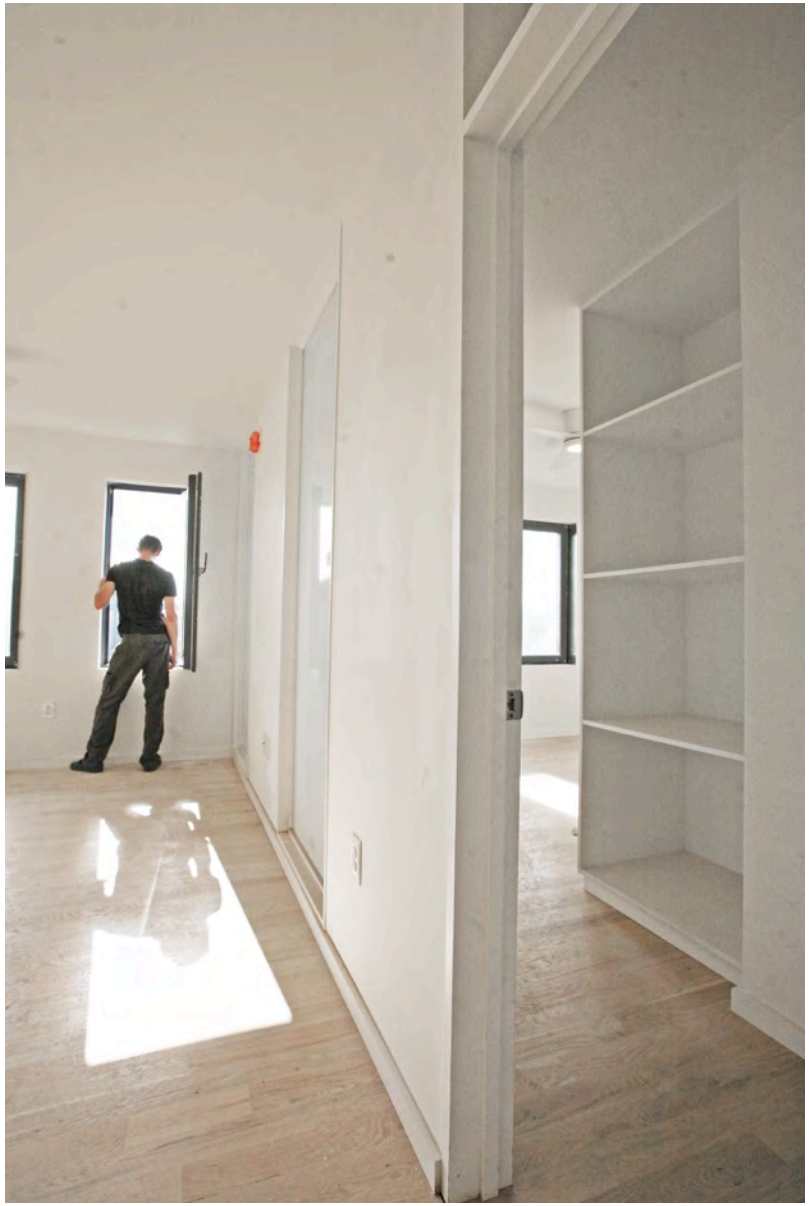

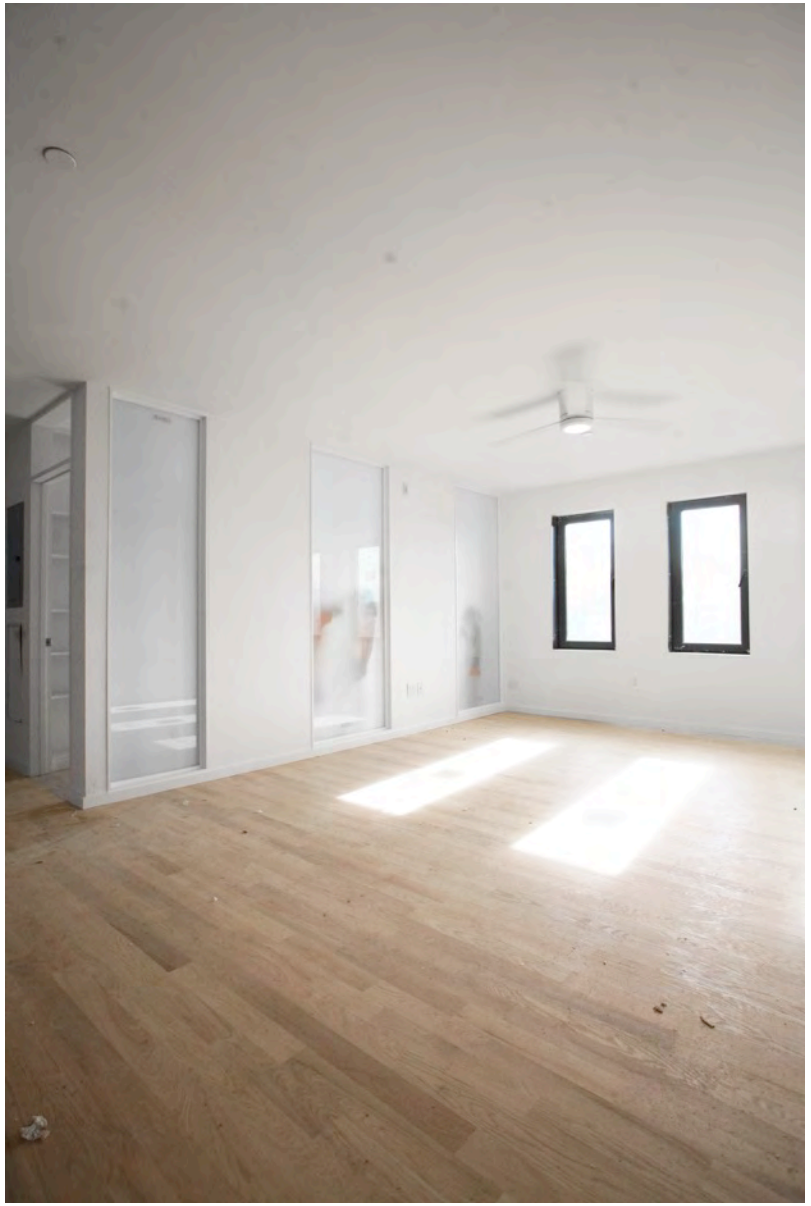

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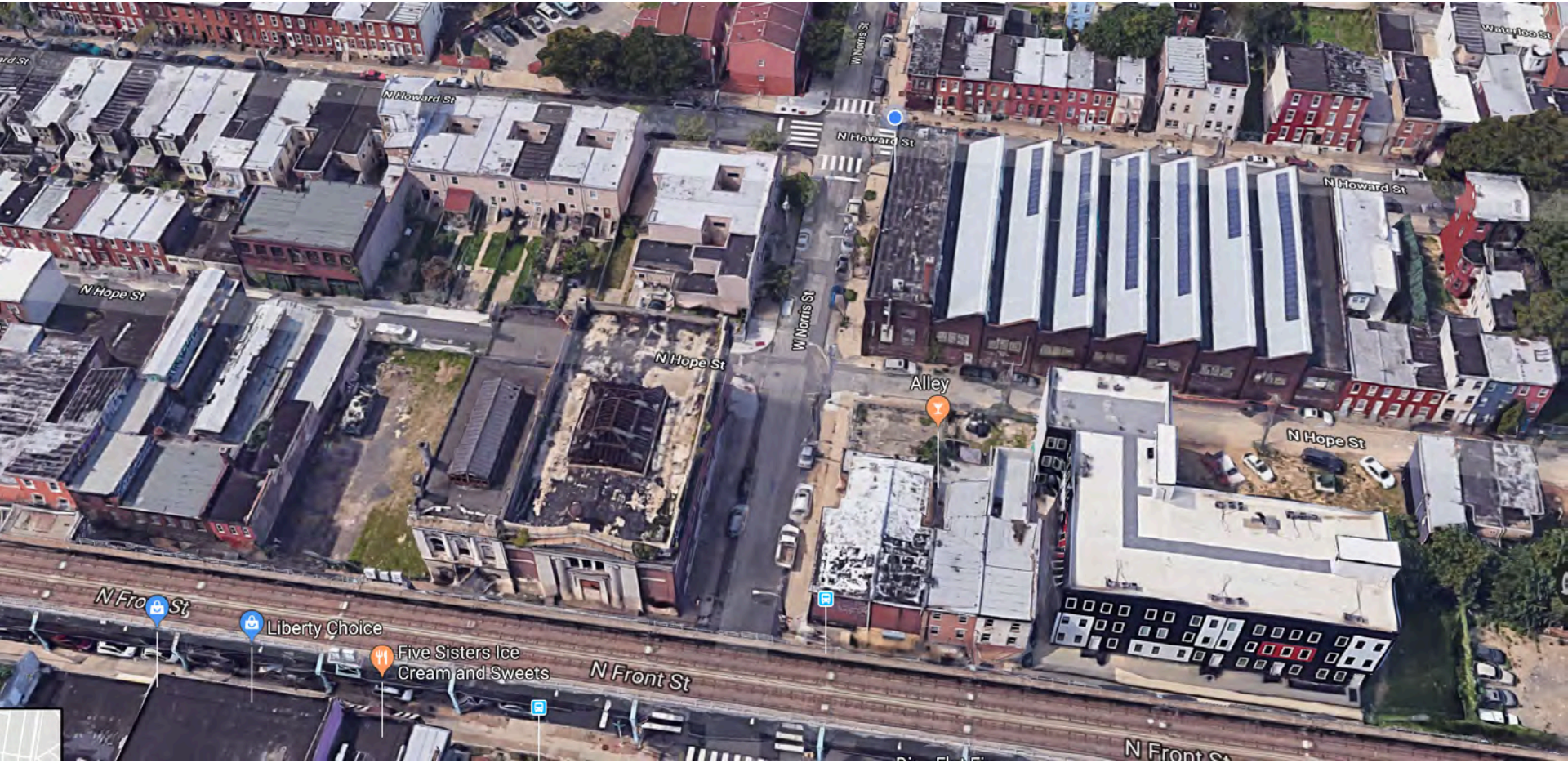
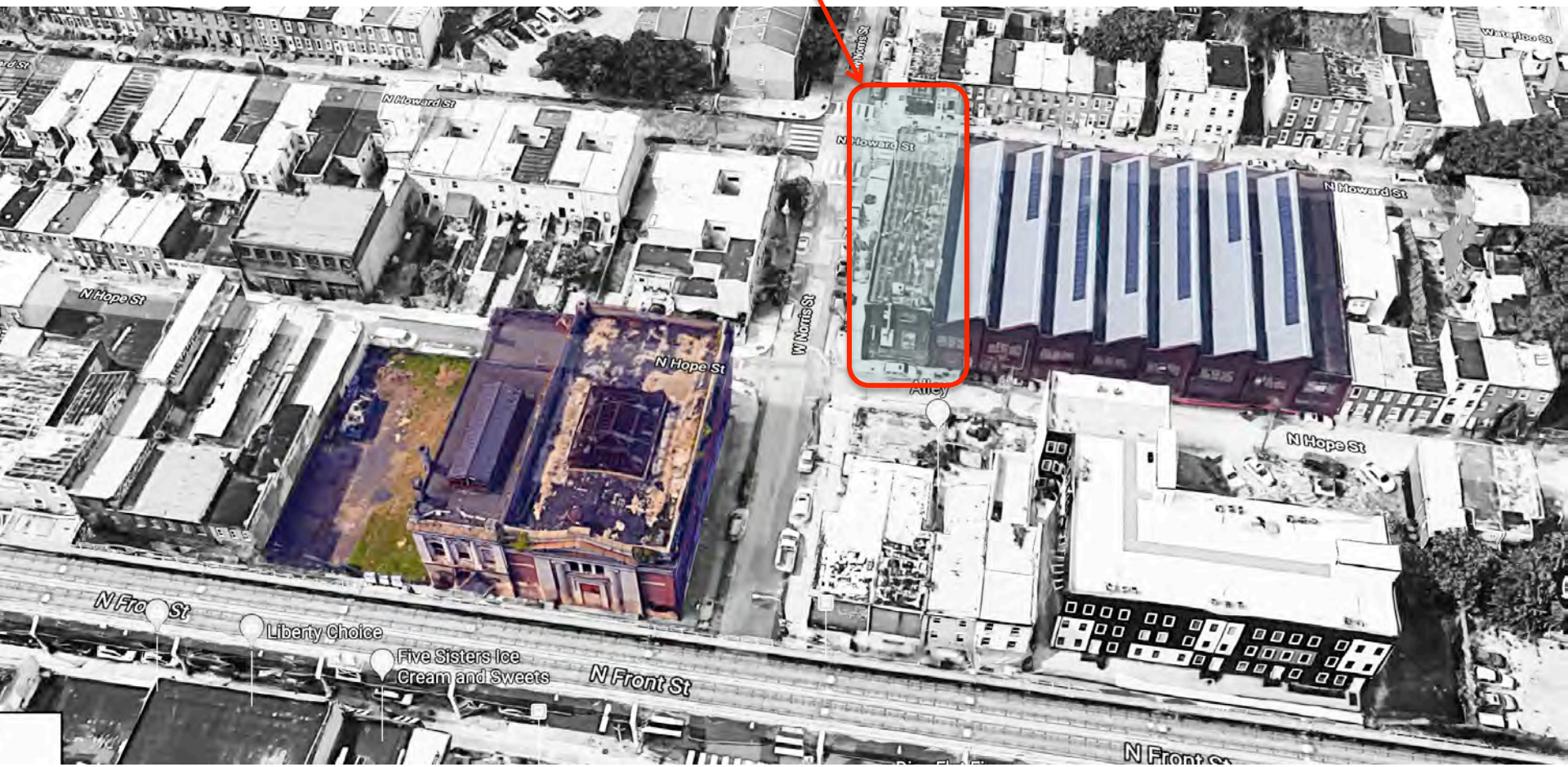

N Howard St
N Howard St
N Howard St
W Norris St
W Norris St
N Hope St
N Hope St
N Hope St
Alley
N Front St
N Front St
Liberty Choice
Five Sisters Ice Cream and Sweets
N Front St

ONION FLATS

ONION FLATS

ONION FLATS



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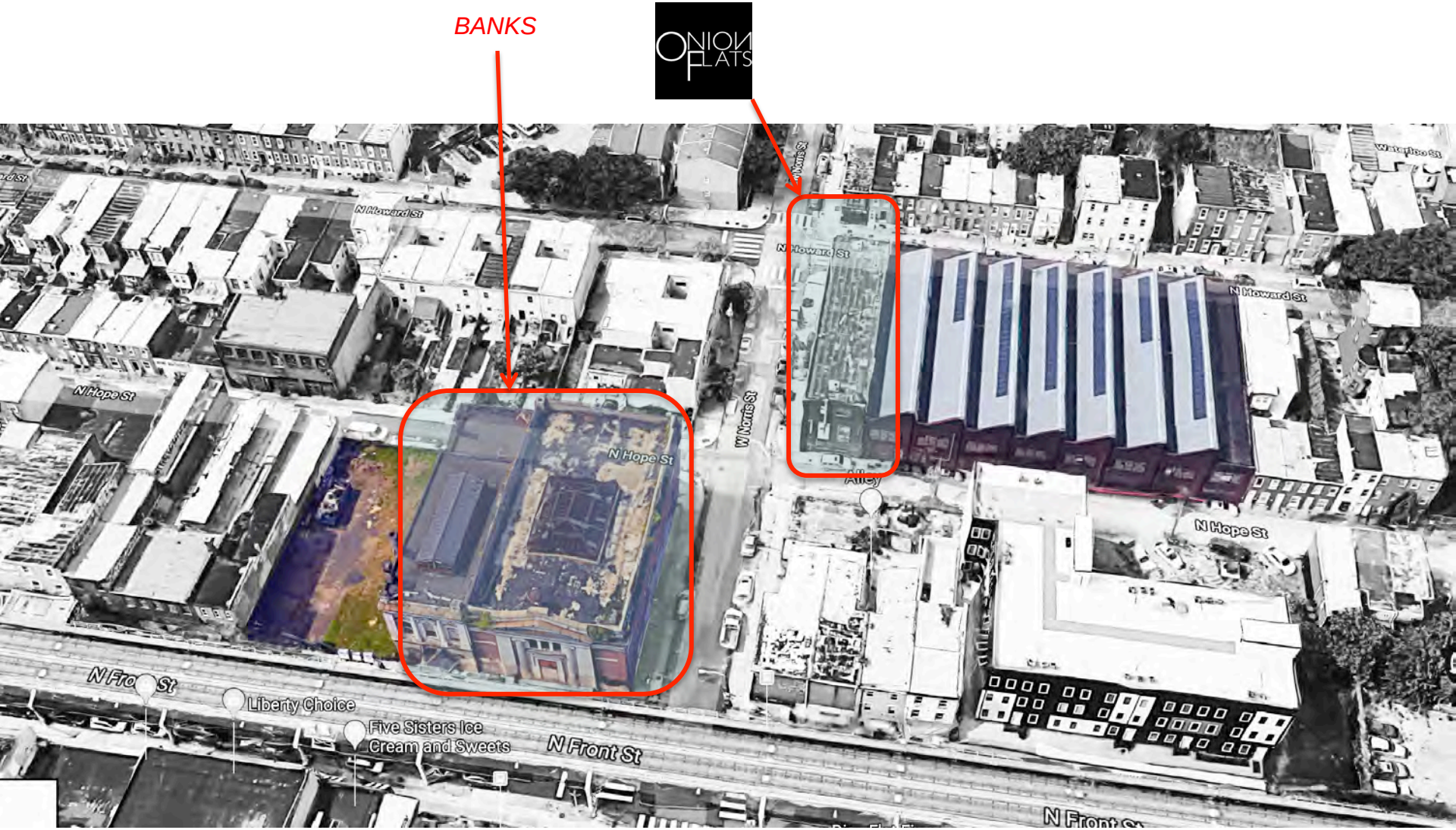

BANKS
ONION FLATS
N Howard St
N Hope St
W Norris St
Alley
N Front St
Liberty Choice
Five Sisters Ice Cream and Sweets

BANKS 2018

BANKS 2018

ONION FLATS

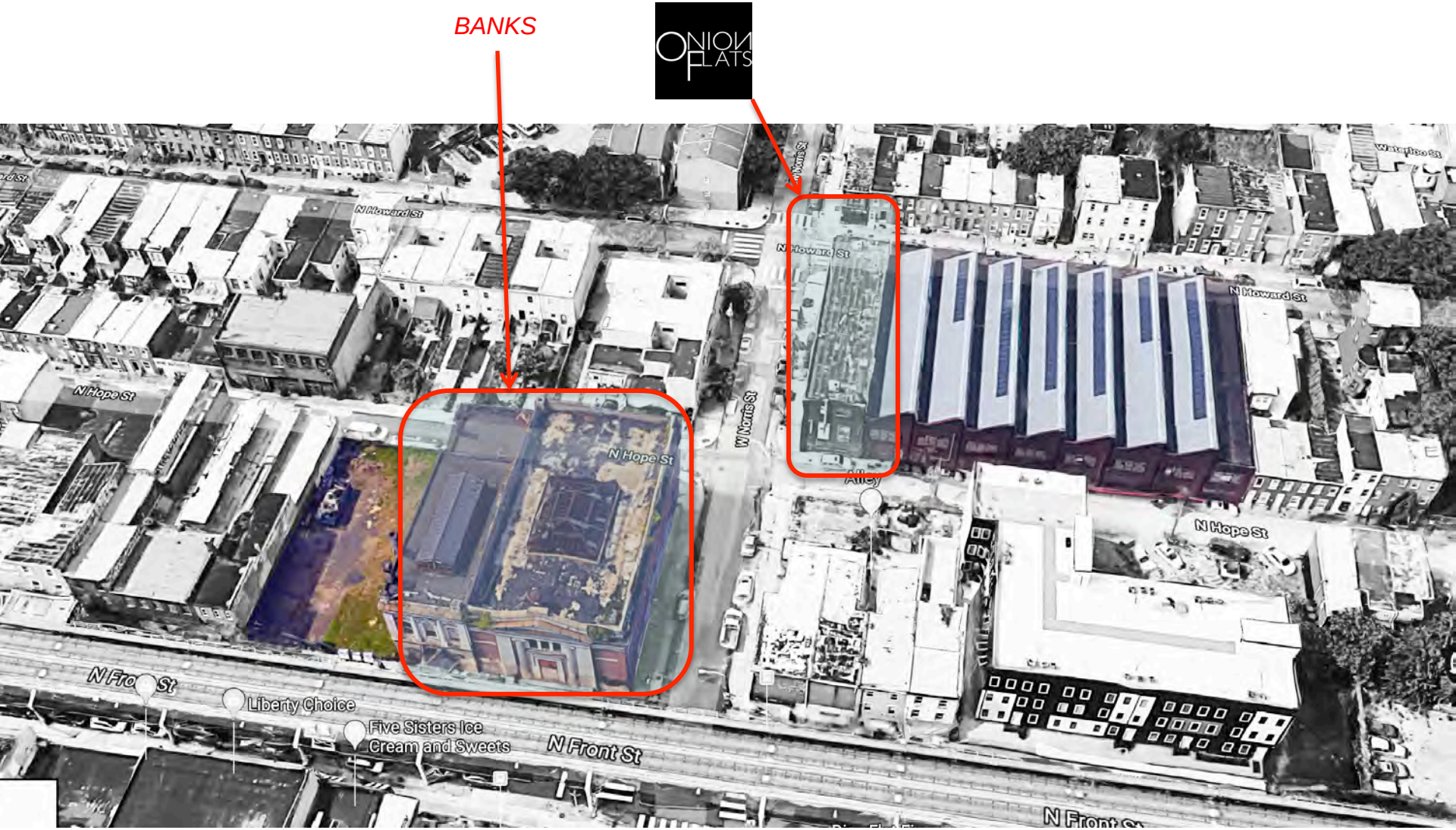
BANK FLATS 2017: shared work space

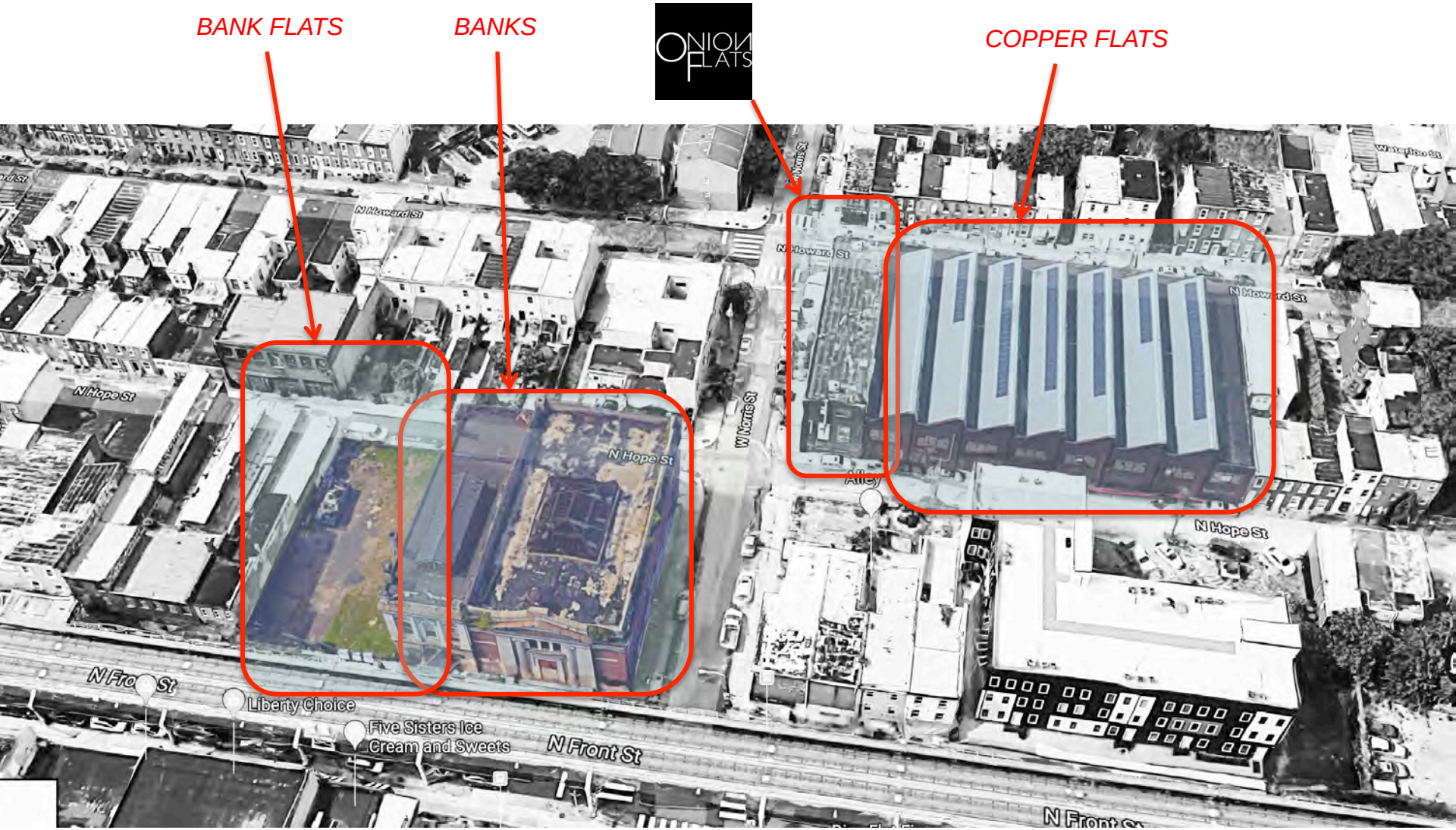
ONION FLATS

BANKS 2018: shared work space

ONION FLATS

BANK FLATS 2017: shared work space


BANKS
ONION FLATS
N Howard St
N Hope St
W Norris St
Alley
N Front St
Liberty Choice
Five Sisters Ice Cream and Sweets


BANK FLATS
BANKS
COPPER FLATS
ONION FLATS
N Howard St
N Hope St
W Norris St
Alley
N Front St
Liberty Choice
Five Sisters Ice Cream and Sweets

BIRDSEYE VIEW

BANK FLATS 2018: 30 units and retail

Copper Flats 2020: 70 units

ONION FLATS

FRONT STREET VIEW

BANK FLATS 2018: 30 units and retail

PROJECT SPECS

- *30 Apartments (300-500sf)*
- *24,141 sf*
- *R34 walls*
- *R 54 roof/floors*
- *.13 Uvalue windows*
- *.6 SHGC*
- *DE-Centralized VentilationERV*
- *SEMI-DE-Centralized Hot Water*
- *DE-Centralized heating/cooling*
- *DE-Centralized Electric Metering*
- *89 kw PV array to get to Net Zero*

BANK FLATS 2018: 30 units and retail

PROJECT SPECS

- *30 Apartments (300-500sf)*
- *24,141 sf*
- *R34 walls*
- *R 54 roof/floors*
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- *89 kw PV array to get to Net Zero*

BANK FLATS 2018: 30 units and retail

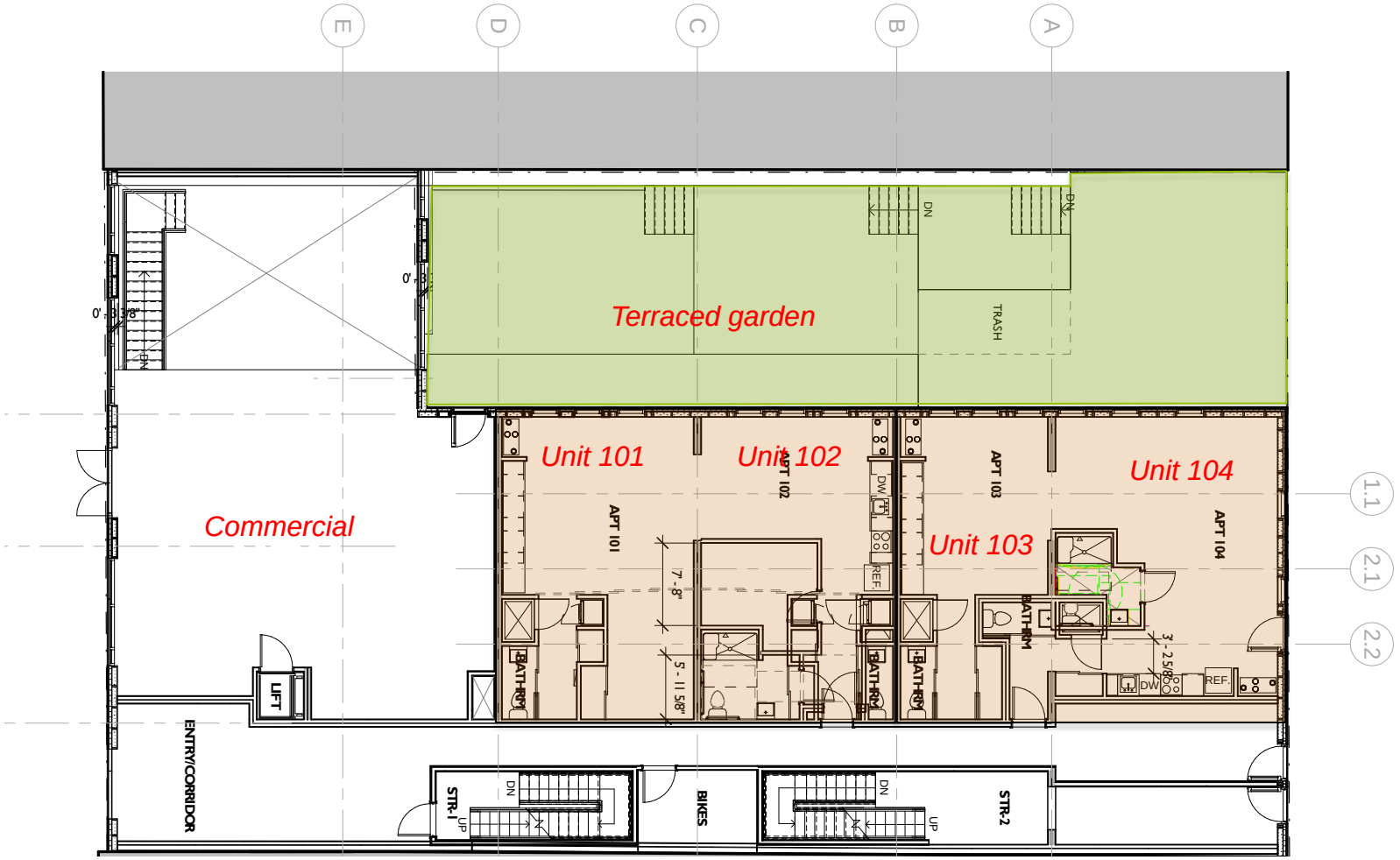
PROJECT SPECS

- *30 Apartments (300-500sf)*
- *24,141 sf*
- *R34 walls*
- *R 54 roof/floors*
- *.13 Uvalue windows*
- *.6 SHGC*
- *DE-Centralized VentilationERV*
- *SEMI-DE-Centralized Hot Water*
- *DE-Centralized heating/cooling*
- *DE-Centralized Electric Metering*
- *89 kw PV array to get to Net Zero*

BANK FLATS COSTS		
DESCRIPTION OF WORK		
Site/Excavation/Concrete		$204,100.50
Rough Carpentry		$669,015.80
Steel		$50,000.00
Roofing		$132,333.00
Exterior Cladding		$230,250.00
Insulation		$97,138.87
Drywall Tape & Finish		$140,001.00
Doors, Frames & Hardware		$57,565.00
Finish Carpentry & Accessories		$93,836.00
Kitchen/Vanity		$140,140.00
Appliances/Fixtures/Faucets		$139,076.00
Bath Fixtures		$28,322.15
Painting		$66,870.57
Flooring		$185,794.89
Plumbing		$235,386.86
HVAC		$314,000.00
Electrical		$282,429.00
SOLAR		$141,751.00
General Conditions		$445,933.00
OH/Profit		$176,853.65
TOTAL	***24141***	***$3,830,797.30***

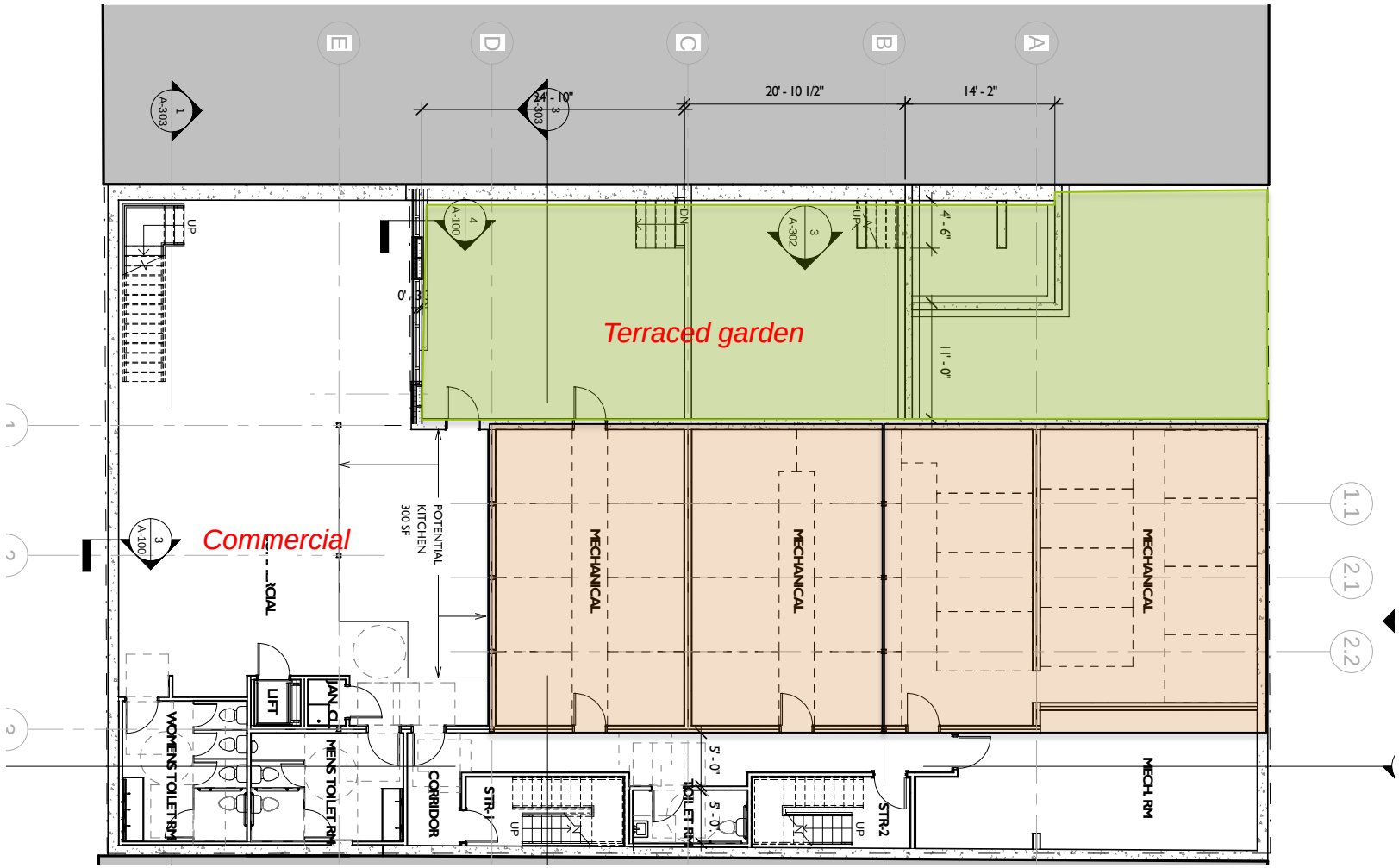
Total Sf: ***24,141 sf***
COSTS: Hard ***$158/sf***

BANK FLATS 2018: 30 units and retail



GROUND FLOOR

BANK FLATS 2018: 30 units and retail

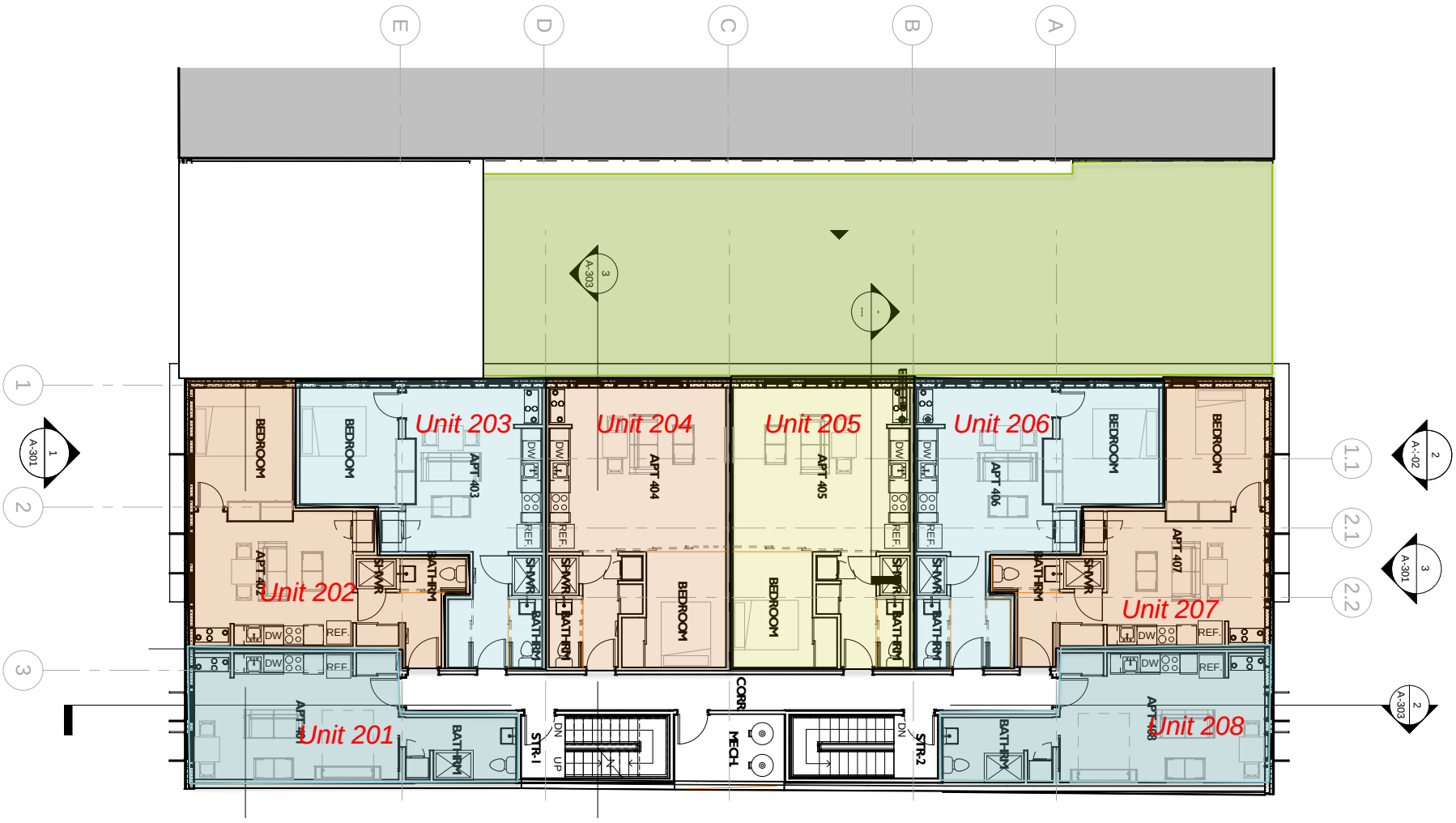


BASEMENT

BANK FLATS 2018: 30 units and retail

2ND-4TH FLOORS

BANK FLATS 2018: 30 units and retail



2ND-4TH FLOORS

BANK FLATS 2018: 30 units and retail