



# COMMISSION OF ARCHITECTURAL REVIEW

## APPLICATION / CERTIFICATE OF APPROPRIATENESS

**PROPERTY** (Location of Work)

Address 533 Masby St.  
 Historic District Union Hill

**PROPOSED ACTION**

- Alteration (including paint colors)       Rehabilitation       Demolition  
 Addition       New Construction (Conceptual Review required)  
 Conceptual Review       Final Review

**OWNER**

Name Carolyn Mullaneq  
 Company \_\_\_\_\_  
 Mailing Address 5692 Irvington  
Rd. Whitestone Va.  
 Phone 804 436 7282  
 Email cjmpix@yahoo.com  
 Signature \_\_\_\_\_  
 Date 2/13/17

**APPLICANT** (if other than owner)

Name Jonah Green  
 Company Green Builders  
 Mailing Address \_\_\_\_\_  
 Phone 804 466 9069  
 Email jonahgreen@yahoo.com  
 Signature Jonah Green  
 Date 2/13/17

**ACKNOWLEDGEMENT OF RESPONSIBILITY**

**Requirements:** A complete application includes all applicable information requested on checklists to provide a complete and accurate description of existing and proposed conditions. Preliminary review meeting or site visit with staff may be necessary to process the application. Owner contact information and signature is required. Late or incomplete applications will not be considered.

**Zoning Requirements:** Prior to CAR review, it is the responsibility of the applicant to determine if zoning approval is required and application materials should be prepared in compliance with zoning.

**Compliance:** If granted, you agree to comply with all conditions of the COA. Revisions to approved work require staff review and may require a new application and CAR approval. Failure to comply with the COA may result in project delays or legal action. The COA is valid for one (1) year and may be extended for an additional year, upon written request.

(Space below for staff use only) \_\_\_\_\_

Application received:

Date/Time \_\_\_\_\_

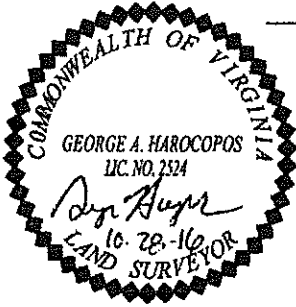
Complete     Yes     No

By \_\_\_\_\_

This is to certify that on 10/28/16  
 I made an accurate field survey of the known premises shown hereon; that all improvements known or visible are shown hereon; that there are no encroachments by improvements either from adjoining premises, or from subject premises upon adjoining premises, other than shown hereon.

NOTE: THIS LOT APPEARS TO BE IN FEMA FLOOD ZONE X AS SHOWN ON HUD COMMUNITY PANEL NUMBERS 5101290041E

NOTE: This survey has been prepared without the benefit of a title report and does not therefore necessarily indicate all encumbrances on the property.



Note: Original House Was 15' Off Mosby Street And Party Wall On The Southern Boundary Line

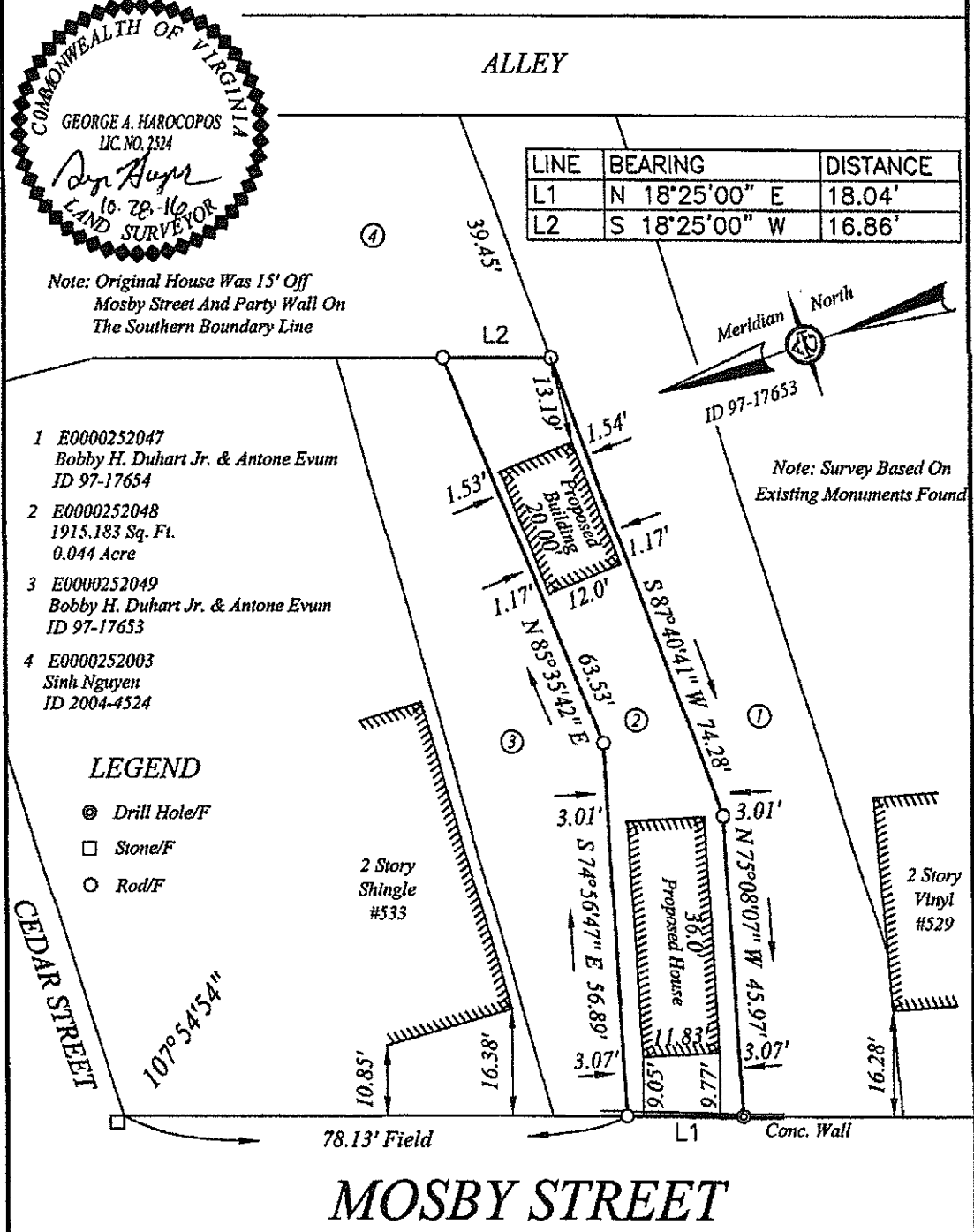
- 1 E0000252047  
Bobby H. Duhart Jr. & Antone Evum  
ID 97-17654
- 2 E0000252048  
1915.183 Sq. Ft.  
0.044 Acre
- 3 E0000252049  
Bobby H. Duhart Jr. & Antone Evum  
ID 97-17653
- 4 E0000252003  
Sinh Nguyen  
ID 2004-4524

**LEGEND**

- ⊙ Drill Hole/F
- Stone/F
- Rod/F

2 Story Shingle #533

2 Story Vinyl #529



**MOSBY STREET**

SURVEY OF  
 LOT AND IMPROVEMENTS THEREON LOCATED AT

**# 533 MOSBY STREET**

SECTION XXX  
 RICHMOND, VIRGINIA

JN 45935

A. G. HAROCOPOS & ASSOCIATES, P.C.  
 CERTIFIED LAND SURVEYOR AND CONSULTANT

4920 E. MILLRIDGE PKWY. SUITE 200 MIDLOTHIAN VA, 23112  
 Office 804 744 2630 FAX 804 744 2632  
 E-MAIL: AGHAROCOPOS@VERIZON.NET

NOTE: PLAT PREPARED FOR THE EXCLUSIVE USE OF GREEN BUILDERS

Scale 1"=20' Date 10/28/16 Drawn by GAH

533 Mosby Street

This project conforms to the guidelines of the historic district of the city of Richmond, VA from several standpoints.

The gable roof line is consistent with many homes in the area. The traditional wood siding is consistent with many homes in the area and will be painted Benjamin Moore ~~Iron Mountain or Gravel Gray~~. Trim color will be black. Entry way will be Core-Ten steel. All energy needs will be met by solar panels. Loads and usage were calculated based on exterior siding color of black.

*Wrought iron*

The house is narrow to conform with the lot size which keeps it very much in line with nearly all the homes in this district...long and narrow.

Off street parking is located at the rear of the property and is accessible by deeded access through the adjacent lot to the south. Parking area will be 18 feet by 14 feet gravel. Super/Recycling Cans will be located in the parking area.

The compressor for mini-split HVAC unit will be located on north slope of roof towards rear and will not be visible from the street.

## Addendum to 533 Mosby Street

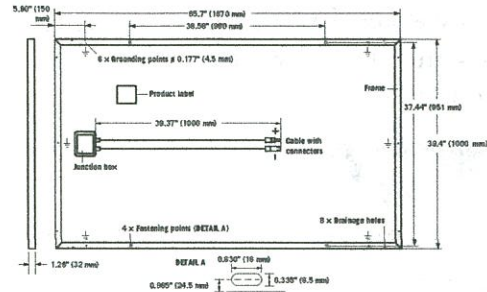
Color of siding will not be black. It will be either Benjamin Moore "iron mountain" or "gravel gray" with black trim.

Roof is not corrugated. It is standing seem.

Fence posts will be 6" by 6" p.t. painted black. 6' tall. Fence material between posts will be Corten steel to match entry.

## MECHANICAL SPECIFICATION

<b>Format</b>	65.7 in × 39.4 in × 1.26 in (including frame) (1670mm × 1000mm × 32mm)
<b>Weight</b>	41.45 lb (18.8kg)
<b>Front Cover</b>	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
<b>Back Cover</b>	Composite film
<b>Frame</b>	Black anodised aluminum
<b>Cell</b>	6 × 10 Q.ANTUM solar cells
<b>Junction box</b>	3.03 in × 3.54 in × 0.62 in (77 mm × 90 mm × 15.8 mm), Protection class IP67, with bypass diodes
<b>Cable</b>	4 mm <sup>2</sup> Solar cable; (+) ≥ 39.37 in (1000mm), (-) ≥ 39.37 in (1000 mm)
<b>Connector</b>	MC4, IP68

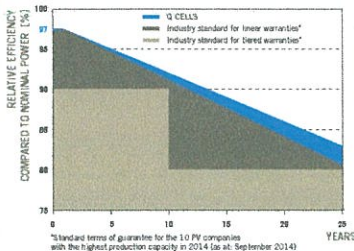


## ELECTRICAL CHARACTERISTICS

POWER CLASS		270	275	280	
<b>MINIMUM PERFORMANCE AT STANDARD TESTING CONDITIONS, STC<sup>1</sup> (POWER TOLERANCE +5 W / -0 W)</b>					
Minimum	Power at MPP <sup>2</sup>	P <sub>MPP</sub> [W]	270	275	280
	Short Circuit Current*	I <sub>SC</sub> [A]	9.29	9.35	9.41
	Open Circuit Voltage*	V <sub>OC</sub> [V]	38.46	38.72	38.97
	Current at MPP*	I <sub>MPP</sub> [A]	8.70	8.77	8.84
	Voltage at MPP*	V <sub>MPP</sub> [V]	31.04	31.36	31.67
	Efficiency <sup>2</sup>	η [%]	≥ 16.2	≥ 16.5	≥ 16.8
<b>MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC<sup>3</sup></b>					
Minimum	Power at MPP <sup>2</sup>	P <sub>MPP</sub> [W]	199.6	203.3	207.0
	Short Circuit Current*	I <sub>SC</sub> [A]	7.49	7.54	7.58
	Open Circuit Voltage*	V <sub>OC</sub> [V]	35.89	36.13	36.37
	Current at MPP*	I <sub>MPP</sub> [A]	6.81	6.87	6.93
	Voltage at MPP*	V <sub>MPP</sub> [V]	29.30	29.59	29.87

<sup>1</sup> 1000 W/m<sup>2</sup>, 25 °C, spectrum AM 1.5G    <sup>2</sup> Measurement tolerances STC ± 3 %; NOC ± 5 %    <sup>3</sup> 800 W/m<sup>2</sup>, NOCT, spectrum AM 1.5G    \* typical values, actual values may differ

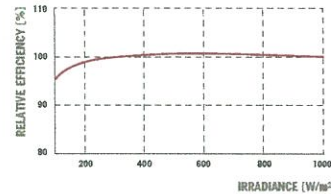
### Q CELLS PERFORMANCE WARRANTY



At least 97% of nominal power during first year. Thereafter max. 0.6% degradation per year. At least 92% of nominal power after 10 years. At least 83% of nominal power after 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

### PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m<sup>2</sup>).

### TEMPERATURE COEFFICIENTS

Temperature Coefficient of I <sub>SC</sub>	α	[%/K]	+0.04	Temperature Coefficient of V <sub>OC</sub>	β	[%/K]	-0.29
Temperature Coefficient of P <sub>MPP</sub>	γ	[%/K]	-0.40	Normal Operating Cell Temperature	NOCT	[°F]	113 ± 5.4 (45 ± 3 °C)

### PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V <sub>sys</sub>	[V]	1000 (IEC) / 1000 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	C (IEC) / TYPE 1 (UL)
Max Load (UL) <sup>2</sup>	[lbs/ft <sup>2</sup> ]	75 (3600 Pa)	Permitted module temperature on continuous duty	-40°F up to +185°F (-40 °C up to +85 °C)
Load Rating (UL) <sup>2</sup>	[lbs/ft <sup>2</sup> ]	55.6 (2666 Pa)		<sup>2</sup> see installation manual

### QUALIFICATIONS AND CERTIFICATES

UL 1703; VDE Quality Tested; CE-compliant;  
IEC 61215 (Ed.2); IEC 61730 (Ed.1) application class A



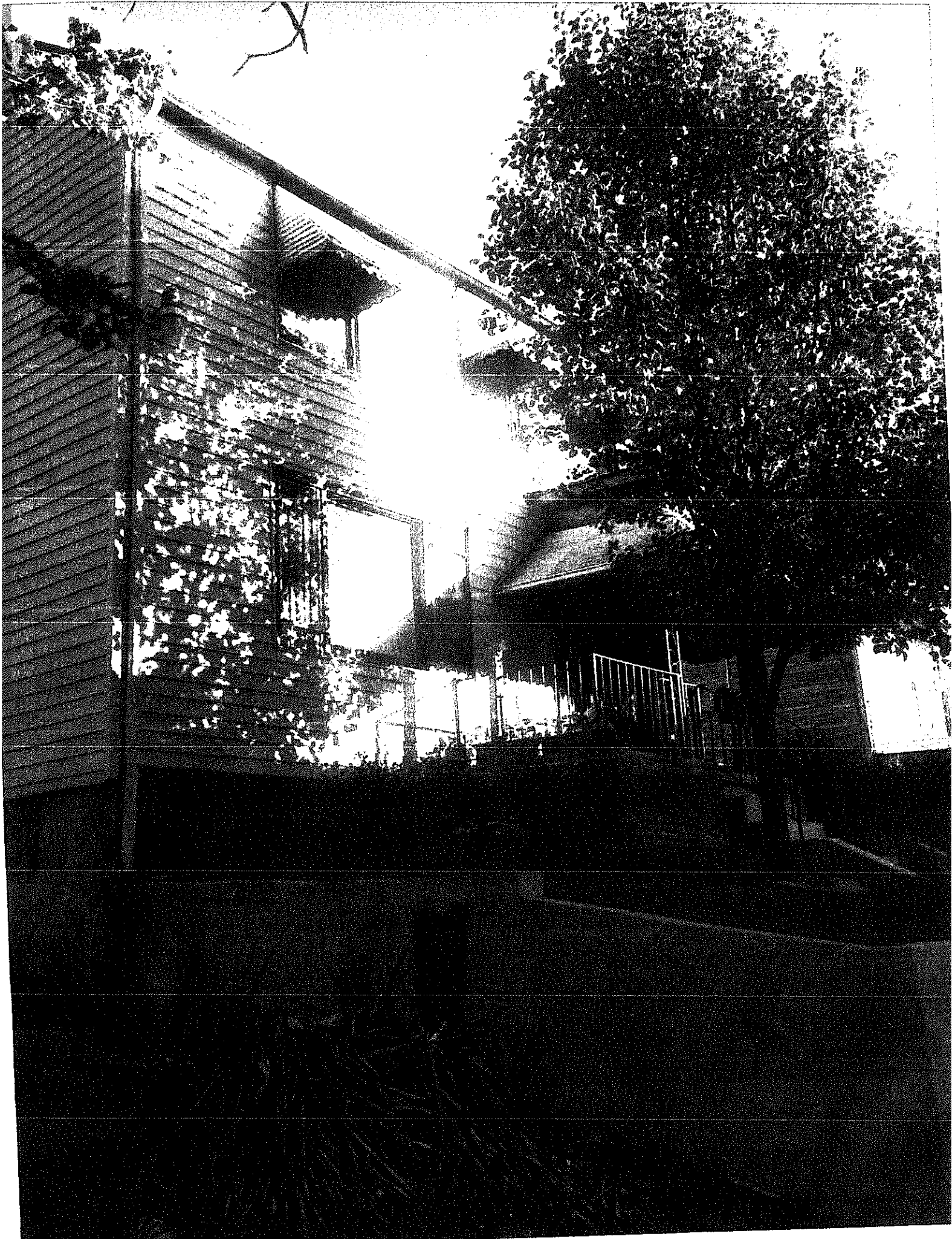
### PACKAGING INFORMATION

Number of Modules per Pallet	32
Number of Pallets per 53' Container	32
Number of Pallets per 40' Container	26
Pallet Dimensions (L × W × H)	68.7 in × 45.3 in × 46.1 in (1745 × 1150 × 1170 mm)
Pallet Weight	1435 lb (651 kg)

**NOTE:** Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

**Hanwha Q CELLS America Inc.**  
300 Spectrum Center Drive, Suite 1250, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

Specifications subject to technical changes © Hanwha Q CELLS Q.P.LUS BFR-G4-270-280\_2015-12\_Rev02\_NA



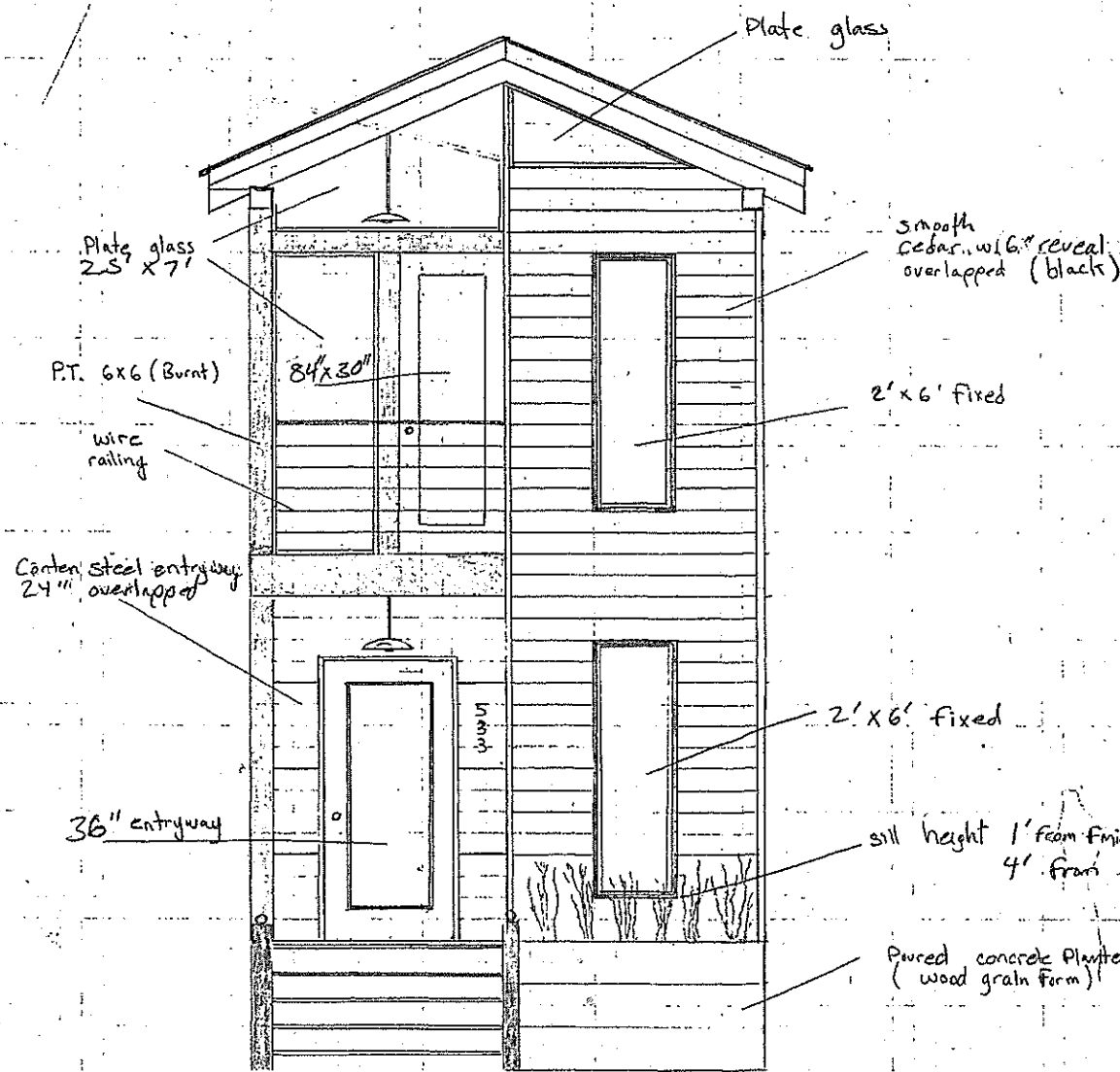


Union Hill (Masby St.)  
792 S.F

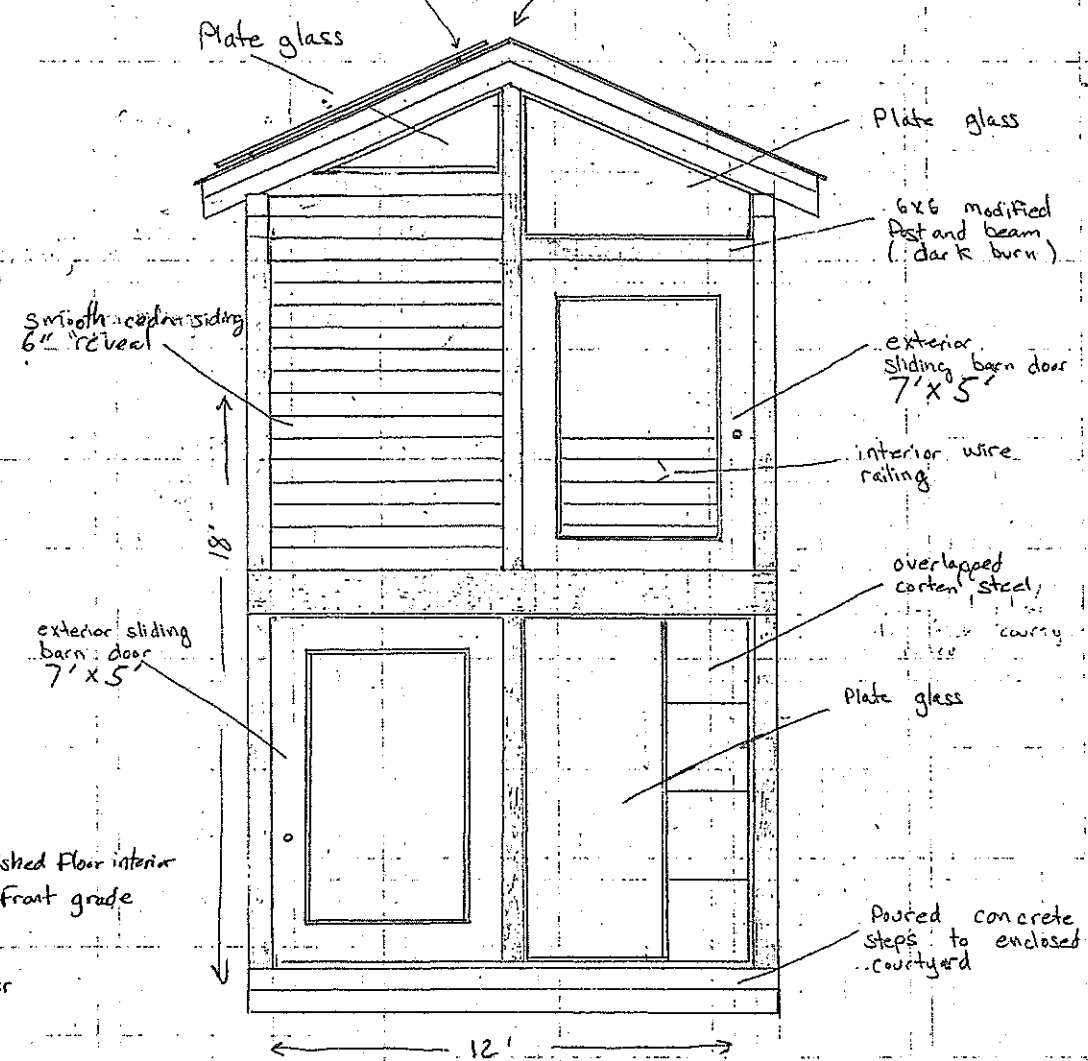
Solar panels on south slope of roof will not be visible from street due to height of roof and angle will not extend to front of house will be mounted flat to roof with minimal gap to maintain flush appearance

12 Panels 5' x 3' spec sheet included

12" 23" to top of ridge beam

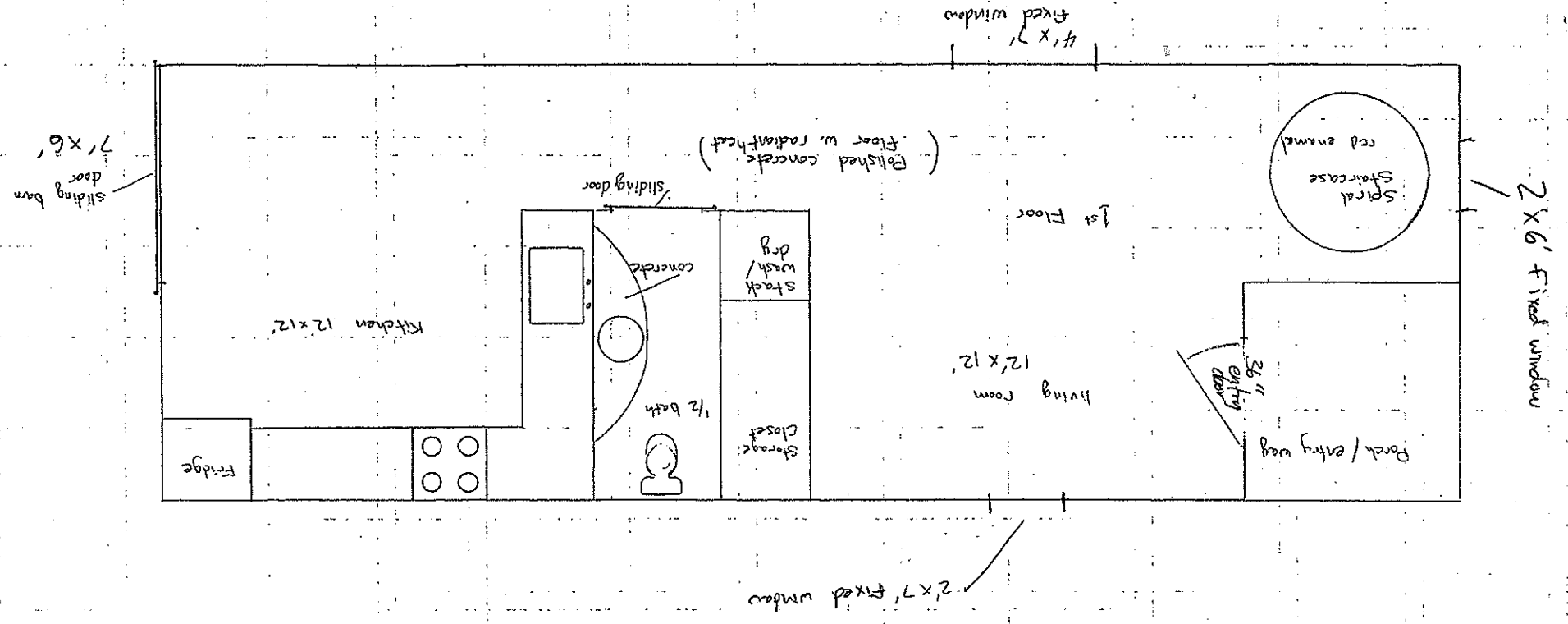
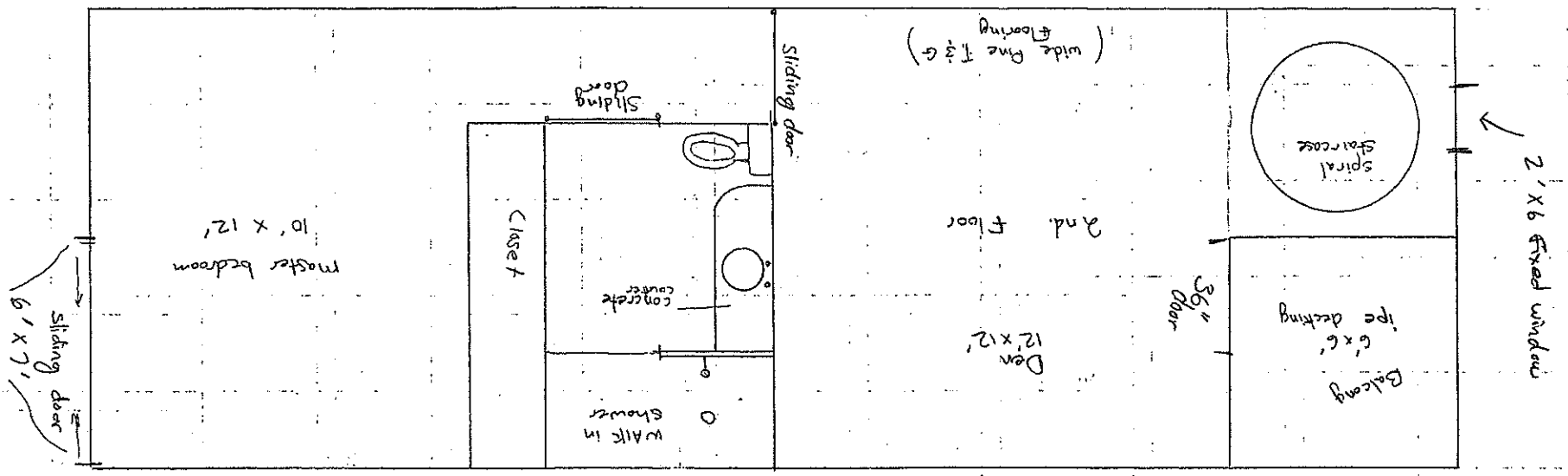


Front Elevation

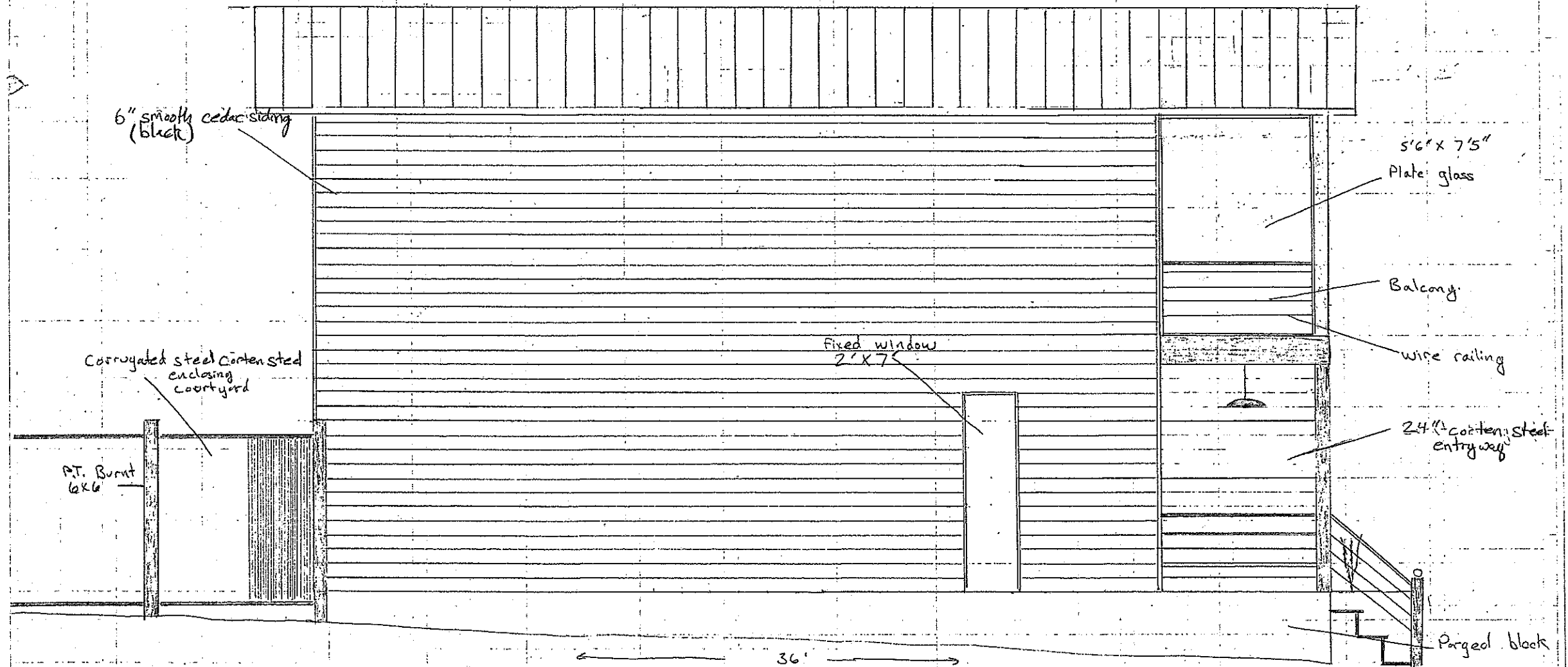


Rear Elevation





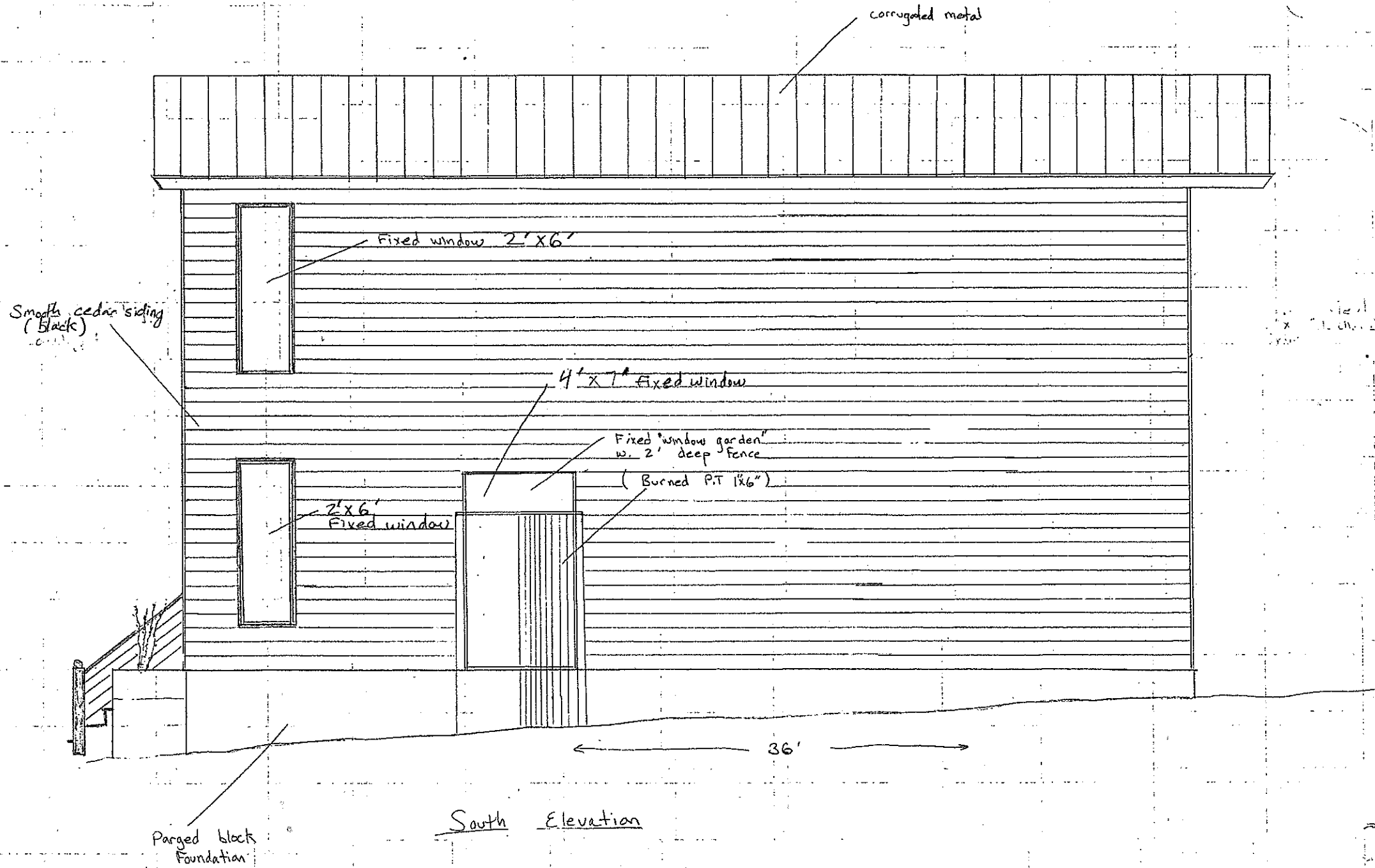
Union Hill (Masby St.)



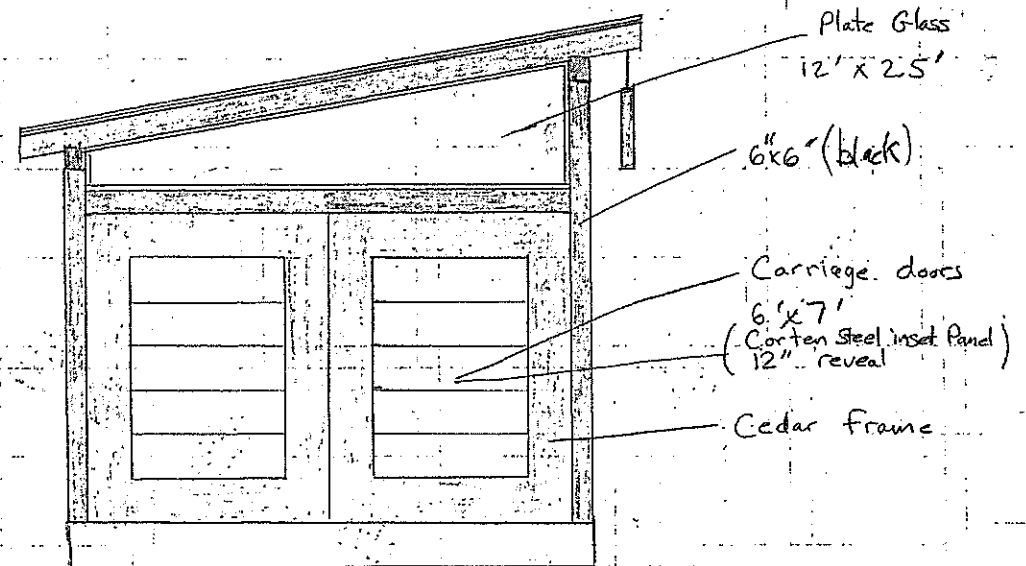
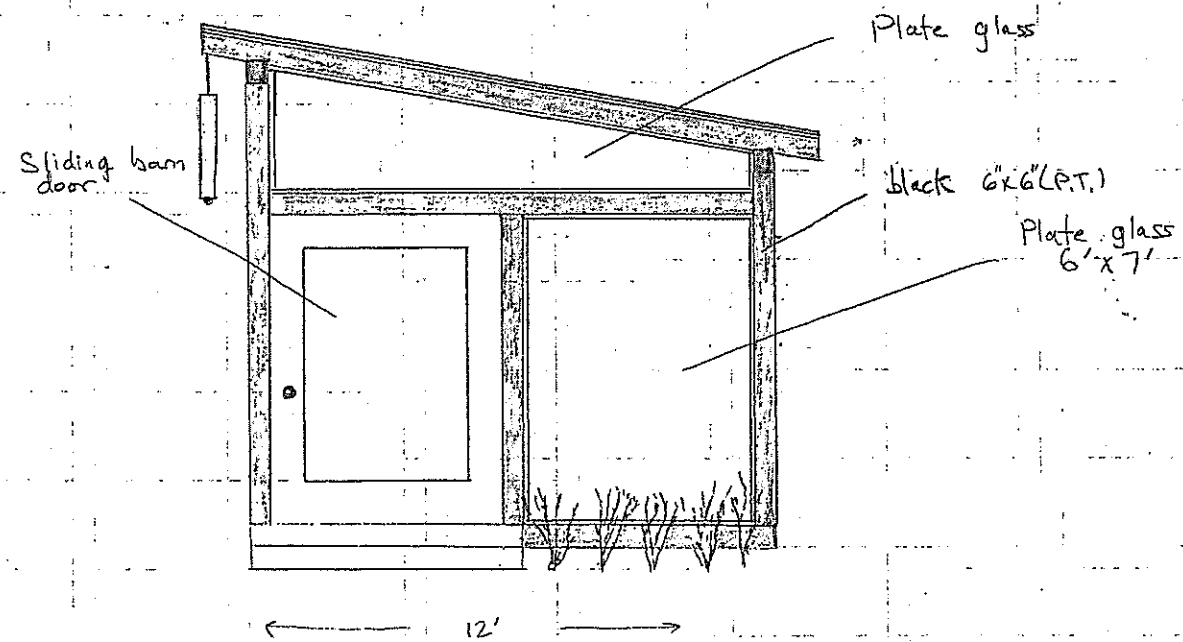
North Elevation

Union Hill (Mosby St.)  
792 S.F.

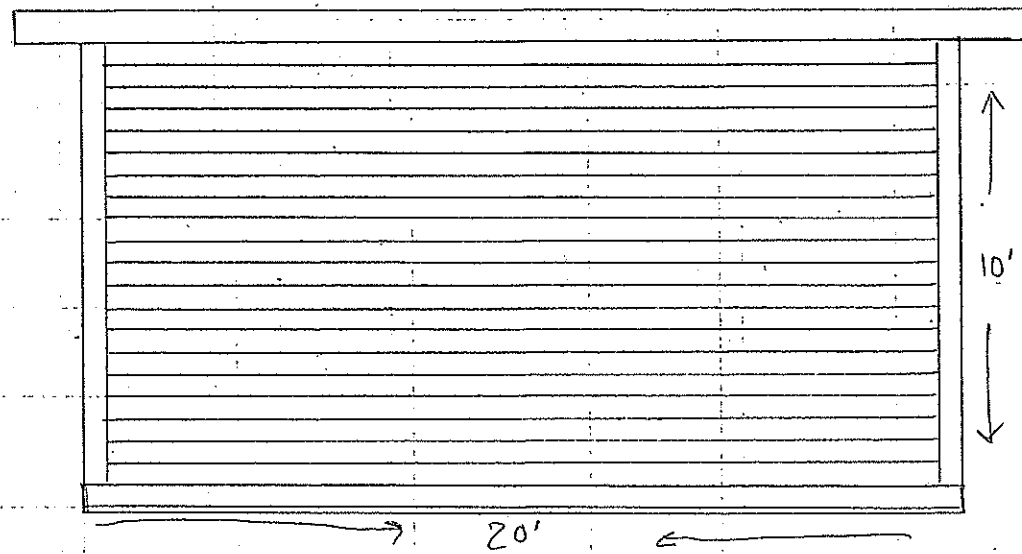
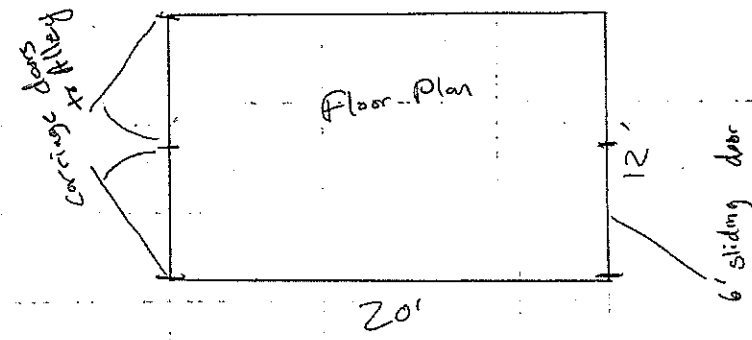
- Corrugated metal roof
- Cedar siding 6" reveal (black)



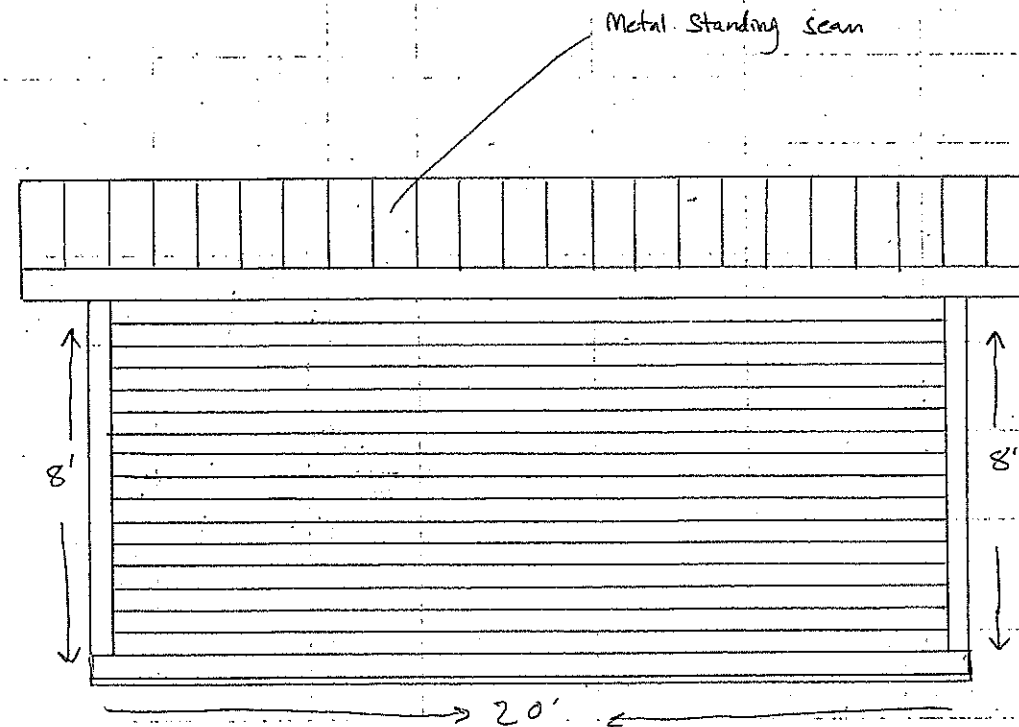
Studio 12" x 20" 192 sq ft  
Smooth cedar siding 2" reveal (black)



12'x20' carriage house/studio  
cedar siding to match house (black)  
concrete pad  
Black cedar carriage doors w. corten steel inset panels



North Elevation



South Elevation

Union Hill 533 Mosby St.  
Context Drawing

