

### Landmarks Certificate of Appropriateness & Overlay District Permit Louisville Metro Planning & Design Services

F. F. P. SON COUNTY	ase No.: ISCOA 1187	(ISCOAII 80) Intake Staff:	IP .	
	Date: 9/11/15	Fee: <del></del>	_	
application. Applications for	Certificate of Appropriateness a or Signage are no longer submit the Construction Review Divisio	tted to Planning & Design Se	ease see page 4 of this rvices. Applications for Signage	
Project Information:				
Certificate of Appropria		■ Clifton □ Cherokee Tr		
	ırdstown/Baxter Ave Overlay (B ılu Review Overlay District (NF		opment Review Overlay (DDRO)	
Project Name: <u>Met</u>	al and solar roof installation		RECEIVED	
Project Address / Parcel	I ID: <u>174 William Street 4</u>	40206 / 069A0012	SEP 1 1 2015	
Deed Book(s) / Page Nu	umbers <sup>2</sup> : <u>6951 / 0451</u>		PLAININING & DESIGN SERVICES	
Total Acres: 0.105				
Project Cost: \$14k of \$25k PVA Assessed Value: \$128,500				
Existing Square Feet: NA New Construction Square Feet: NA Height (ft.): NA Stories: NA				
Project Description (use additional sheets if needed):				
standing seam meta  The primary intent v ago, while keeping in Please refer to the a  At the time, I was no	al roof installation. I have subm	itted separately for the meta ouse to more closely match t mically viable, hopefully for a led description for the projec	the original type of many decades inother generation to come.	

### **Contact Information:**

Owner:	■ Check if primary contact	Applicant:	☐ Check if primary contact
Name: Mark Frazar		Name: Owner	
Company:			
Address: 174	William St		
City: Louisville	State: <u>KY</u> Zip: <u>40206</u>		State: Zip:
Primary Phone:	502.802.4442	Primary Phone:	
Alternate Phone	502.562.9220	Alternate Phone:	
Email: _frazarm	@gmail.com		
Owner Signatu	re (required):	Jaga	
	☐ Check if primary contact		y: Check if primary contact
			CED 1 1 2012
			DESIGN SERVICES
	State: Zip:		State: Zip:
Primary Phone:		Primary Phone:	
Alternate Phone	:		
Email:		Email:	
subject property is (are) owner(s) of record sign(	ement: A certification statement must be a limited liability company, corporation, p (s) the application. , in my co	artnership, association,	trustee, etc., or if someone other than the
	f LLC / corporation / partnership / association same application and that I am authorize		
Signature:		[	Date:
I understand that knowing	gly providing false information on this applica I that pursuant to KRS 523.010, et seq. know	ation may result in any ac	tion taken hereon being declared null and

Page 2 of 5

10<sup>th</sup> September 2015

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SEP 112015

CLAINING &

DESIGN SERVICES

Urban Design Team Planning and Design Services Louisville Metro Government 444 S. 5th Street Louisville, KY 40202

Dear Urban Design Staff:

Please allow me first to say that I am a long-time fan of the shotgun style house, the so-called 'camelback' shotgun style of house, and their history. This was a major factor in buying and moving to the Clifton neighborhood and into this house, 18 years ago. I also remain a strong proponent of historic preservation, and voted for the local designation of the Clifton district some 12 years ago. As stated, the primary intent of these improvements is to restore the roof of the house to more closely match the original type of construction in the early 1890's, while keeping it both structurally solid and economically viable, for one, or hopefully more generations to come.

In your review, I ask that you take into account our need for lower energy consumption and renewable energy sources, as well as the considerations that were evaluated in the process that lead to this metal and solar roof installation on my home, as you see pictured.

You are probably aware that solar modules need to have some southern exposure in order to provide ideal energy production. You are also likely aware that the Commonwealth of Kentucky does not get the greatest amount of sun among the states, and that, for this reason, it takes a substantially longer time for a solar installation to pay for its own initial costs. You may not know, however, that here it requires upwards of 25 or 30 standard sized modules to produce the amount of electricity as the average household consumes, which is more than 10,000 kWh.

The original solar analysis prepared by RegenEn solar of Butchertown proposed over 30 panels, to cover nearly three times the roof area, and particularly it recommended including the nearly direct South facing side of the primary first floor roof. Despite these recommendations, the solar modules were installed only on the upper 2nd floor rear 'camelback' roof area, singly on the southeast face. I felt that the significant distance from the street hold it apart from anyone's typical field of view from the street, placing it over 50 feet from the street. Additionally, I wanted to ensure that the standing seam metal on the lower primary roof remains visible.

The surface of the solar modules can indeed physically be seen from the street, of course. However, it's worth noting that many houseguests and neighbors have truly been completely unaware of its presence, right up until they were directed where to look.

At my request, the lowest available type mounting, using 'S' clips, was used, to provide the roof with a very low profile, tight to the metal. Further, the number of modules was reduced down again from 16 to 12 just prior to installation, in order to ensure that the new surface would remain within the profile of the original roof. RegenEn estimated this to produce 30 to 35% of my current energy usage, approximately 3,800 to 4,000 kWh. After making other energy efficiency upgrades, I hope to produce 50% of the total electricity used annually.

174 WILLIAM STREET LOUISVILLE, KY 40206

A camelback shotgun house has extremely limited areas where solar modules can be mounted. Other than mounting on the ground, covering most of the rear yard, or building new structures. The only other remaining option would be the northwest face of the same upper rear 'camelback' roof area. In order to get some amount of proper southern exposure, the modules would have to be mounted on a frame structure, creating a surface that projects well above the roof and could be quite visible. If mounted closely parallel to that northwest roof face, as they are now on the southeast side, it is estimated that this 180° rotation of azimuth might amount to a reduction in annual energy production of up to 25%.

I have been fortunate enough to be able to finance this metal and solar roof installation. The projected return on the investment for this installation is about 12 years, based on the current energy production, even after factoring the benefits of the 30% federal tax credit. A reduction in production of up to 25% as described above could change that installation cost recovery time to at least 16, if not up to 18 years. There are many residents in the neighborhood for which such an installation might not be an option today. There are several houses today that still sit vacant or boarded within two blocks. The many pure shotgun style (single-story) houses that we have in Louisville, you may note, have even more limited potential roof area for solar use. In fact, on my street for example, no southern roof face is available that would not be clearly visible from the street, on almost all of the shotgun houses.

I understand that the primary guidelines from which you have to draw come from the Secretary of the Interior, which were originally created for architecturally significant historic properties, each of which go through a lengthy process in order to be qualified for individual designation on the National Historic Register. It seems that it might not be appropriate that the same standards which apply to Farmington or Locust Grove should be applied in literally just the same way to every modest home within all of Louisville's Preservation districts.

One can't help but note that the routine installation of satellite dishes, antennas and both ground and window mounted air conditioners do not appear to be cited or regulated. All of these are generally more obtrusive to the historic profiles of homes and businesses than are solar module surfaces. However, like these other items, the solar modules that have been installed can be removed at any future time as desired, and the metal roofing will remain below; There is little doubt this will happen, given the speed of change in technology.

It is important to remember that in the era of the construction of buildings in this district there were no utility poles, transformers, telephone lines, electric or gas meters, and there were outhouses out back. The homes and businesses were lit by oil or gas, and heated by wood stoves and then coal furnaces. It seems to me that with changing energy needs there must be some greater allowance for even these small but historic structures to adapt with the times.

I hope that your group may find these improvements acceptable, and that equipping this nearly 125-year-old structure for solar energy in the manner it was installed is not inappropriate. I greatly appreciate your consideration in this matter, please do not hesitate to contact me if I can provide anything further which might facilitate the process.

Respectfully,

Mark D. Frazar

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DESIGN SERVICES

enclosure: regenen solar diagram, copy of resolution 079, 17 photographs

This system design may be used only for the purposes of a solar photovoltaic installation by RegenEn Solar LLC. It is to be applied only to the property address

RegenEn Solar 812 E. Washington St. Louisville, KY 40206 RegenEn Solar LLC PH: 502.298.8160

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SEP 112015 FLAIVINING & DESIGN SERVICES E: dhofmann@regenensolar.com Web: www.regenensolar.com

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listed herein unless otherwise agreed upon by registered agent of RegenEn Solar LLC.

PROJECT ADDRESS:

DRAWN BY: D. Hofmann

Louisville, KY 40206 174 William St

SCALE:

PAGE NO:

7

### RESOLUTION NO. <u>079</u>, SERIES 2015

### A RESOLUTION SUPPORTING THE FUTURE OF SOLAR ENERGY IN METRO LOUISVILLE.

**Sponsored By:** Council Members Blackwell, Hollander, Johnson, Woolridge, Hamilton, James, Magre, Fowler, Flood and President Tandy

WHEREAS, solar power is a clean source of energy that can power Louisville's homes, businesses, cars, streetlights, and other infrastructure; and

WHEREAS, solar power will help achieve better air quality and will reduce carbon pollution; and WHEREAS, the Commonwealth of Kentucky currently emits 90 million metric tons of carbon pollution annually to produce electricity; and

WHEREAS, every megawatt (MW) of solar energy installed is projected to create 20 manufacturing jobs and 13 installation or maintenance jobs, and each megawatt hour (MWh) of solar energy displaces approximately 2,000 pounds of carbon pollution from coal-burning power plants; and

WHEREAS, Louisville Metro Council recognizes the above assets of solar power, and desires to encourage this important clean energy solution; and

WHEREAS, Louisville is the 28th largest city in the country, and can take national leadership in pursuit of solar power; and

WHEREAS, Louisville stands ready to take full advantage of the new 21st century energy economy to be driven by clean solar power; and

WHEREAS, Louisville can set a goal of new solar installations with a capacity of 2 million watts (about 500 residential installations) by the end of 2016, with expanded goals to be set for 2025 and beyond.

BE IT RESOLVED BY THE LEGISLATIVE COUNCIL OF THE LOUISVILLE/JEFFERSON COUNTY METRO GOVERNMENT (THE COUNCIL) AS FOLLOWS:

SECTION I. The Louisville Metro Council urges all Metro Agencies and Departments to support the vigorous growth of solar energy in Louisville and to aggressively pursue strategies designed to meet this goal. Such strategies can include supporting solar for new construction, adding solar on school and other municipal buildings, streamlining the permitting process for commercial and industrial solar

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installations, integrating solar energy into public infrastructure and street lights, facilitating investment in solar energy, and supporting a city-wide solar education program such as Solar Over Louisville.

SECTION II. The Louisville Metro Council is supportive of public and private efforts and grant opportunities aimed at ensuring that lower income families are able to take advantage of greening and sustainability initiatives within Jefferson County, Kentucky

SECTION III. This Resolution shall take effect upon its passage and approval.

H. Stephen Ott

Metro Council Clerk

Greg Fischer

Mayor

David W. Tandy

President of the Council

APPROVED AS TO FORM AND LEGALITY:

Michael J. O'Connell Jefferson County Attorney

Solar Energy Support R-124-15 ROCbkn Draft 1

070715



### **Land Development Report**

August 13, 2015 5:12 PM

About LDC

Location

Parcel ID: 069A00120000

Parcel LRSN: 41824

Address: 174 WILLIAM ST

**Zoning** 

Zoning: R5A

Form District: TRADITIONAL NEIGHBORHOOD

Plan Certain #:NONEProposed Subdivision Name:NONEProposed Subdivision Docket #:NONECurrent Subdivision Name:NONEPlat Book - Page:NONERelated Cases:NONE

**Special Review Districts** 

Overlay District: NO

Historic Preservation District:

National Register District:

CLIFTON

CLIFTON

Urban Renewal:

NO

Enterprise Zone:

System Development District:

NO

NO

Historic Site:

YES

**Environmental Constraints** 

**Flood Prone Area** 

FEMA Floodplain Review Zone:

FEMA Floodway Review Zone:

Floodplain Ordinance Review Zone:

Conveyance Zone Review Zone:

NO

FEMA FIRM Panel: 21111C0027E

**Protected Waterways** 

Potential Wetland (Hydric Soil):

Streams (Approximate):

NO

Surface Water (Approximate):

NO

Slopes & Soils

Potential Steep Slope: NO

Unstable Soil: NO

Geology

Karst Terrain: YES

Sewer & Drainage

MSD Property Service Connection:
Sewer Recapture Fee Area:

NO

Drainage Credit Program: MS4 (outside of incentive area)

**Services** 

Municipality: LOUISVILLE

Council District:

Fire Protection District: LOUISVILLE #2

Urban Service District: YES

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SEP 112015

DESIGN SERVICES

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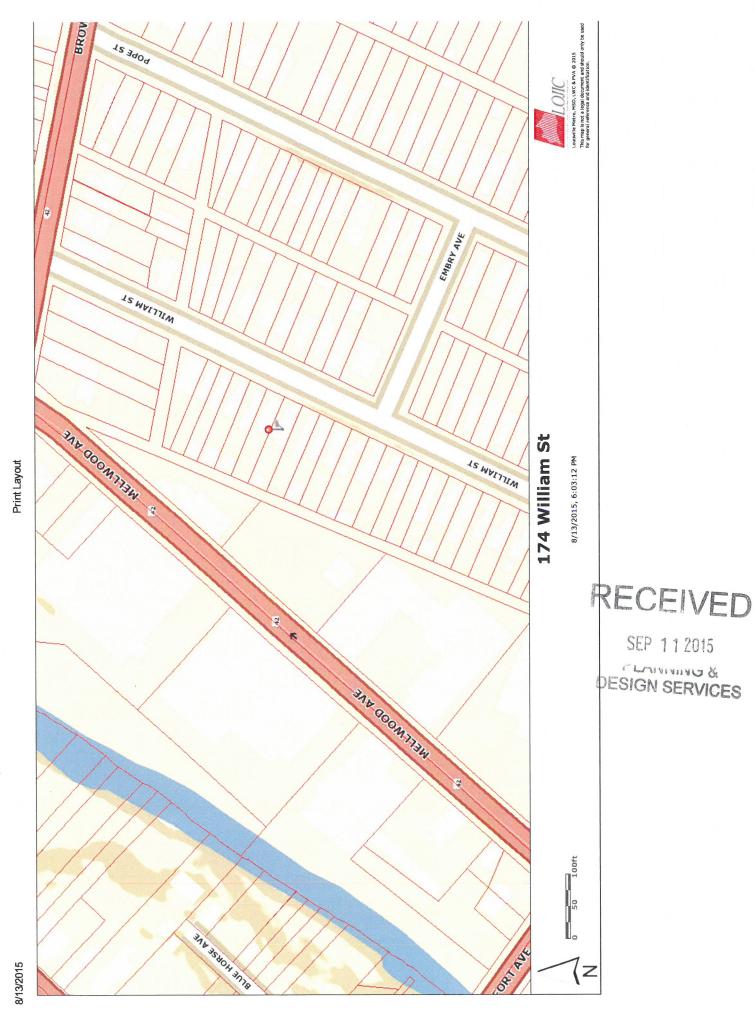
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Print Layout

ADEMY

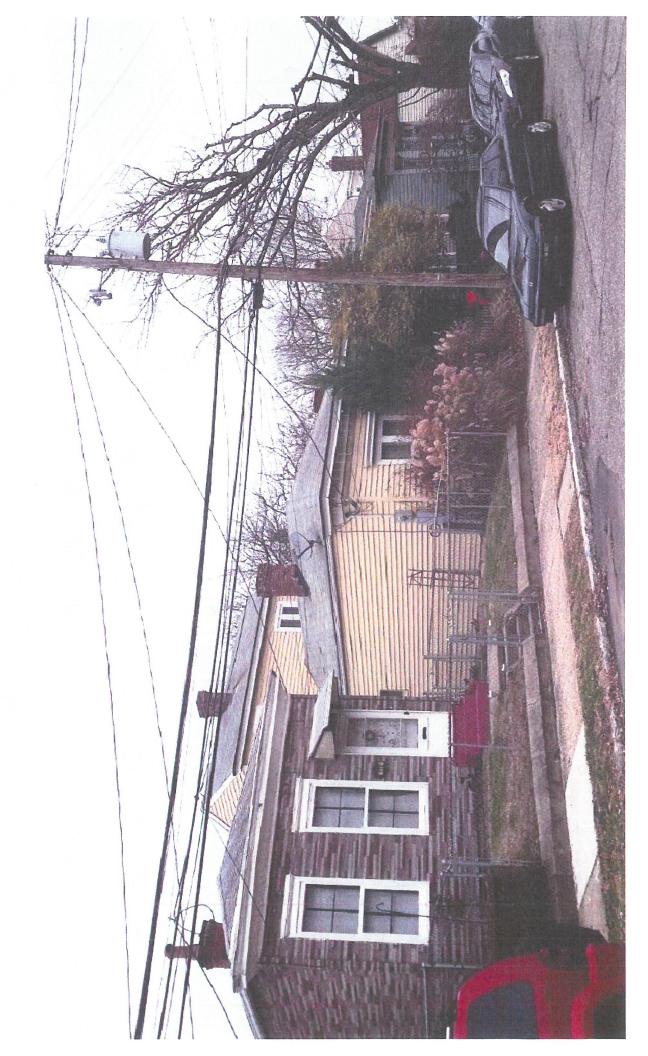
Print Layout

8/13/2015



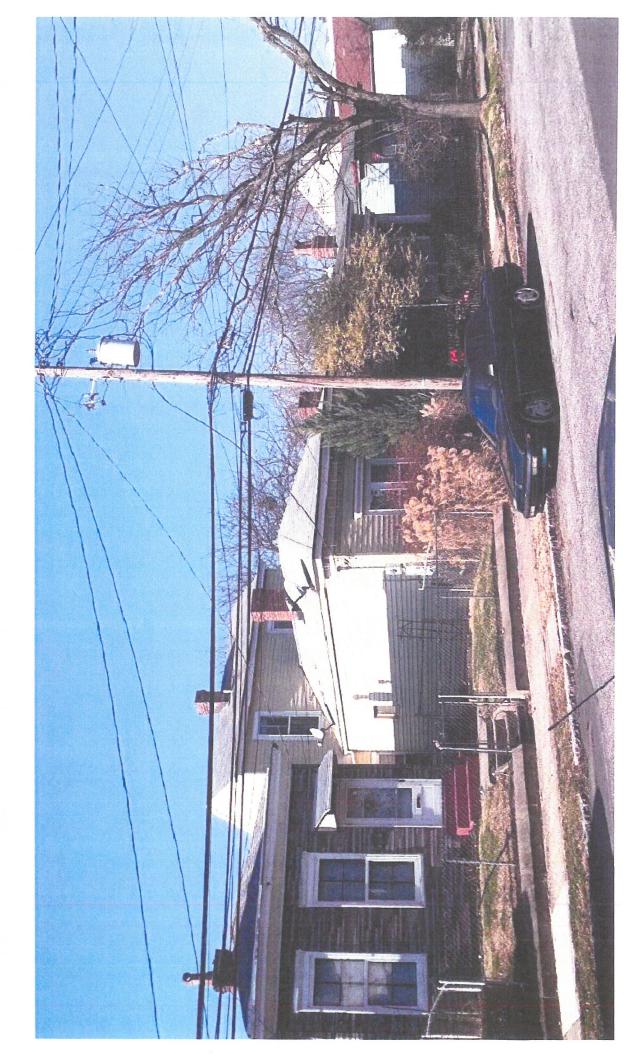
B1 Street View from South BEFORE



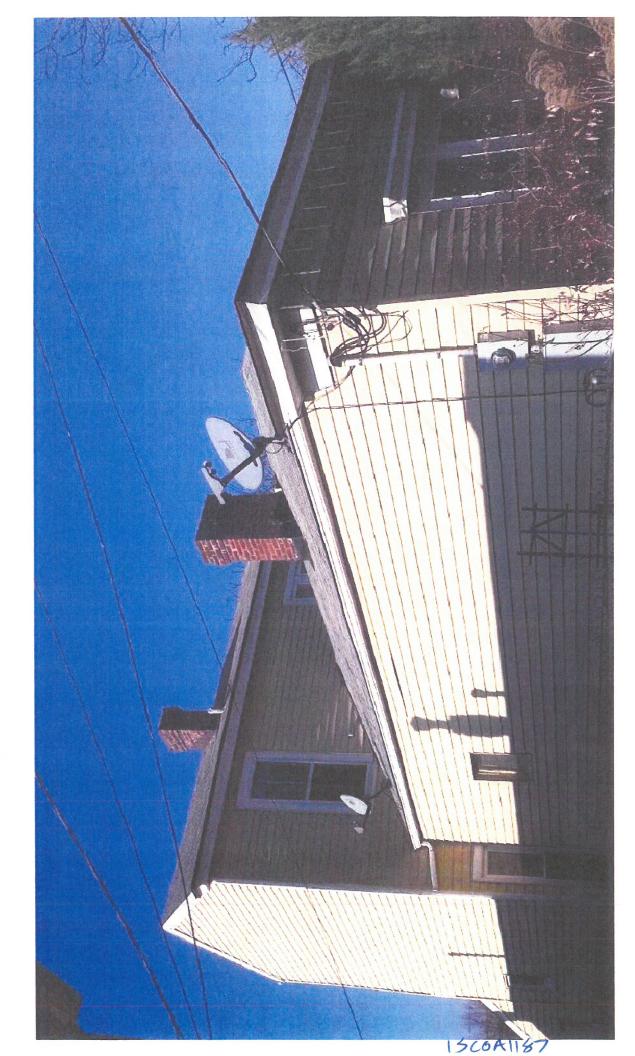


B2 View from South BEFORE

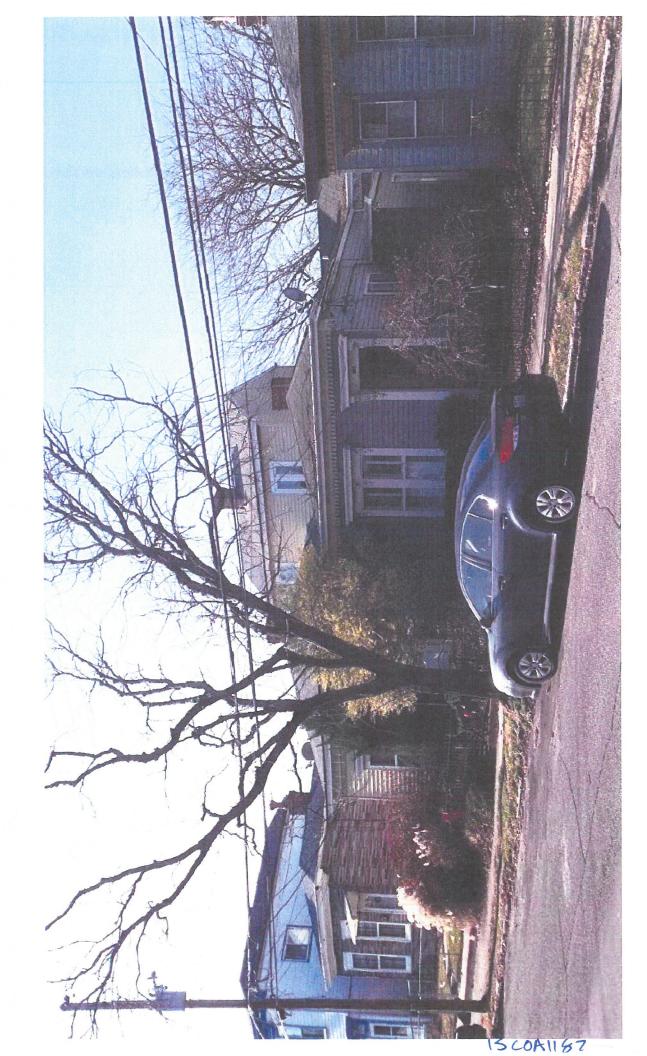




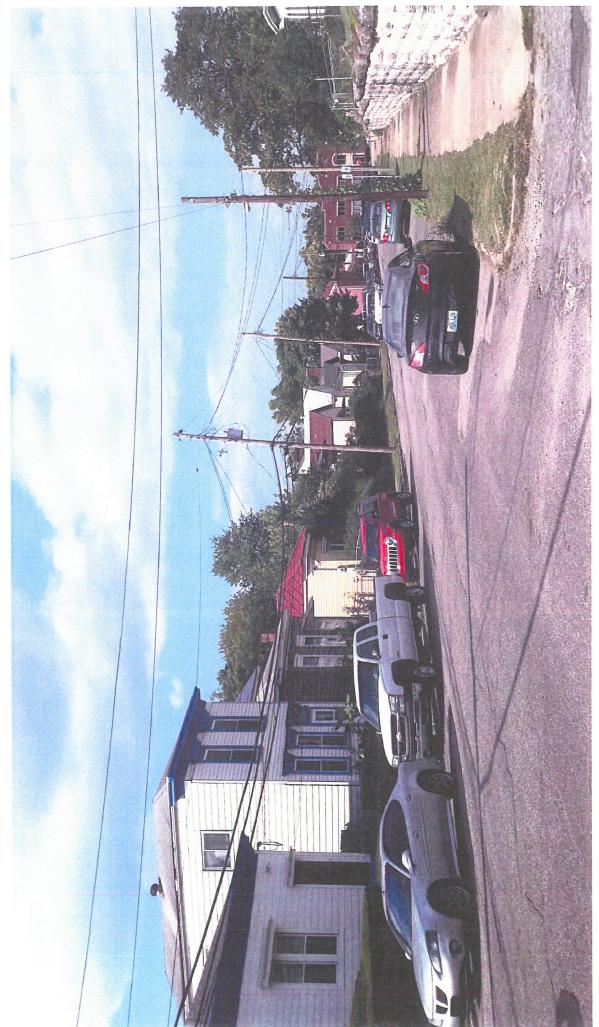






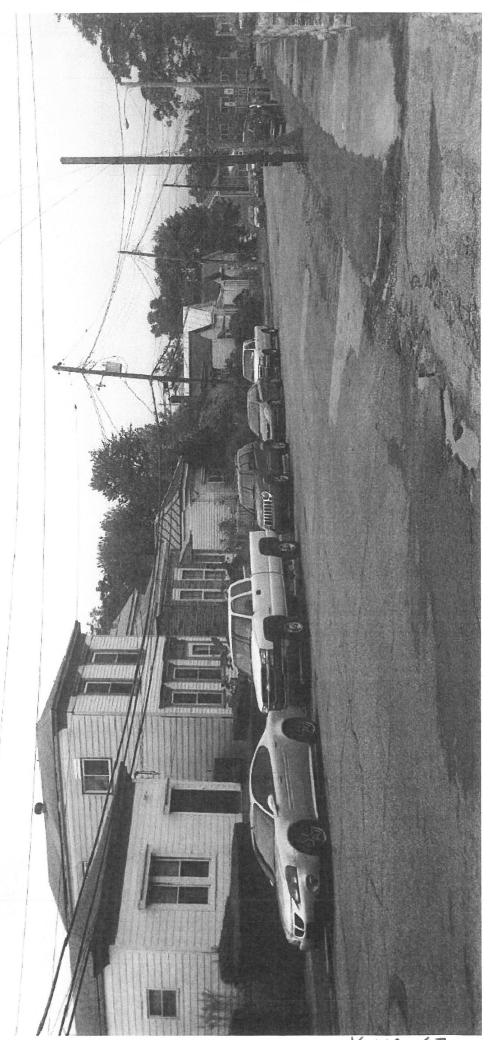


A1.1 Street View from South AFTER



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A1.2 Street View from South AFTER



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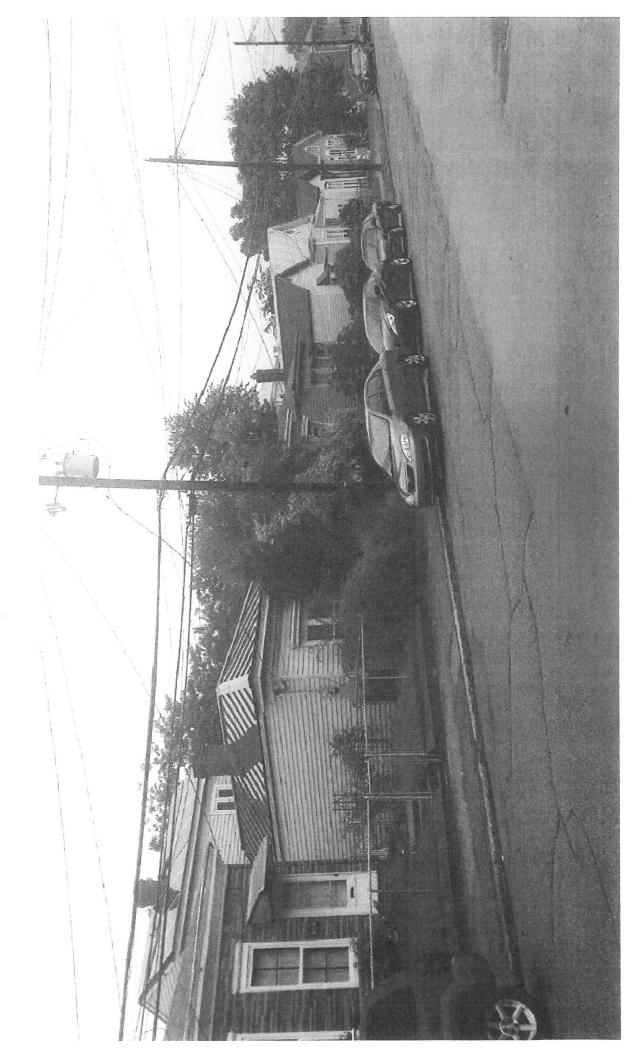


A2.1 View from South AFTER



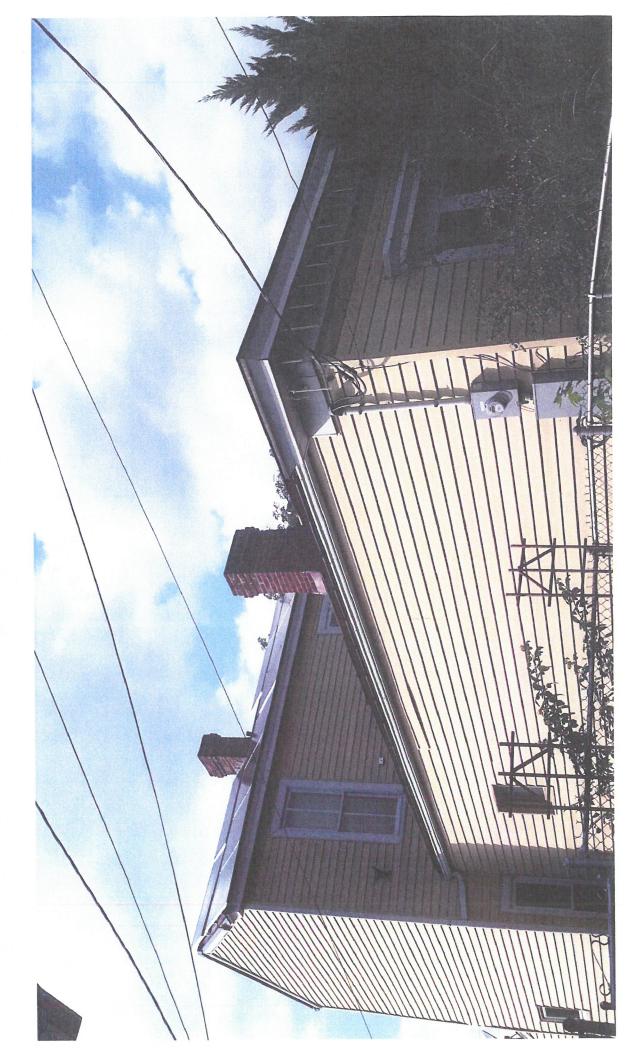
A2.2 View from South AFTER

A3.1 View from Southeast AFTER



A3.2 View from Southeast AFTER

A4 View from South AFTER



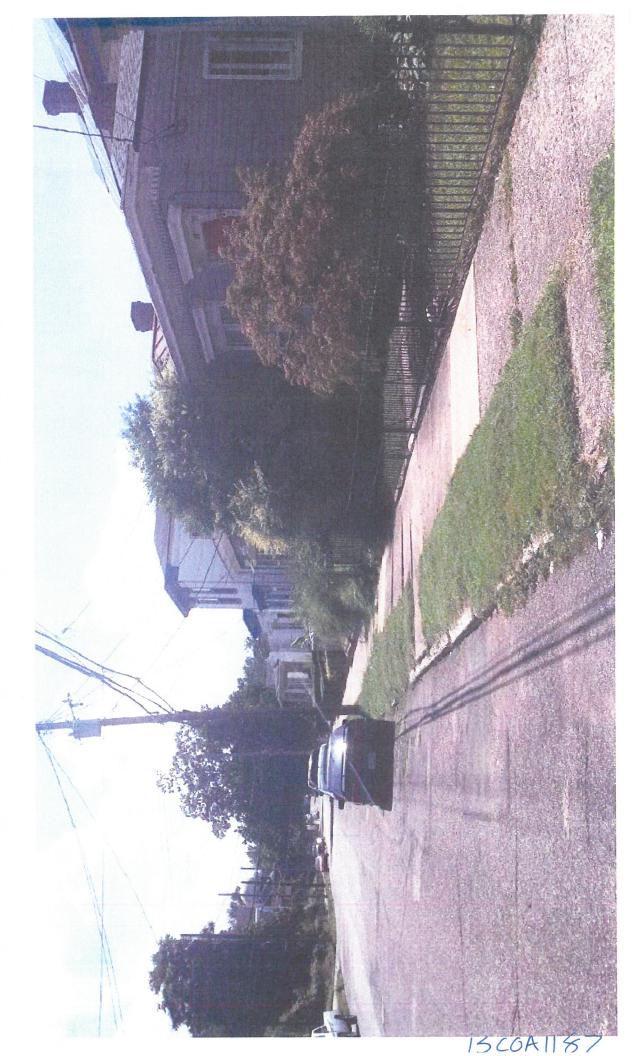
A5.1 View from Northeast AFTER 15COA1187

A5.2 View from Northeast AFTER



15COK1187

## STREETSCAPE VIEW (from Northeast) AFTER



## STREETSCAPE VIEW (from South) AFTER



# STREETSCAPE VIEW (from South) AFTER

