#### ADAM FRANCH

#### April 15, 2022

Attn: Elise Semonian, Planning Director Project Manager Town of San Anselmo 525 San Anselmo Avenue San Anselmo, CA 94960

#### **Re: 9 Laurel Avenue - Shadow Study Verification**

#### Dear Ms Semonian,

I have reviewed the shadow study for the proposed remodel & addition project located at 9 Laurel Avenue in San Anselmo California, APN 007-112-11. The referenced documents include the 9 Laurel Avenue Drawings, a Numerical Shadow Impact excel file, Study 01 SketchUp Model, Study 02 SketchUp Model, Study 01 PDF, and Study 02 PDF. The referenced file versions are noted here:

Name	Date modified	Туре	Size
🔊 3-23-2022 - 9 Laurel Ave. Study 02 updated	4/11/2022 12:22 PM	SketchUp Pro 2022	25,828 KB
🔊 3-23-2022 - 9 Laurel Ave. Study 01 updated	3/25/2022 11:33 AM	SketchUp Pro 2022	27,694 KB
3-23-2022 - 9 Laurel Ave. Numerical Shadow Impact 3-23-2022	3/25/2022 11:32 AM	Microsoft Excel Worksheet	19 KB
🛃 3-23-2022- 9 Laurel Ave. Study 01	3/25/2022 11:32 AM	Adobe Acrobat Document	10,028 KB
🛃 3-23-2022- 9 Laurel Ave. Study 02	3/25/2022 11:33 AM	Adobe Acrobat Document	12,519 KB
🛃 9 Laurel Ave. APN 007-112-11 Drawings	4/15/2022 11:29 AM	Adobe Acrobat Document	46,971 KB

After completing an analysis of the provided documents, I can confirm the revised shadow study is substantially accurate. As a part of the review, I have confirmed the 3D model is accurately geo-located at longitude 122.571453W and latitude 37.978648N; The proposed structures are accurately modeled in the 3D file and match the proposed project drawings, site plan, building height, and solar North is accurately identified in the 3D model. The Shadow Study 01 and Shadow Study 02 pdf files accurately represent the amount of shadow cast from the proposed project onto the neighboring property. In addition, the Numerical Shadow Impact excel file accurately identifies the minutes of daylight versus the minutes of additional shadow cast onto the neighboring property.

Please contact me with any additional questions.

Best Regards,

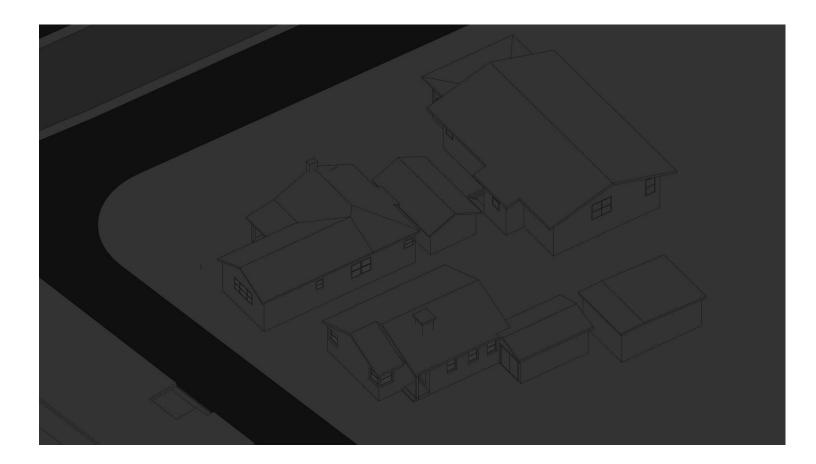
Adam Franch, AIA C-34374 Adam@dev-arc.com 720-219-2117

# Shadow Study #1 for 9 Laurel Ave.

#### ITEM 7 - ATTACHMENT 8

#### 06:00 am

Sunrise at 7:22 am



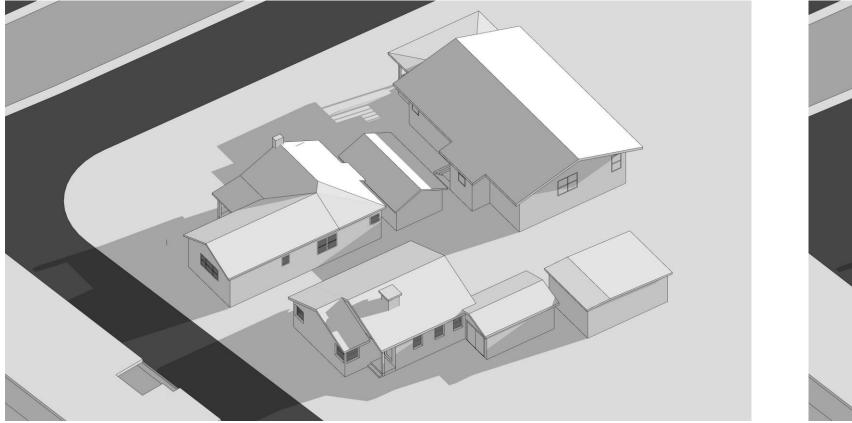


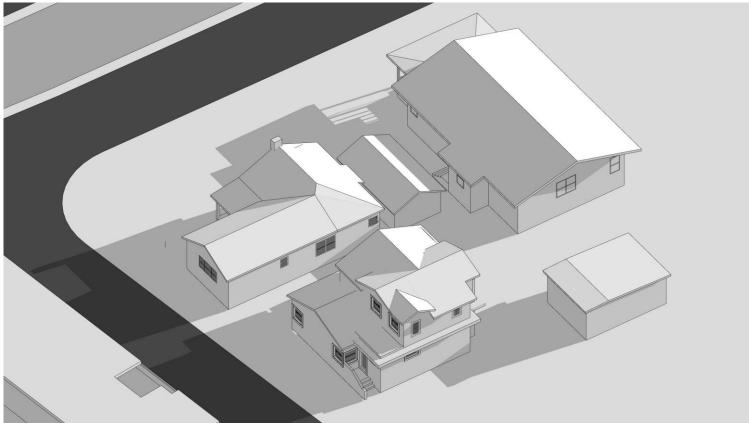
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

09:00 am



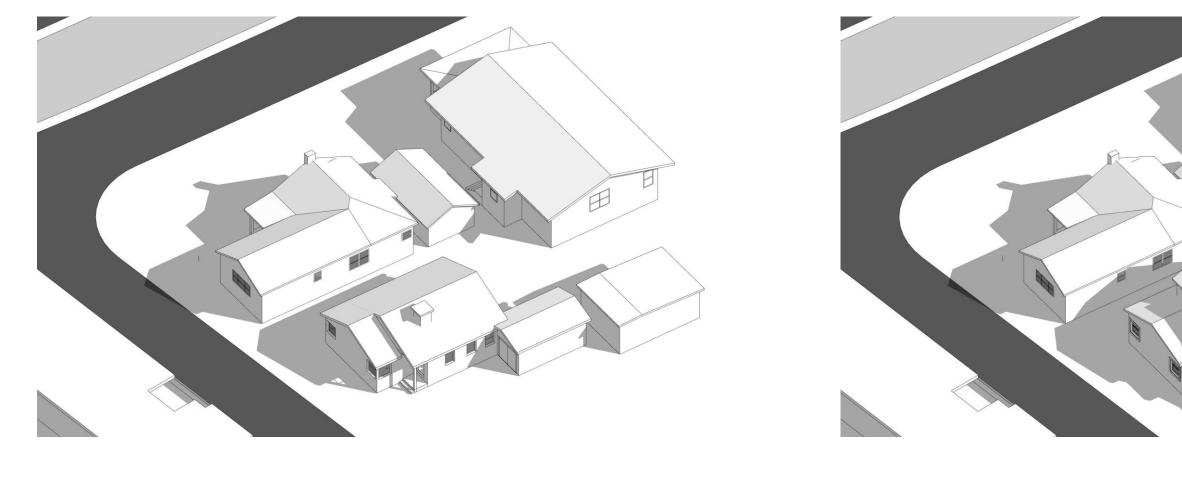


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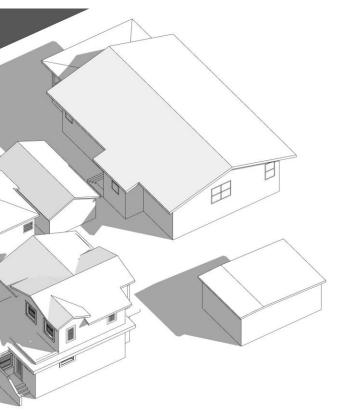
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

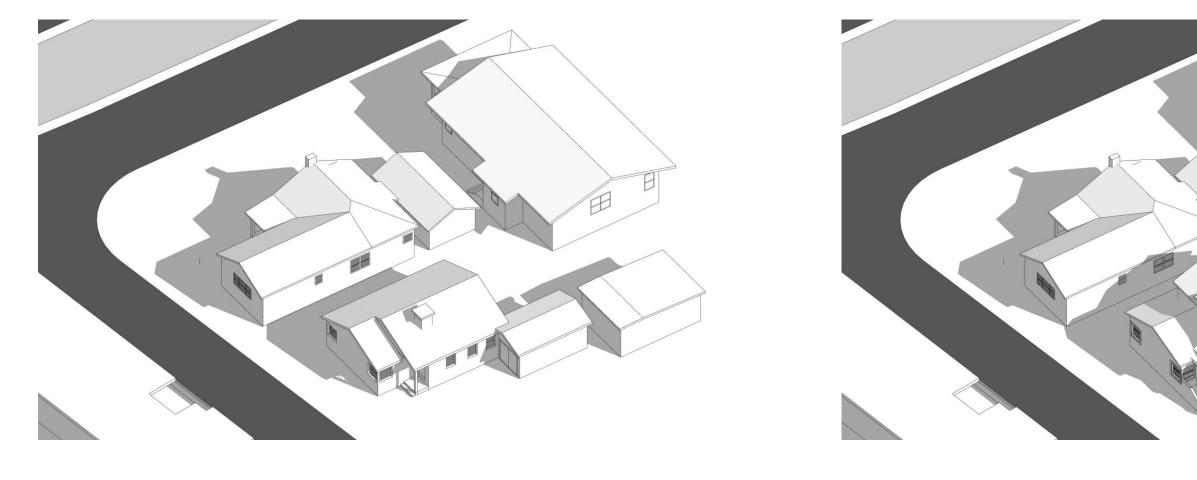
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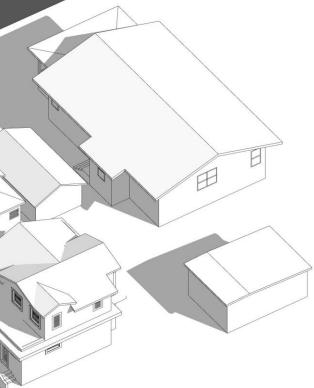
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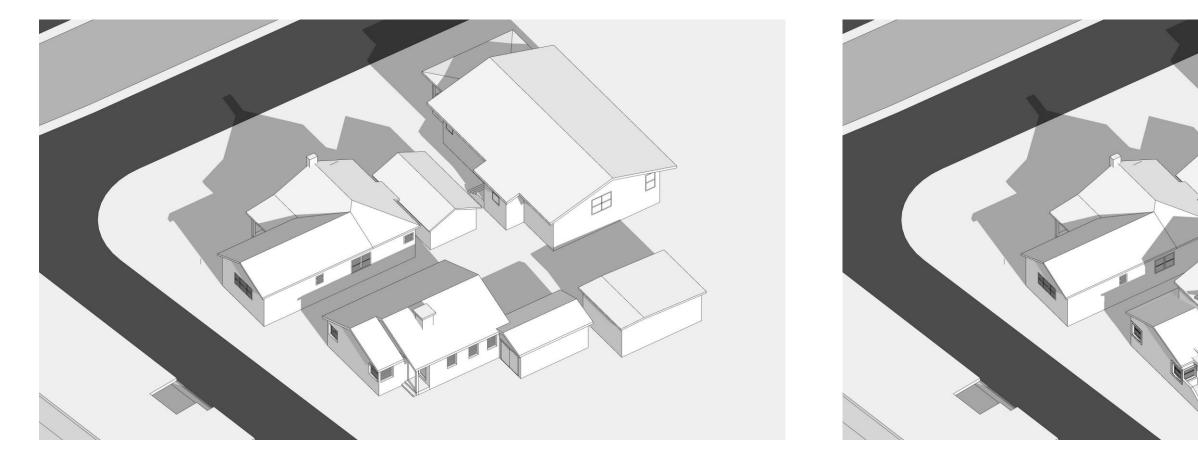
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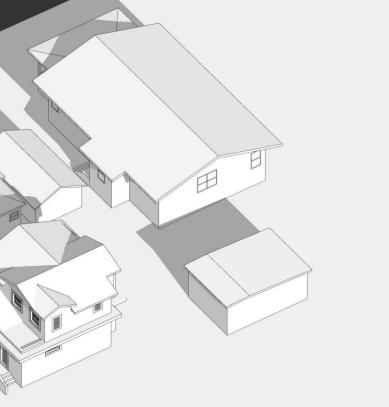
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03:00 pm



EXISTING



04:00 pm



EXISTING

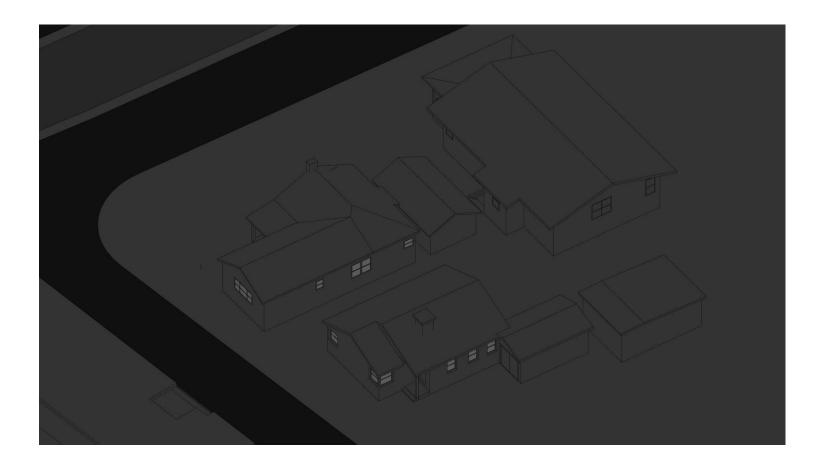
Shadow Study 9 Laurel Ave. San Anselmo

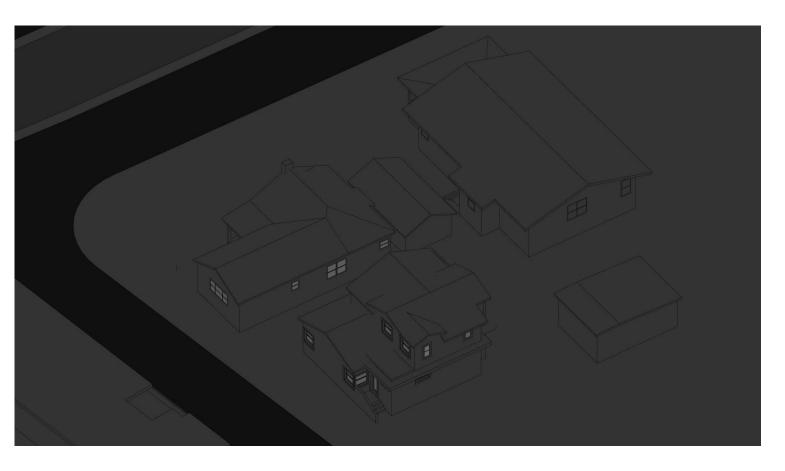
ITEM 7 - ATTACHMENT 8



### 06:00 pm

Sunset at 5:21 pm





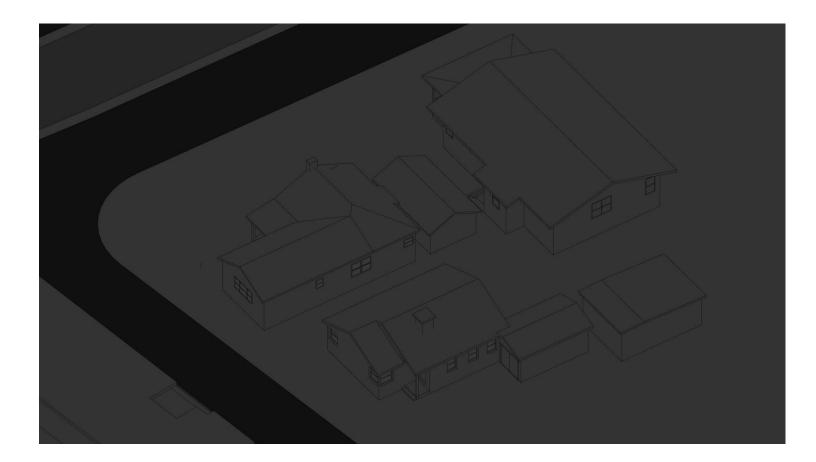
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Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

#### 06:00 am

Sunrise at 6:52 am



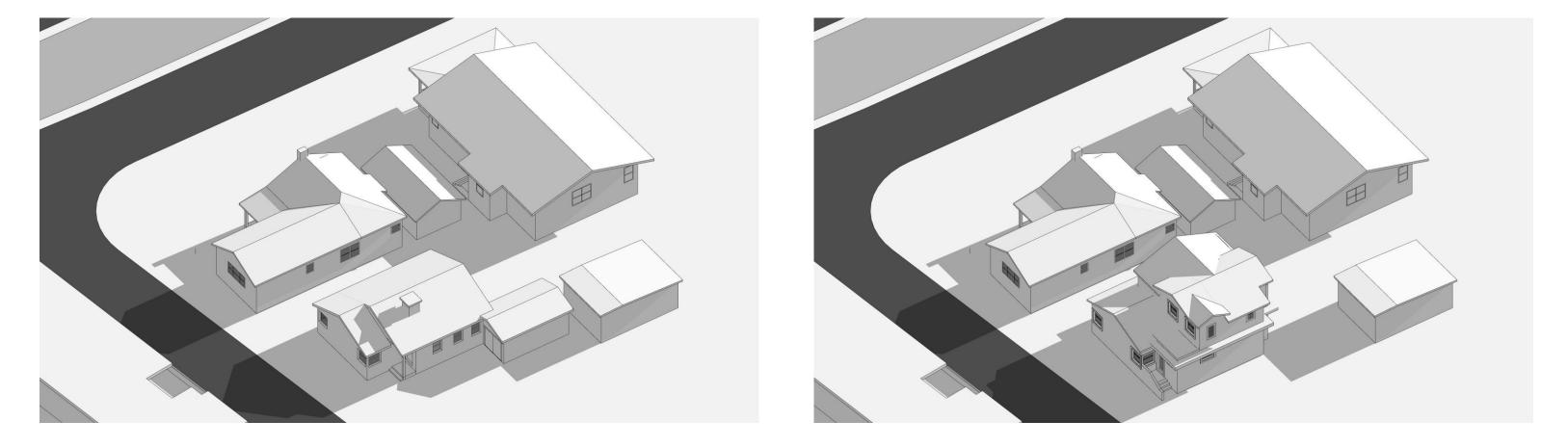


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Shadow Study 9 Laurel Ave. San Anselmo

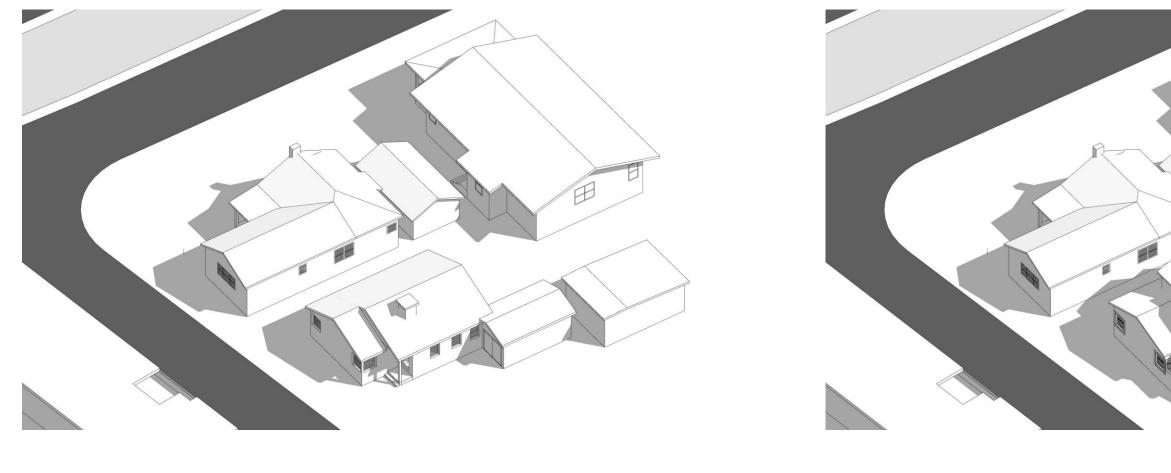
**ITEM 7 - ATTACHMENT 8** 

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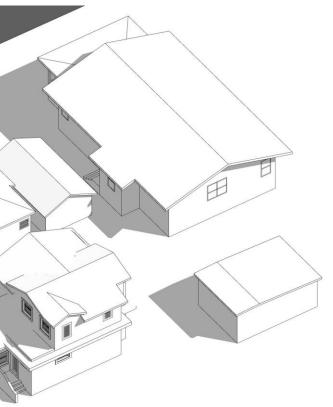


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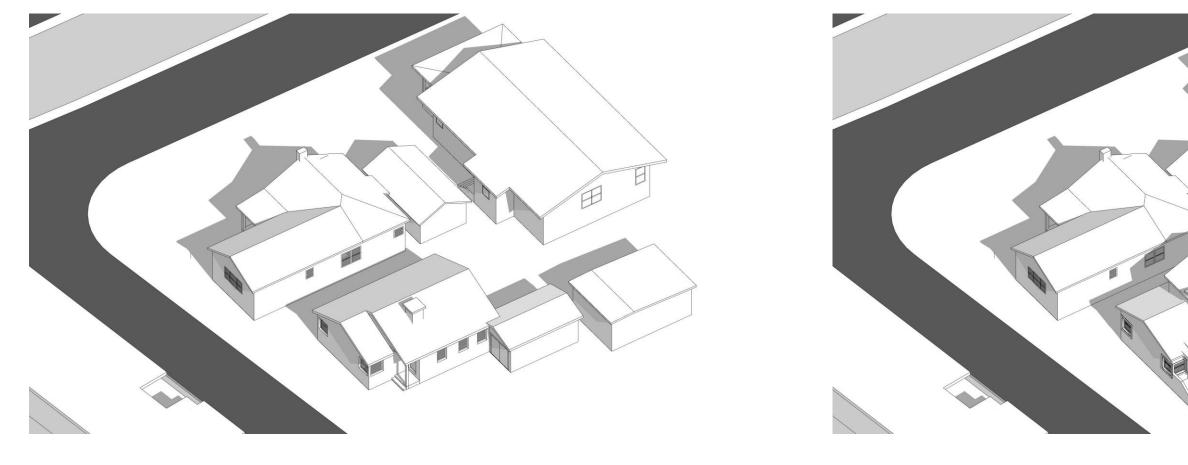
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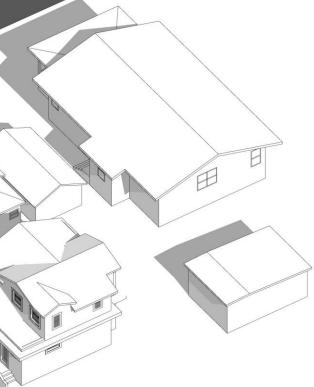
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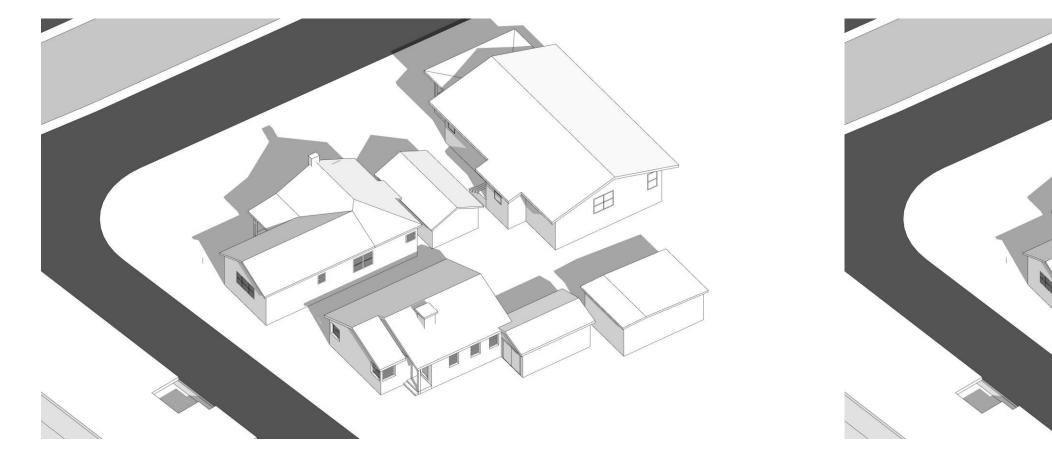
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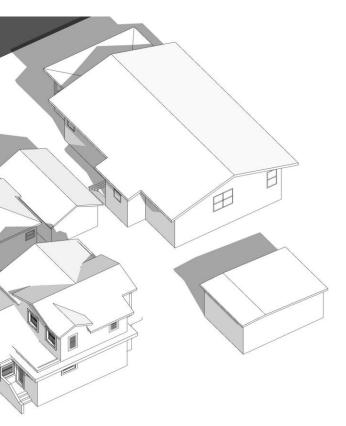
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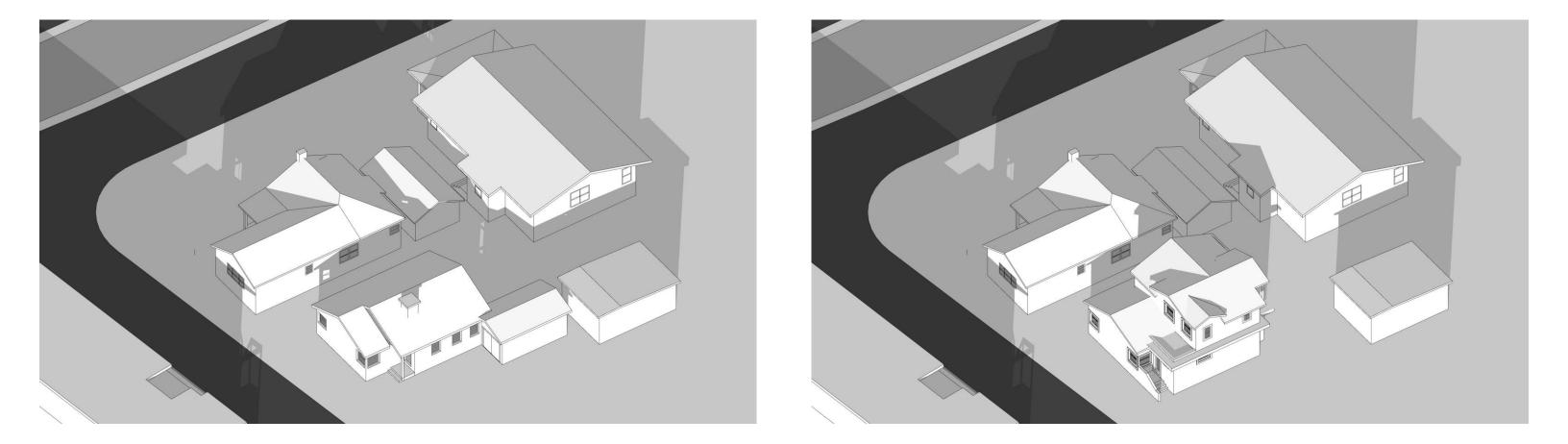
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EXISTING



05:00 pm



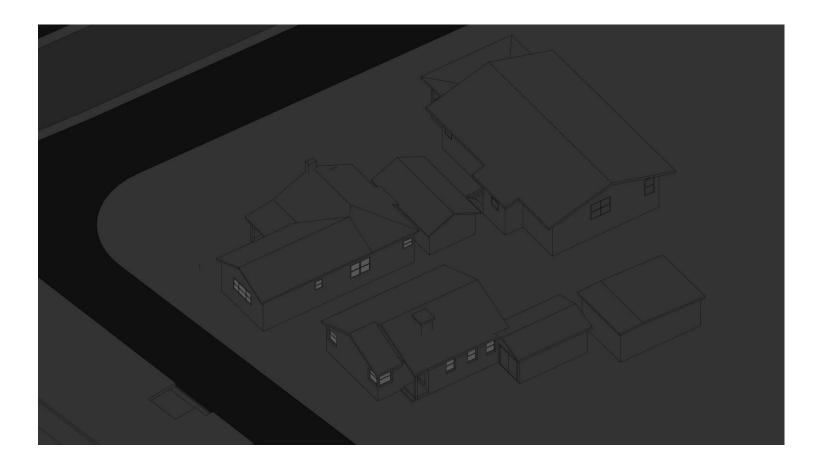
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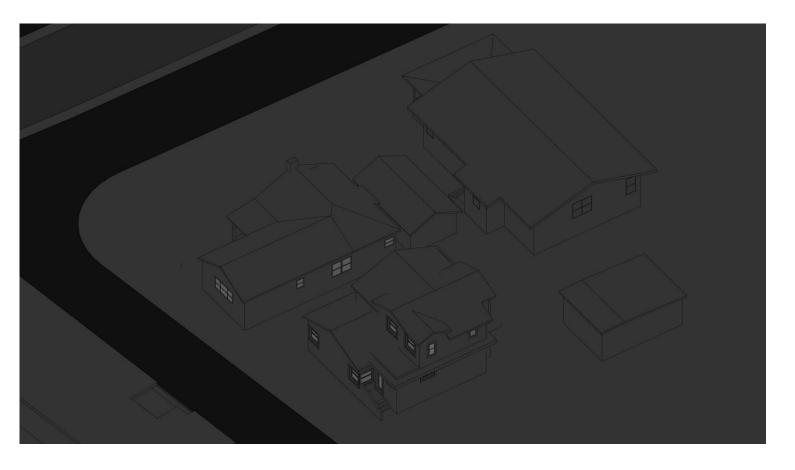
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

### 06:00 pm

Sunset at 5:55 pm





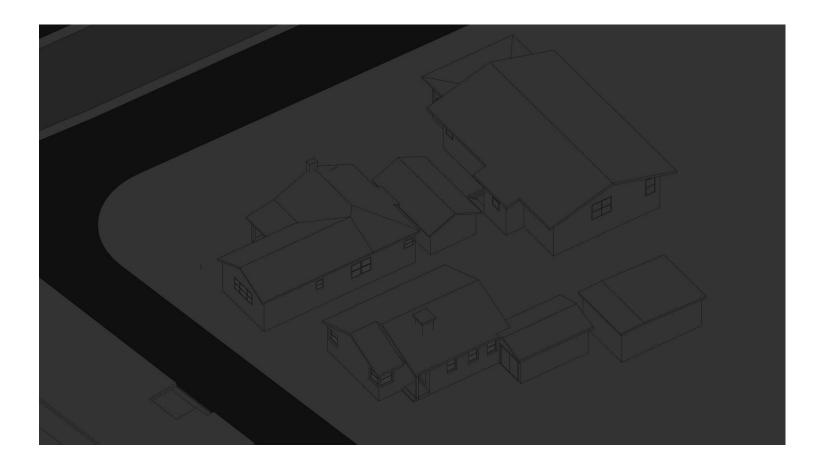
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Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

#### 06:00 am

Sunrise at 7:11 am



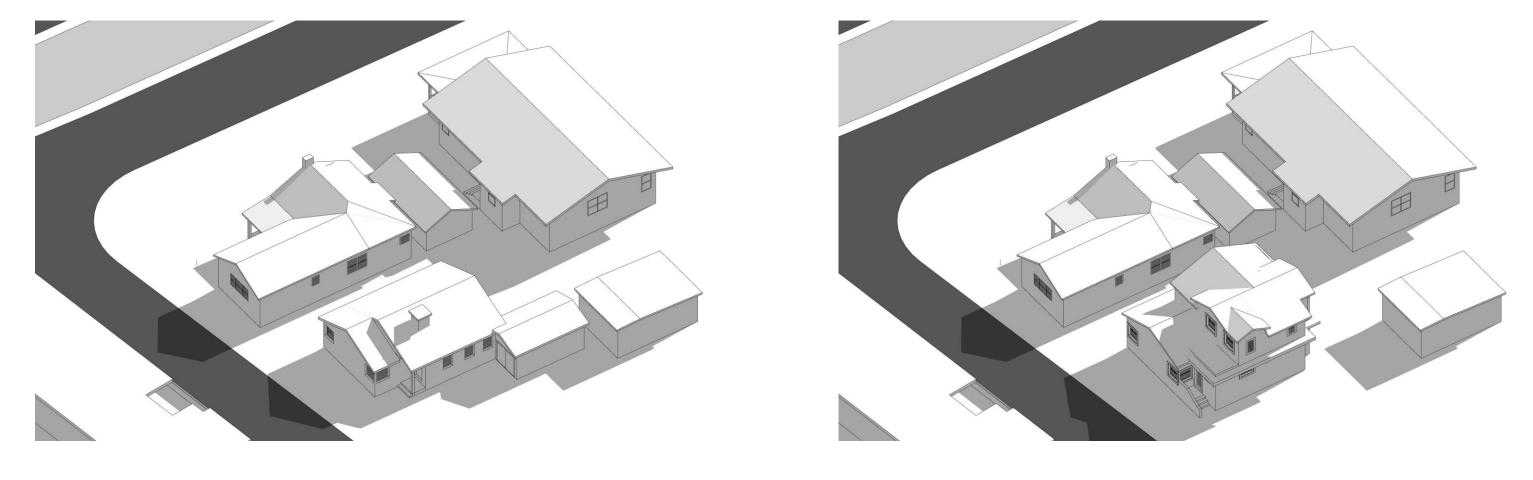


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Shadow Study 9 Laurel Ave. San Anselmo

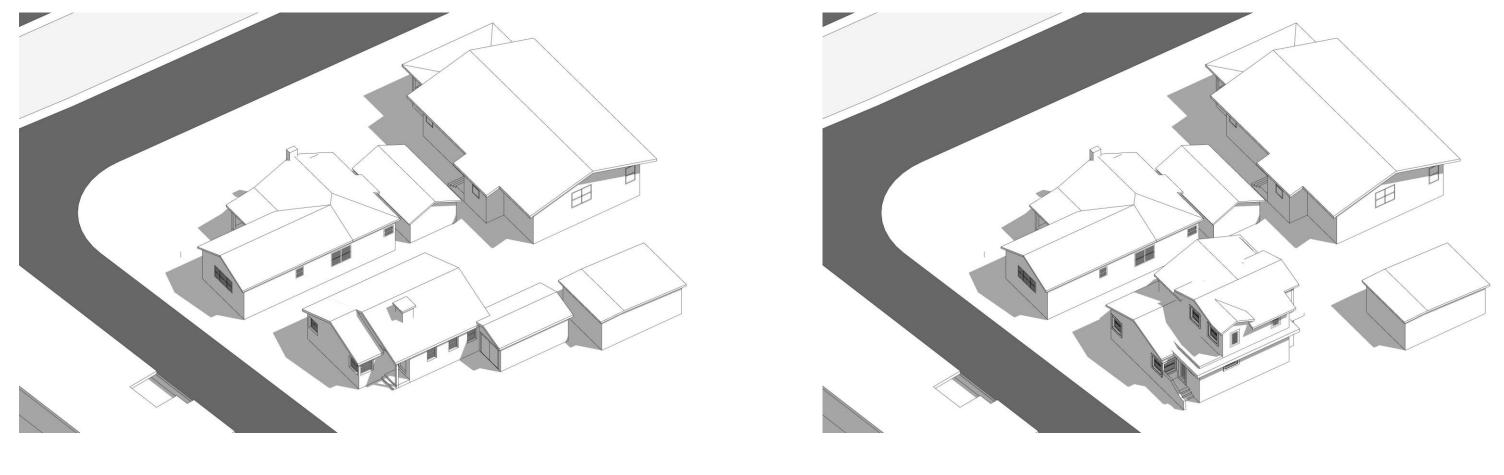
**ITEM 7 - ATTACHMENT 8** 

09:00 am



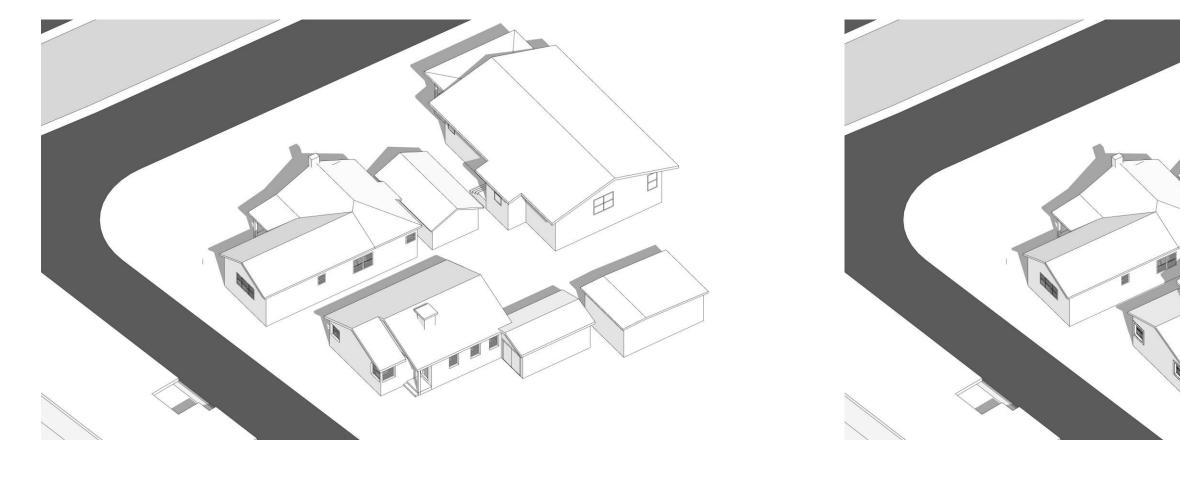
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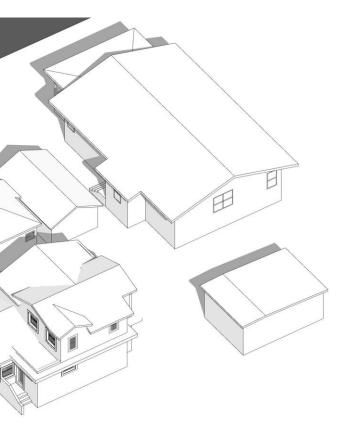


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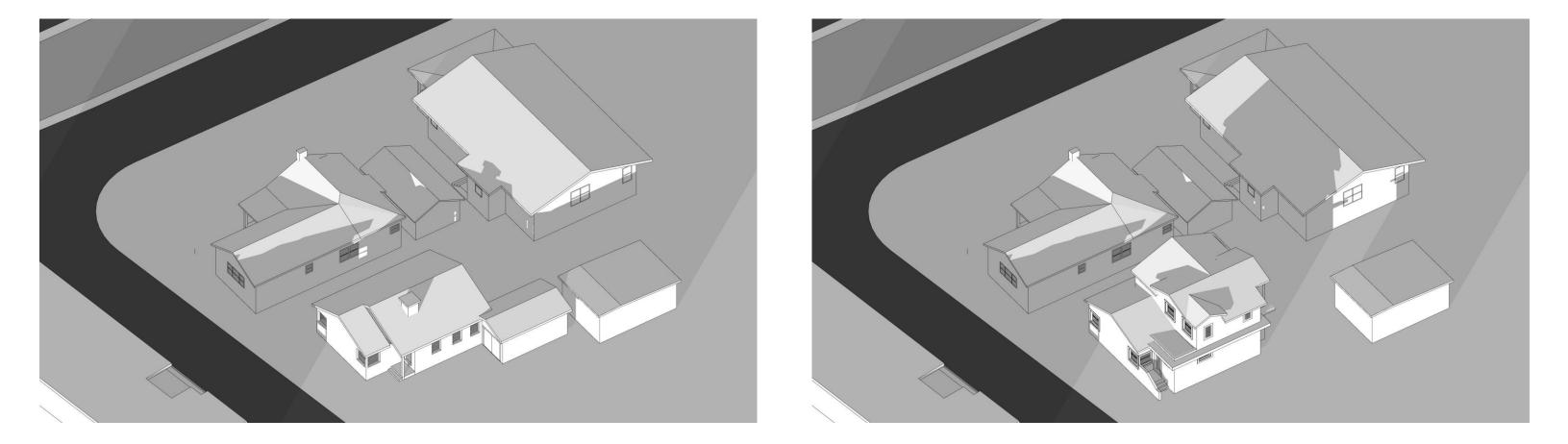


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### 06:00 pm

Sunset at 7:23 pm



EXISTING

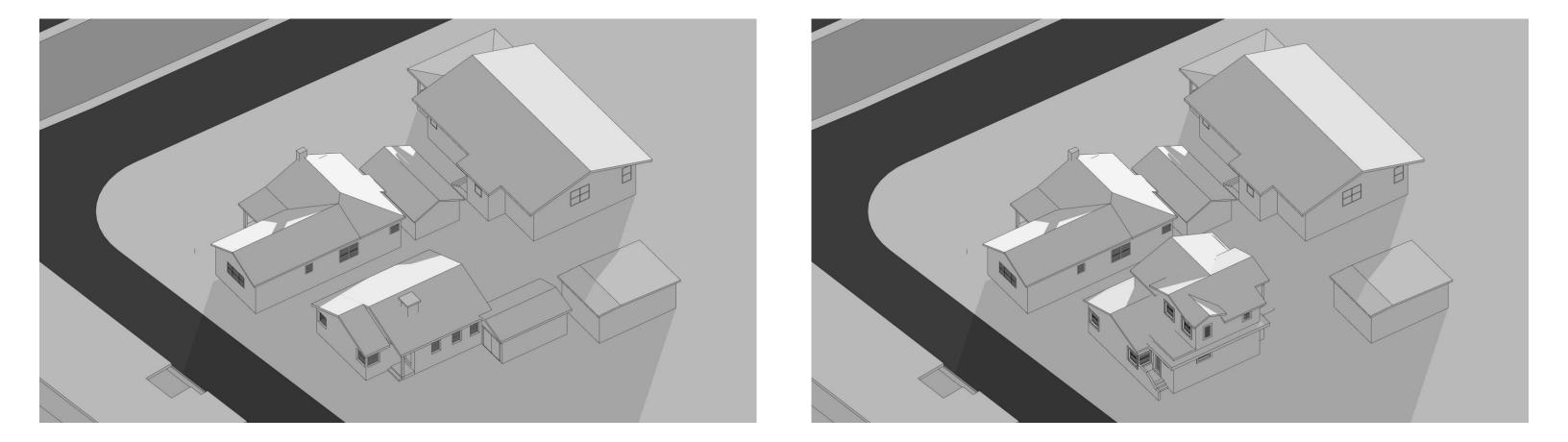
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

## April 21st

#### 06:00 am

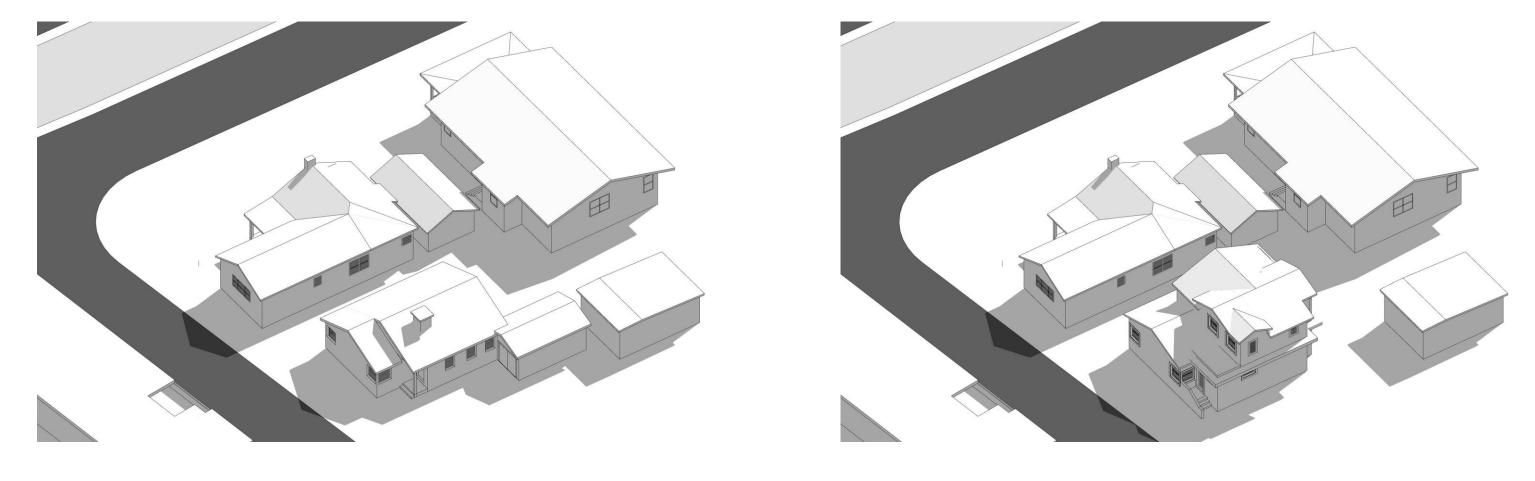
Sunrise at 6:26 am



EXISTING

April 21st

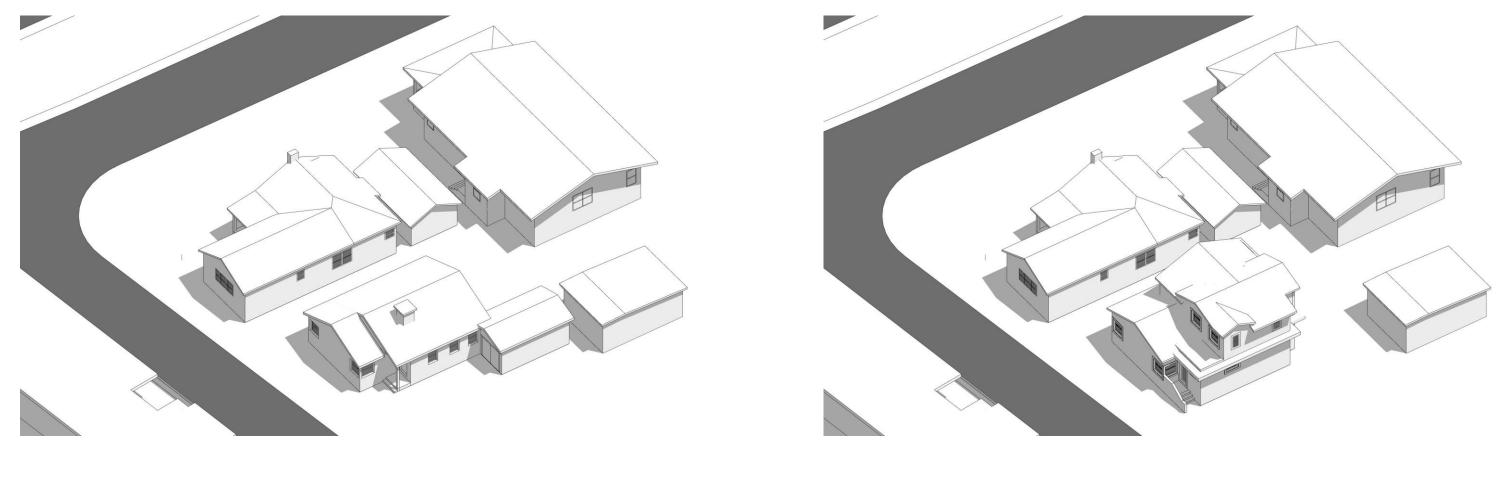
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EXISTING

April 21st

12:00 pm



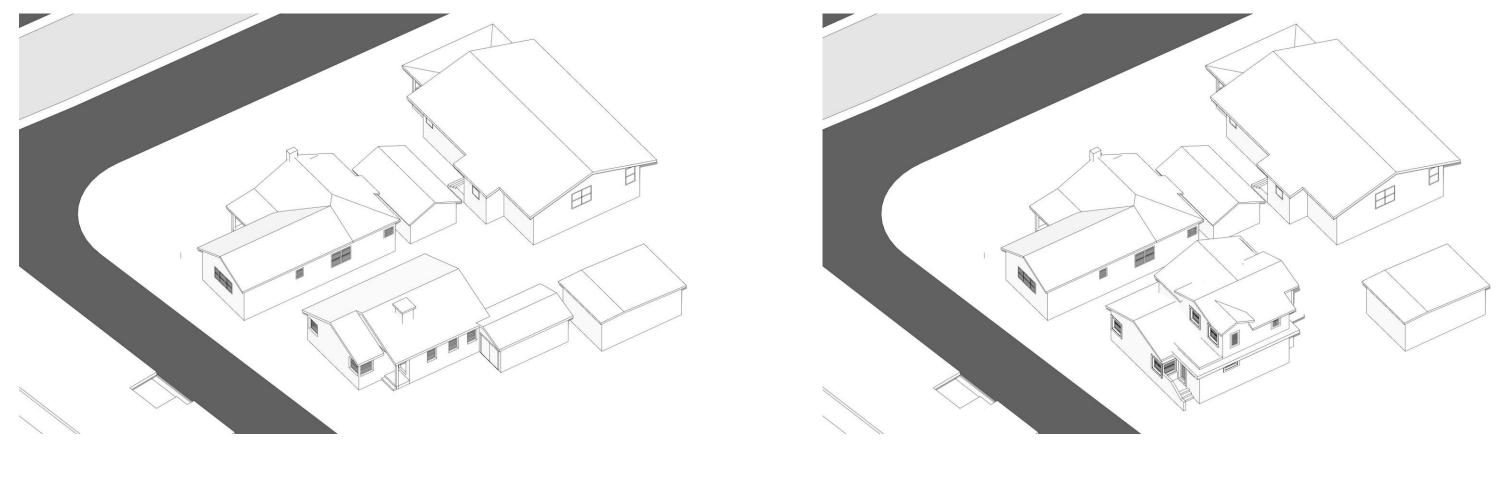
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Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

April 21st

## 03:00 pm

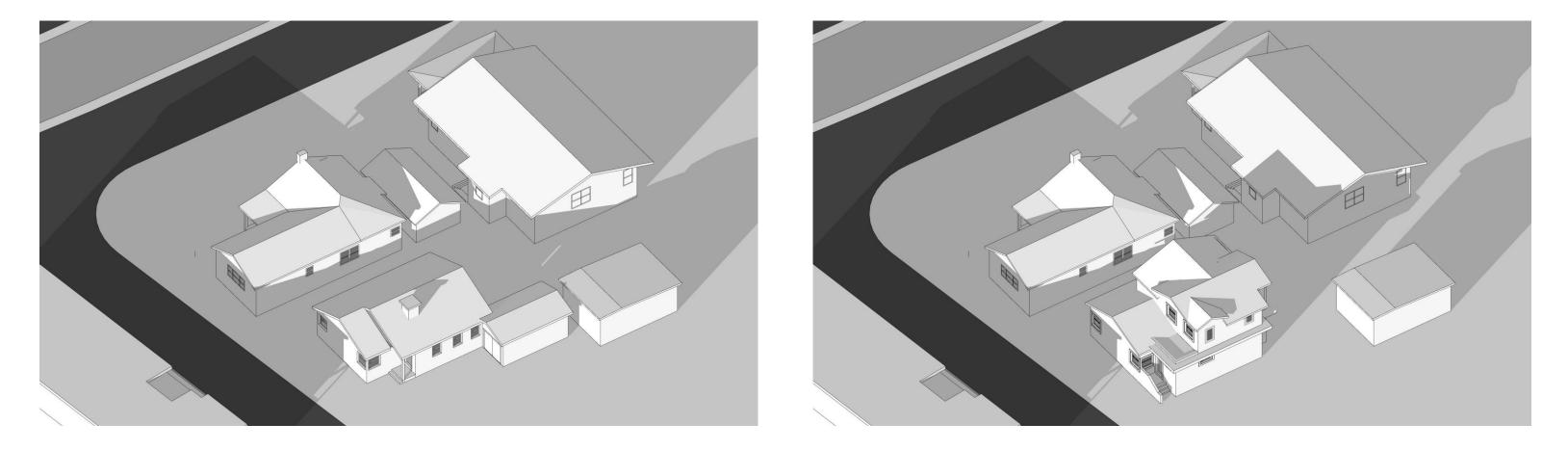


EXISTING

## April 21st

### 06:00 pm

Sunset at 7:52 pm



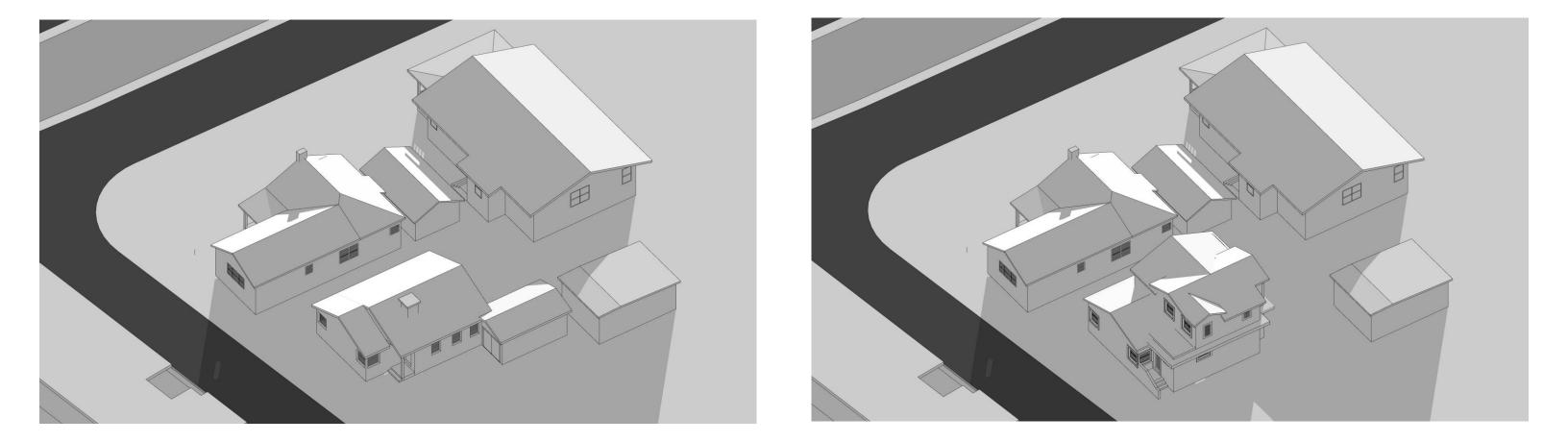
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Shadow Study 9 Laurel Ave. San Anselmo

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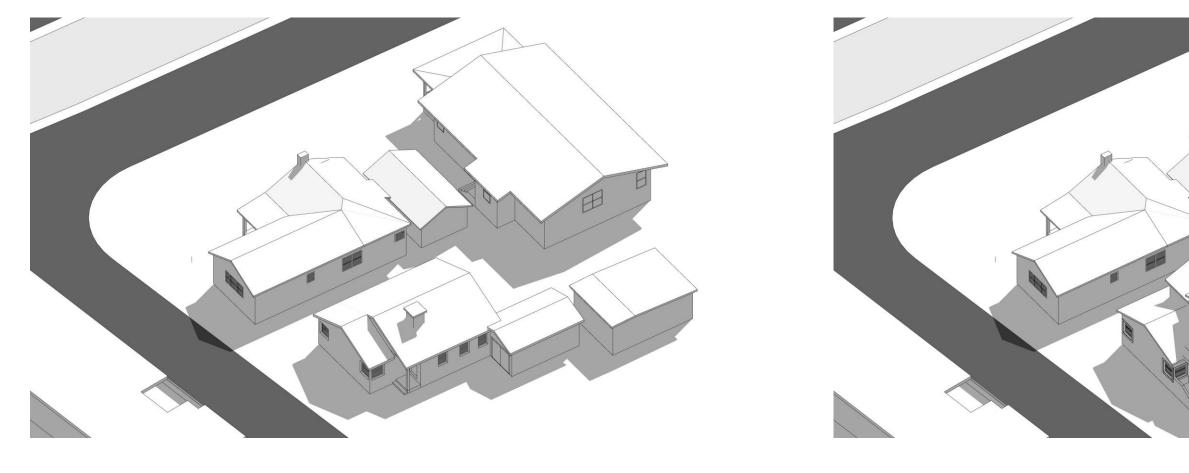
#### 06:00 am

Sunrise at 5:55 am



EXISTING

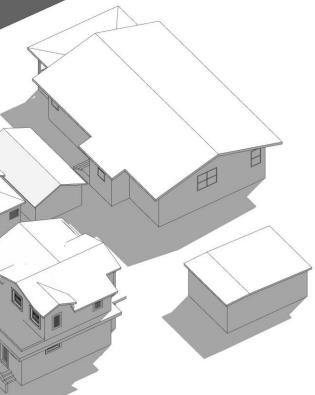
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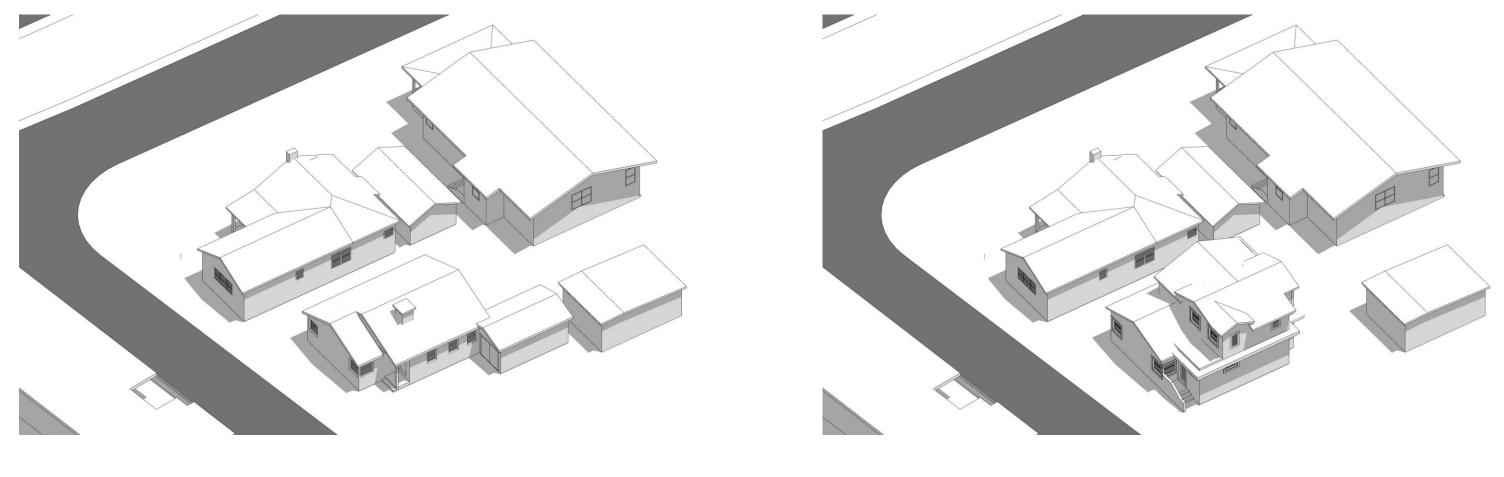
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Shadow Study 9 Laurel Ave. San Anselmo

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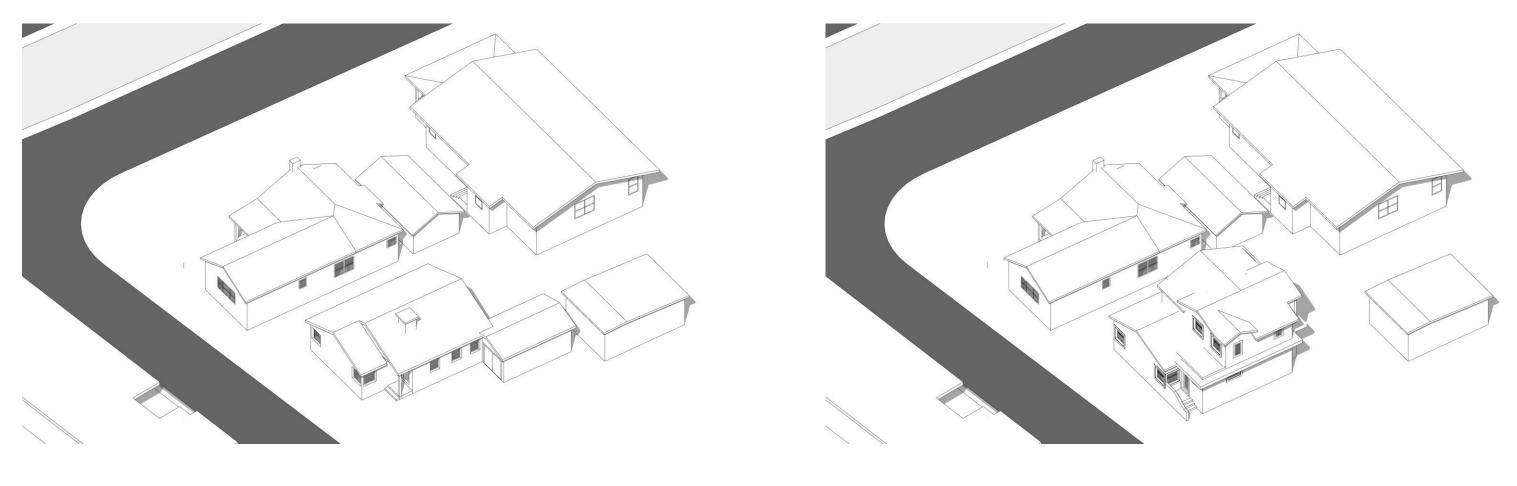


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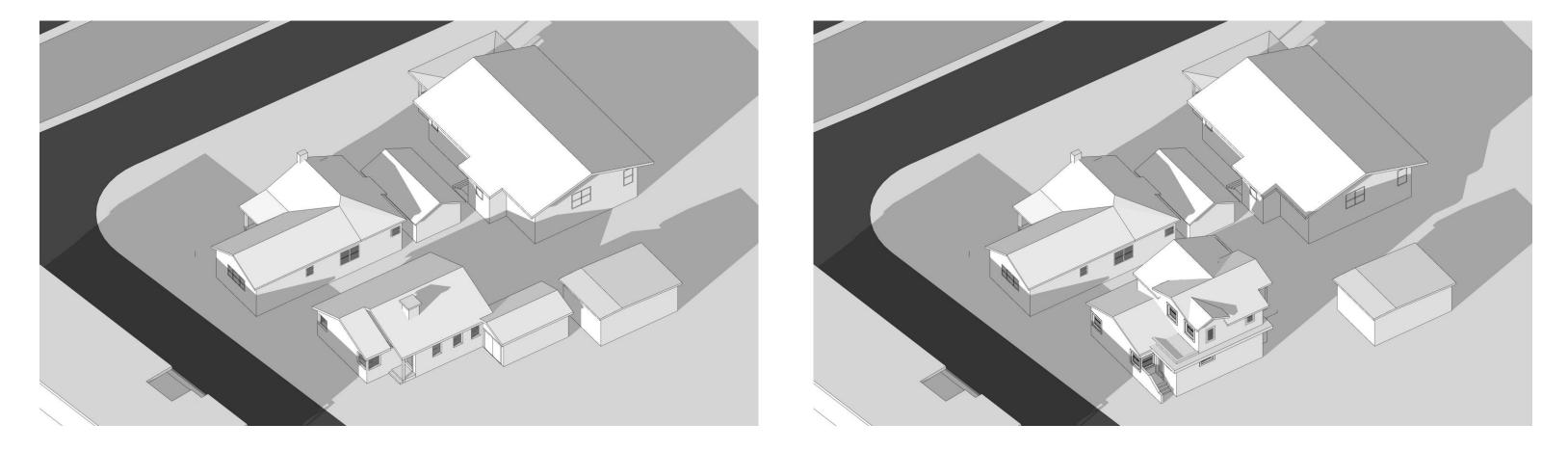
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EXISTING

### 06:00 pm

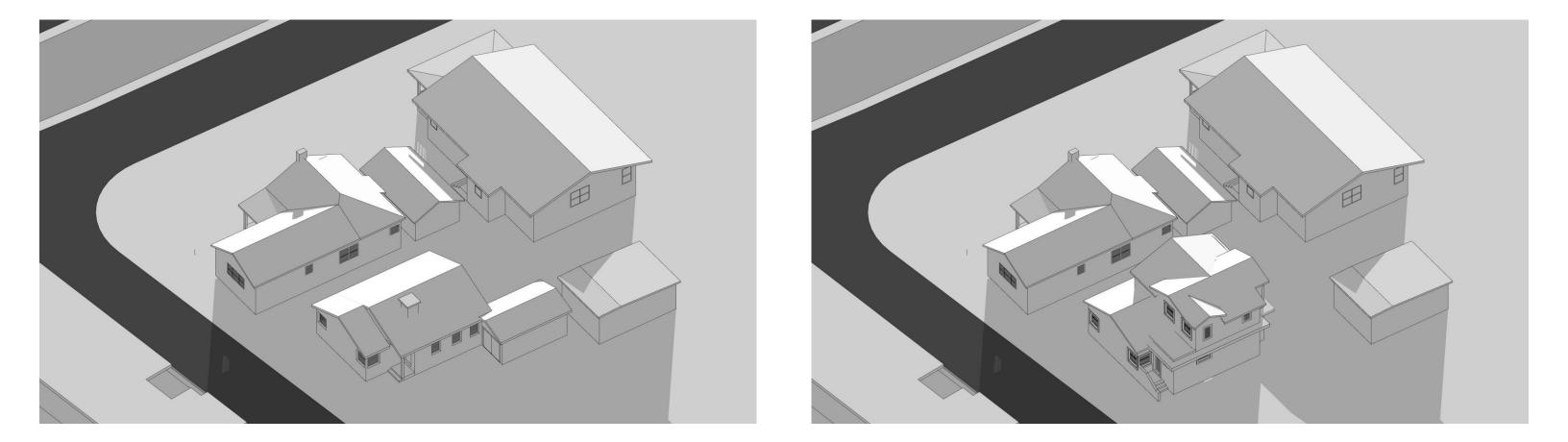
Sunset at 8:19 pm



EXISTING

#### 06:00 am

Sunrise at 5:48 am

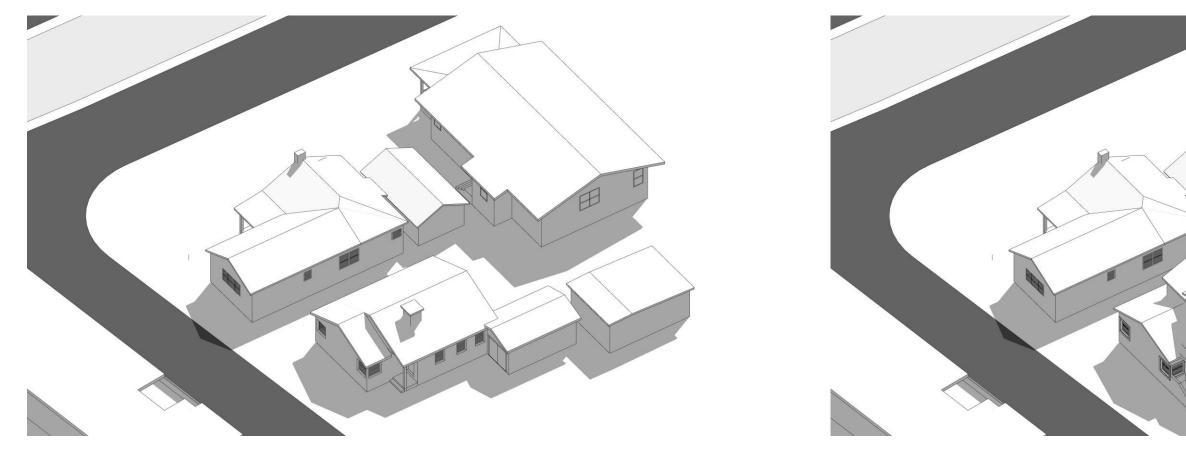


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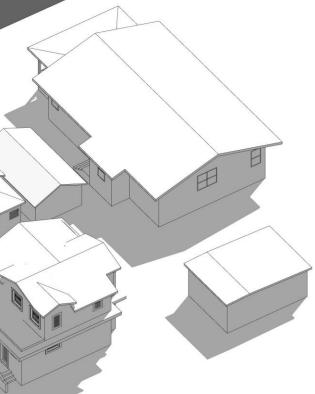
Shadow Study 9 Laurel Ave. San Anselmo

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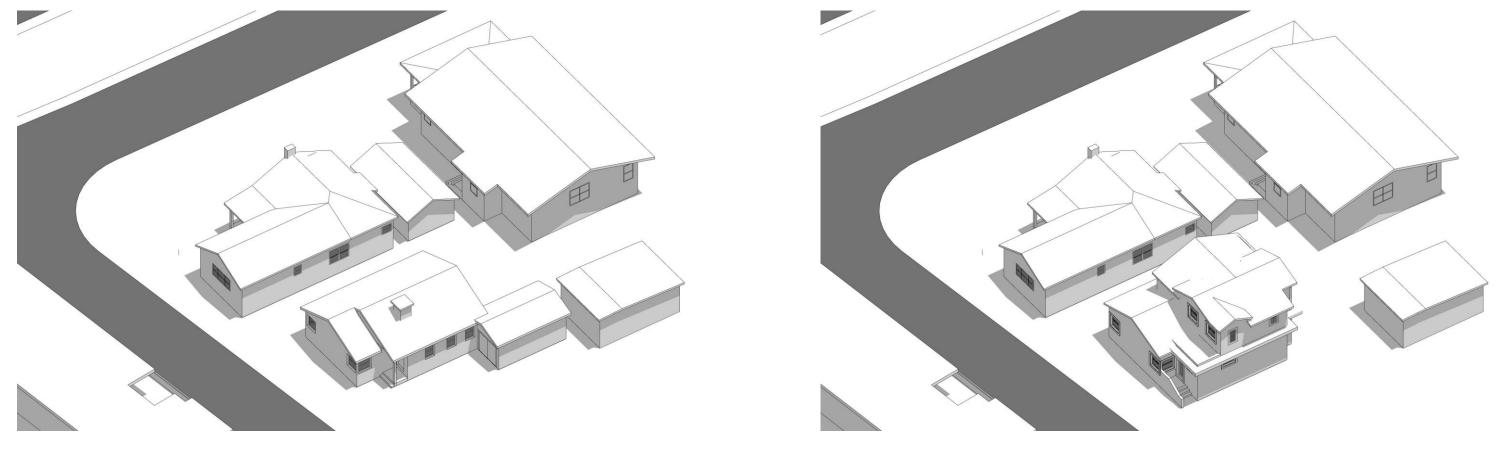
09:00 am



EXISTING

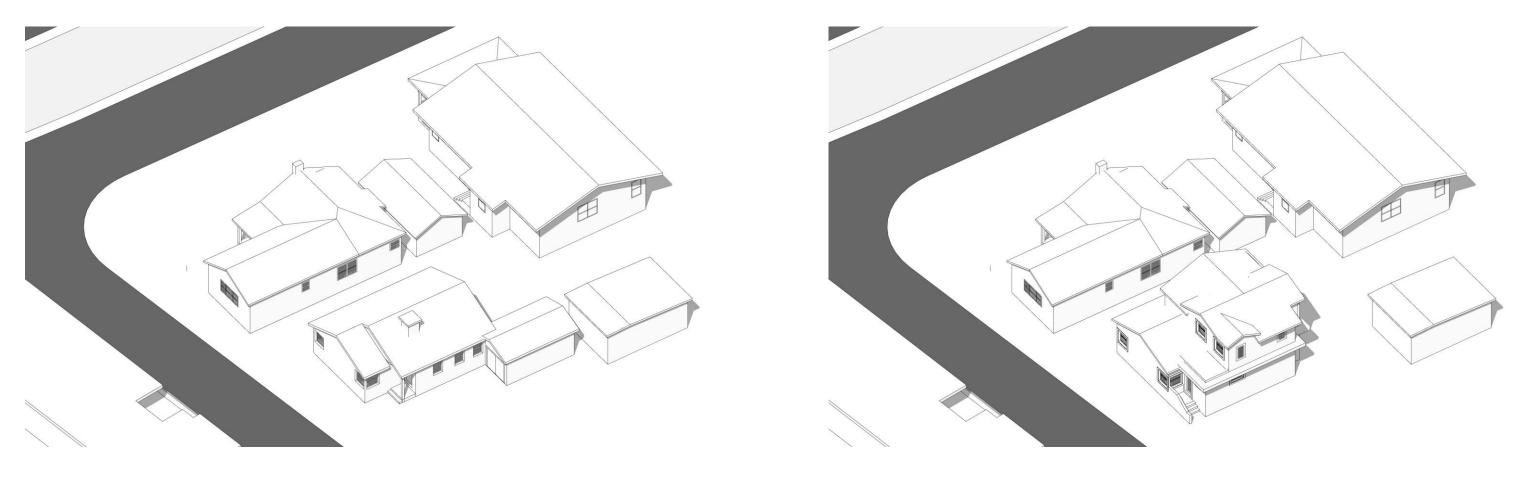


12:00 pm



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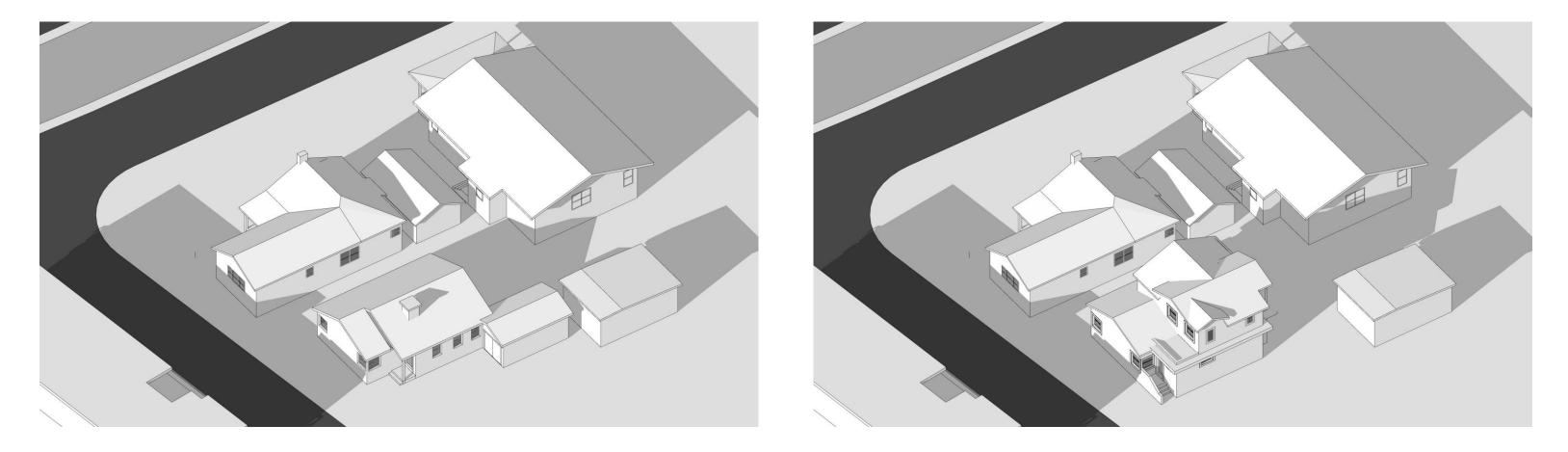
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EXISTING

## 06:00 pm

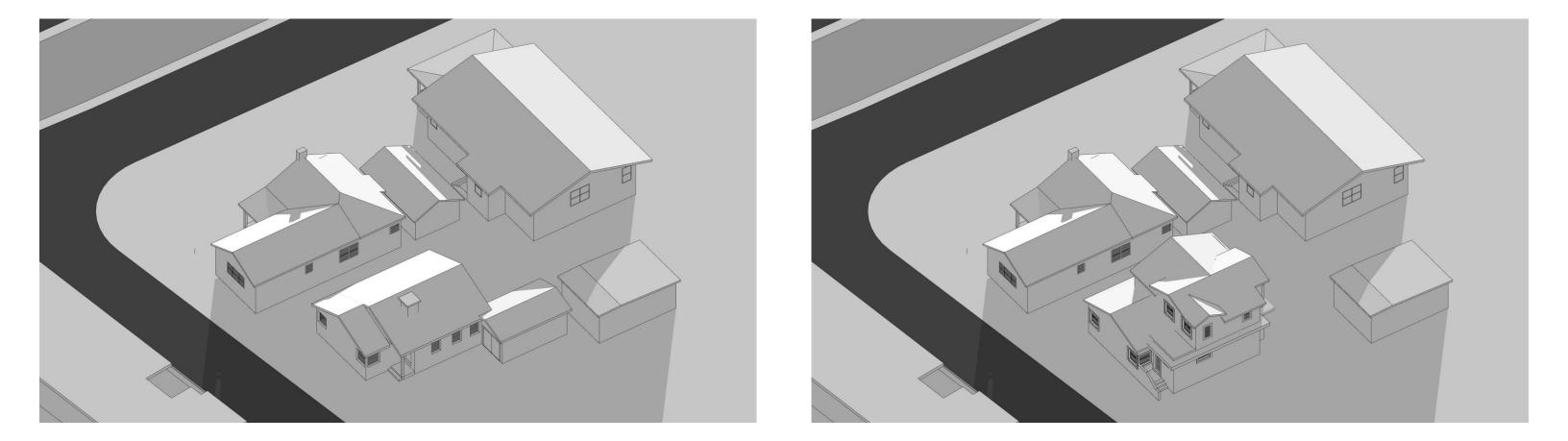
Sunset at 8:36 am



EXISTING

### 06:00 am

Sunrise at 6:04 am

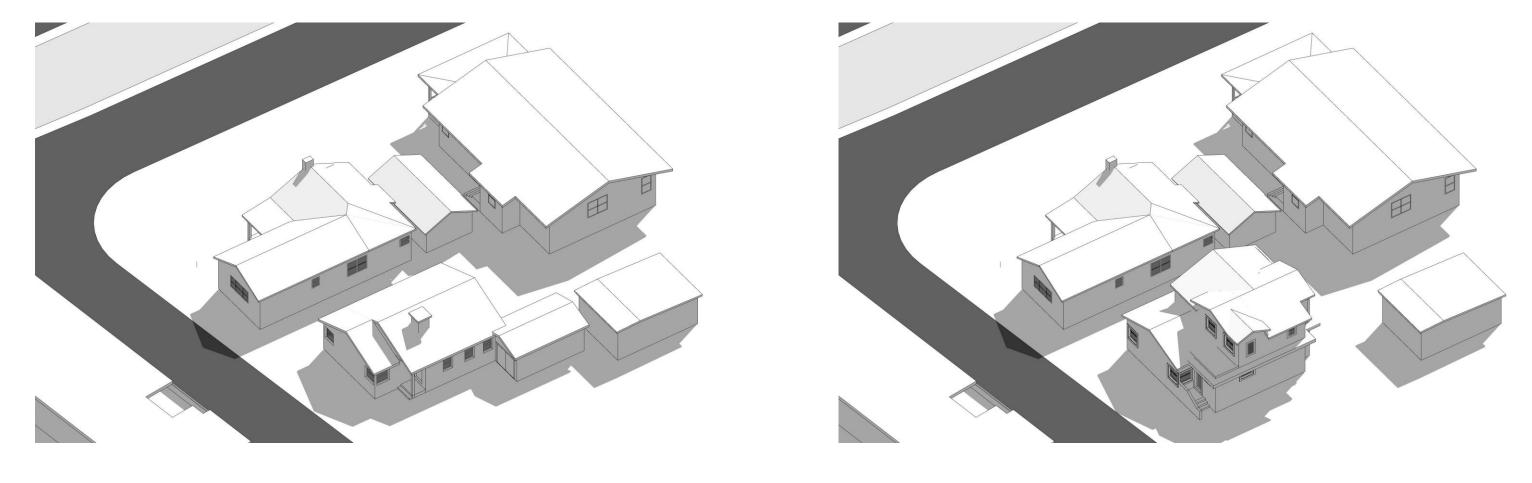


EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

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09:00 am

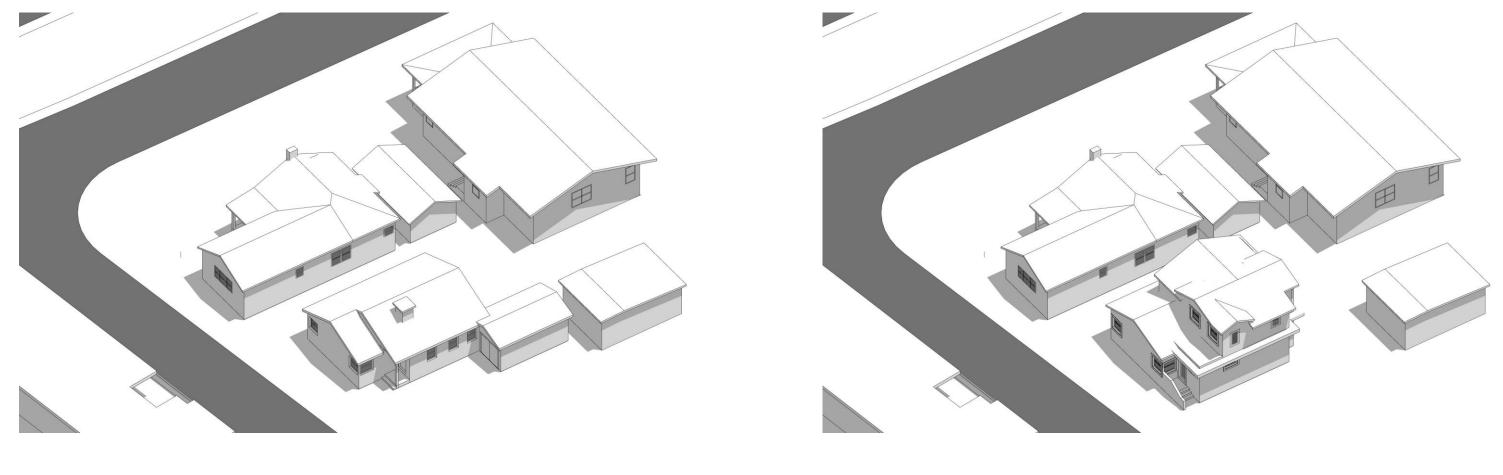


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Shadow Study 9 Laurel Ave. San Anselmo

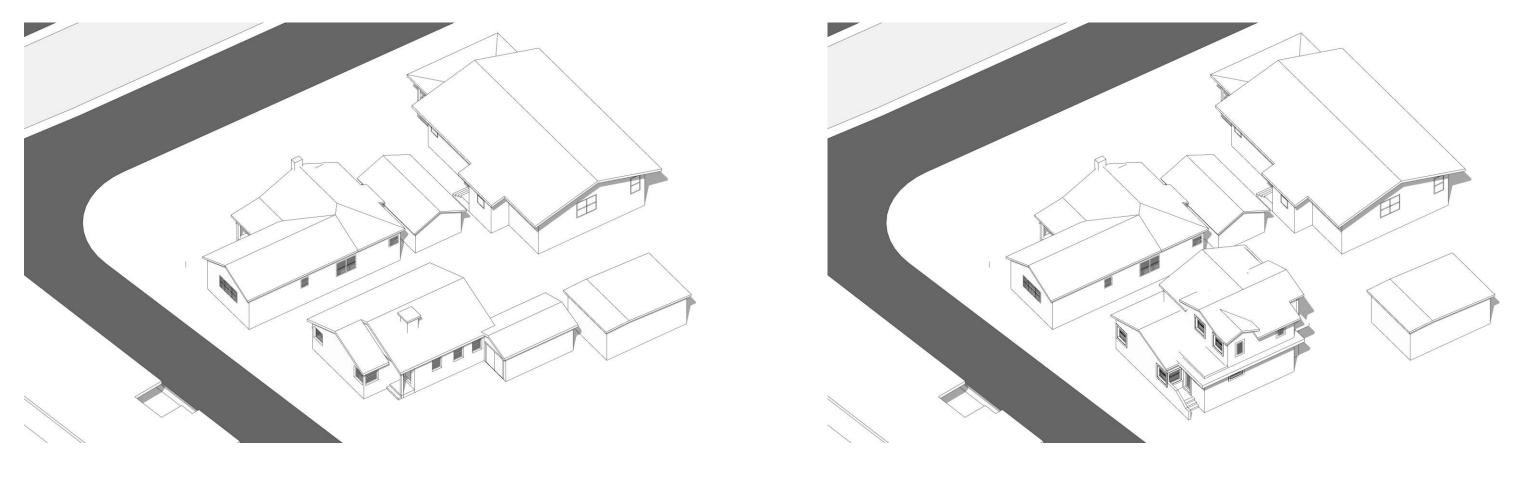
ITEM 7 - ATTACHMENT 8

12:00 pm



EXISTING

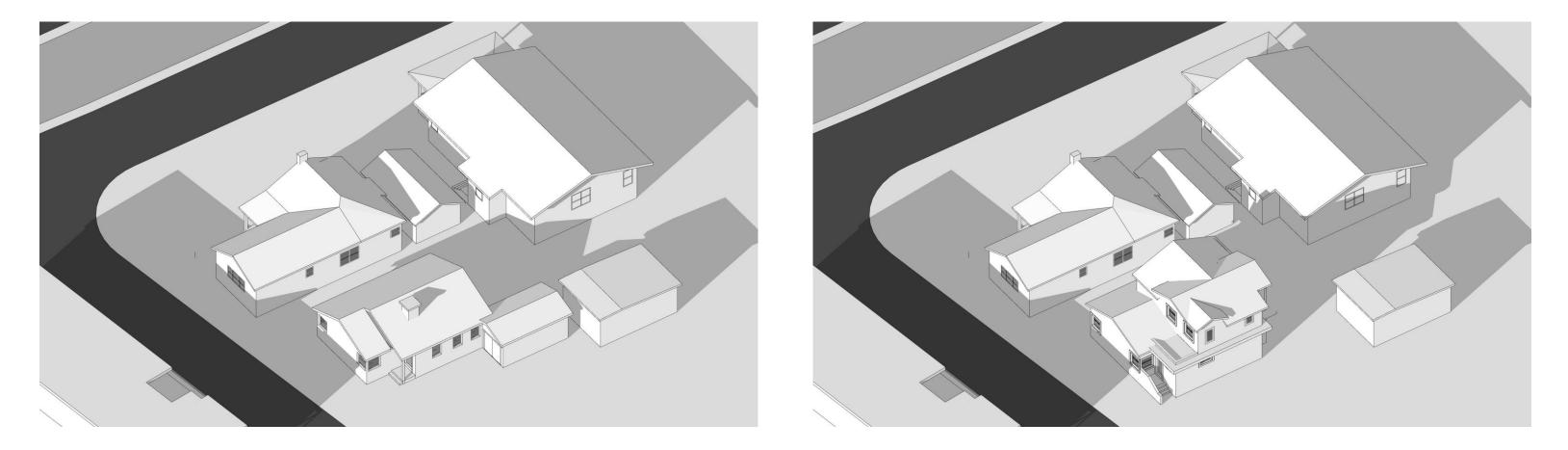
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EXISTING

### 06:00 pm

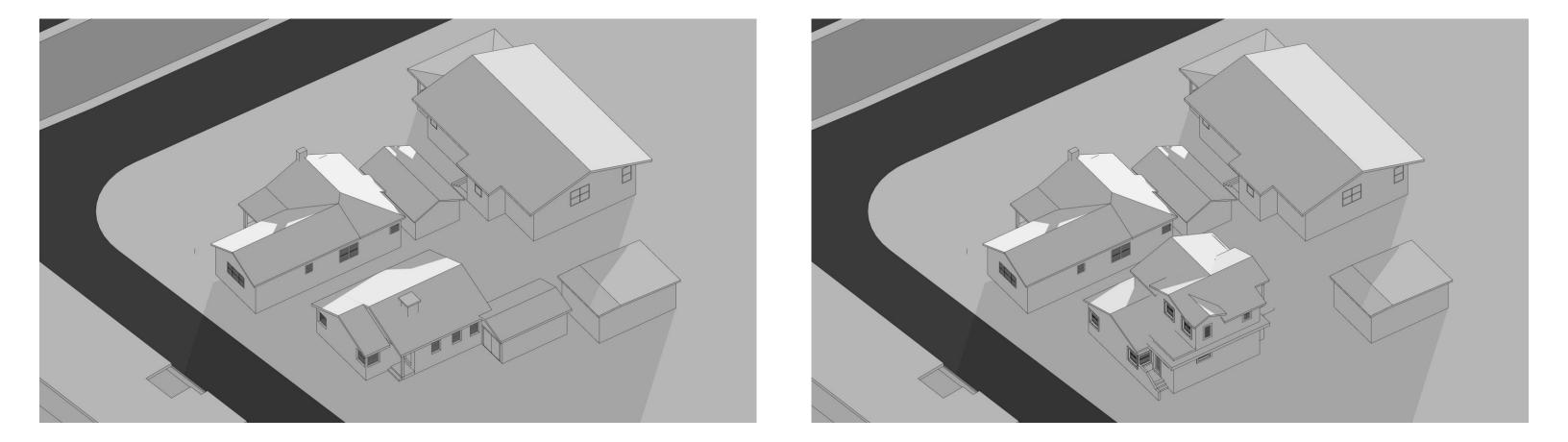
Sunset at 8:28 pm



EXISTING

### 06:00 am

Sunrise at 6:31 am

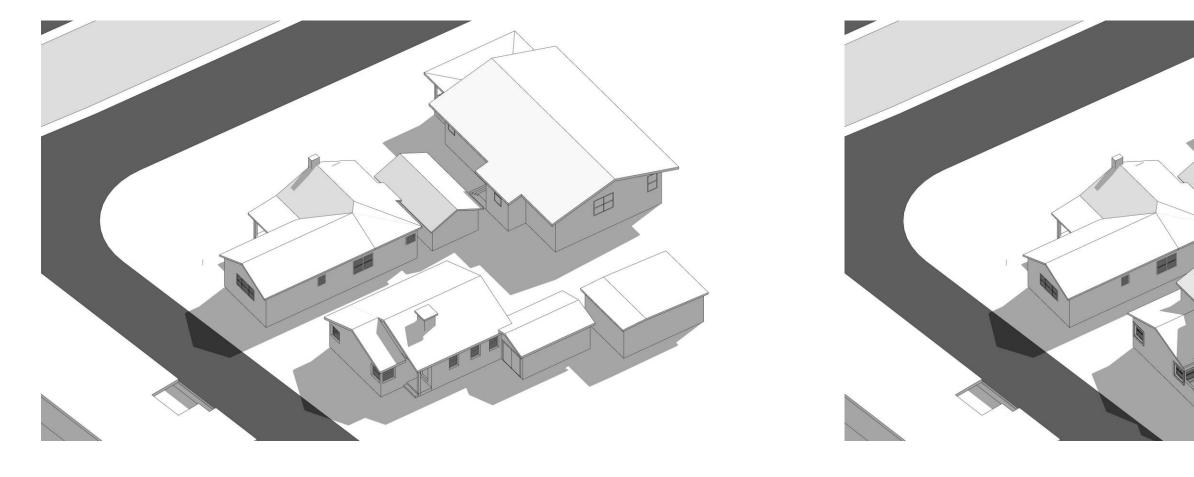


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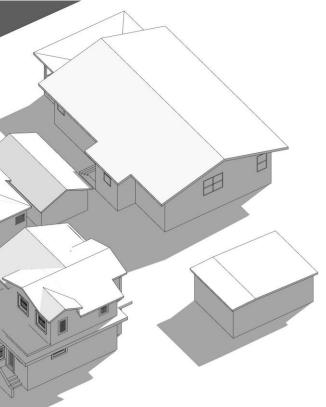
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

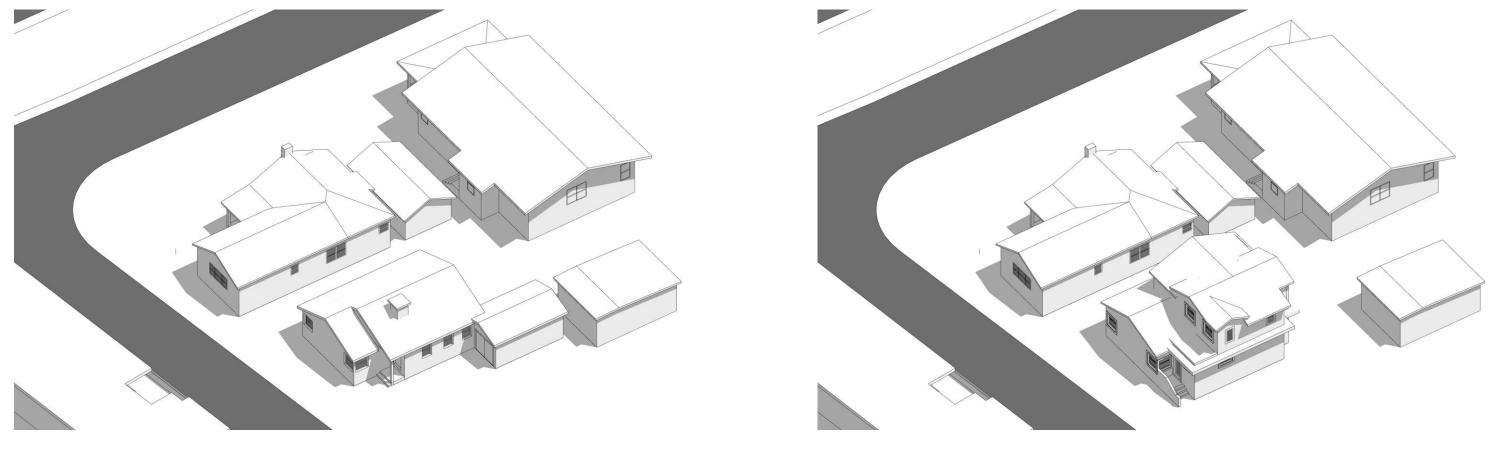
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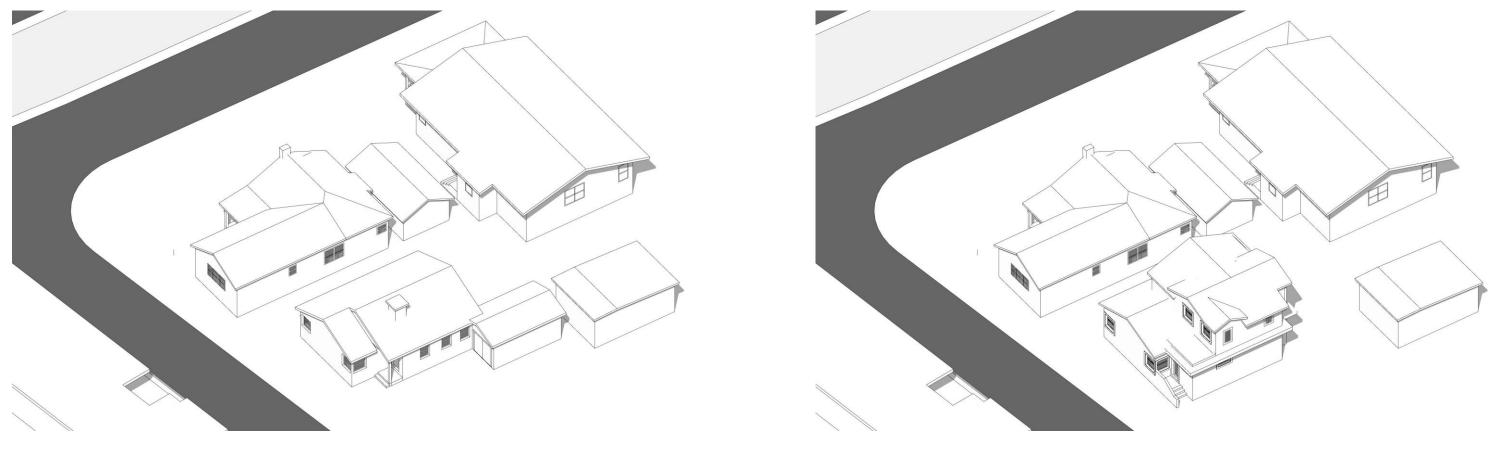


# 12:00 pm



EXISTING

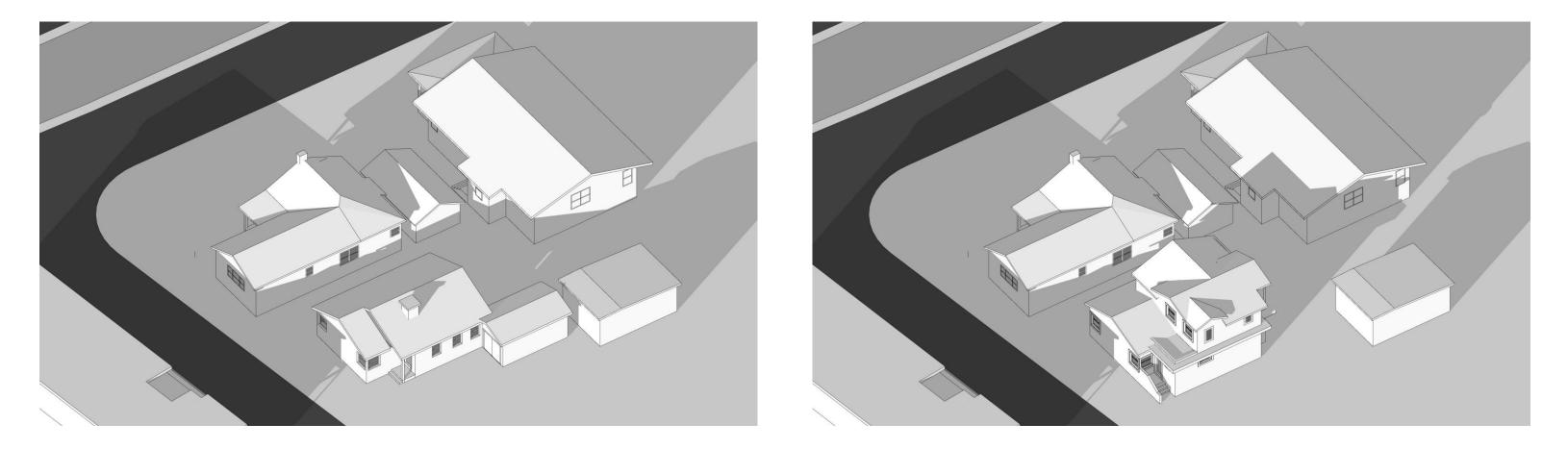
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EXISTING

### 06:00 pm

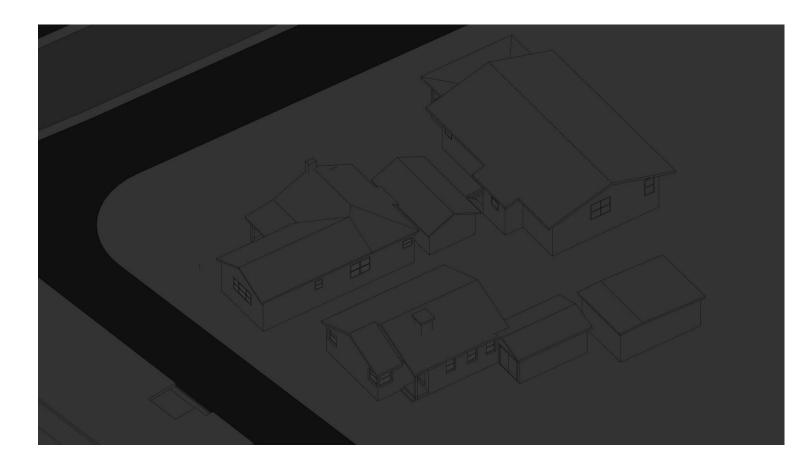
Sunset at 7:54 pm



EXISTING

### 06:00 am

Sunrise at 6:57 am



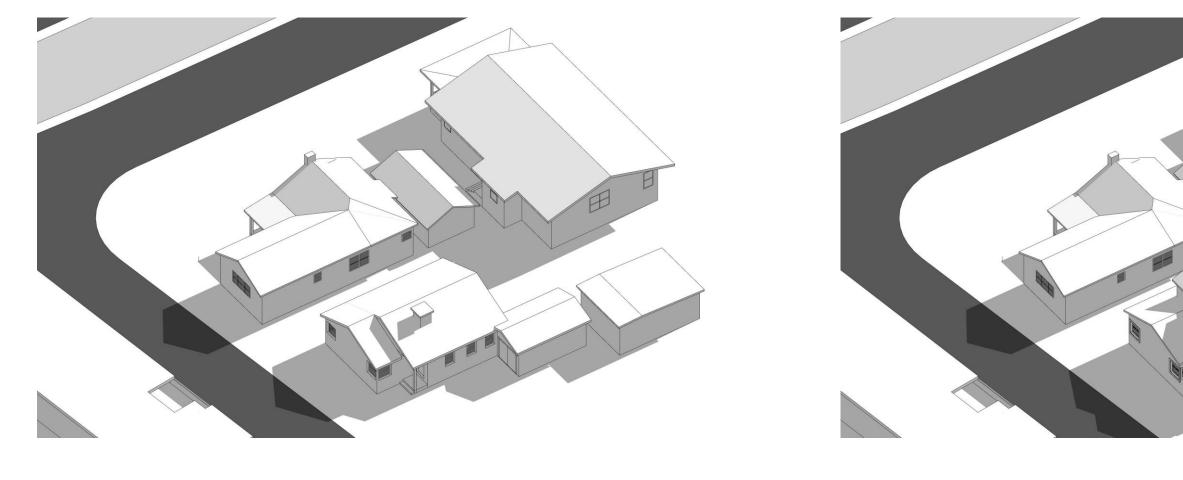


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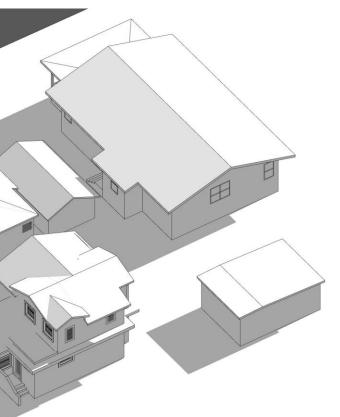
Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

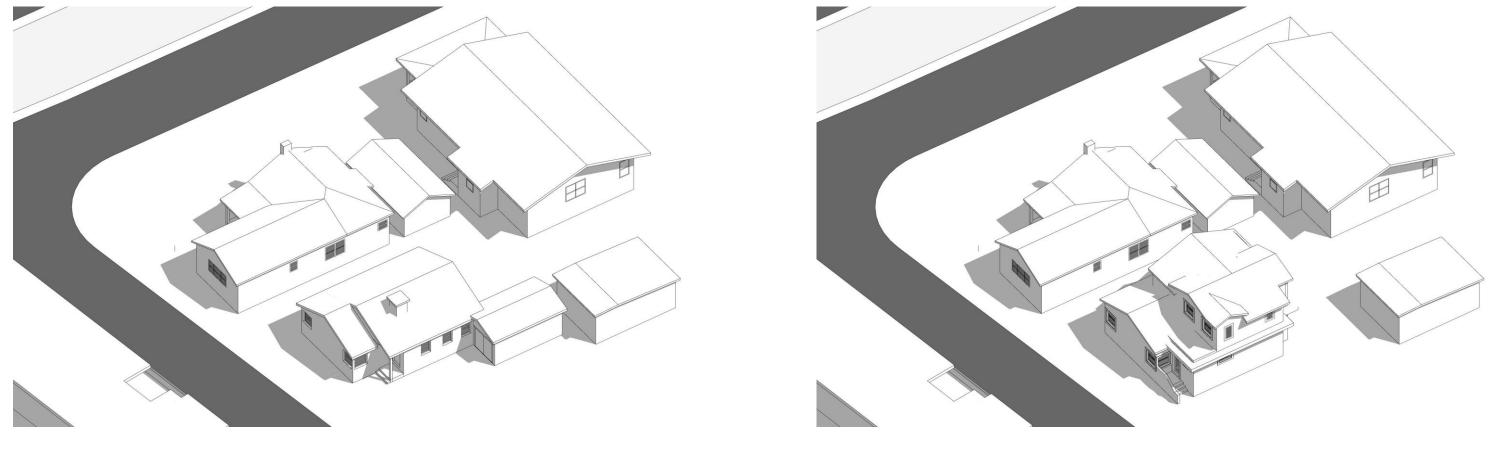
### 09:00 am



EXISTING

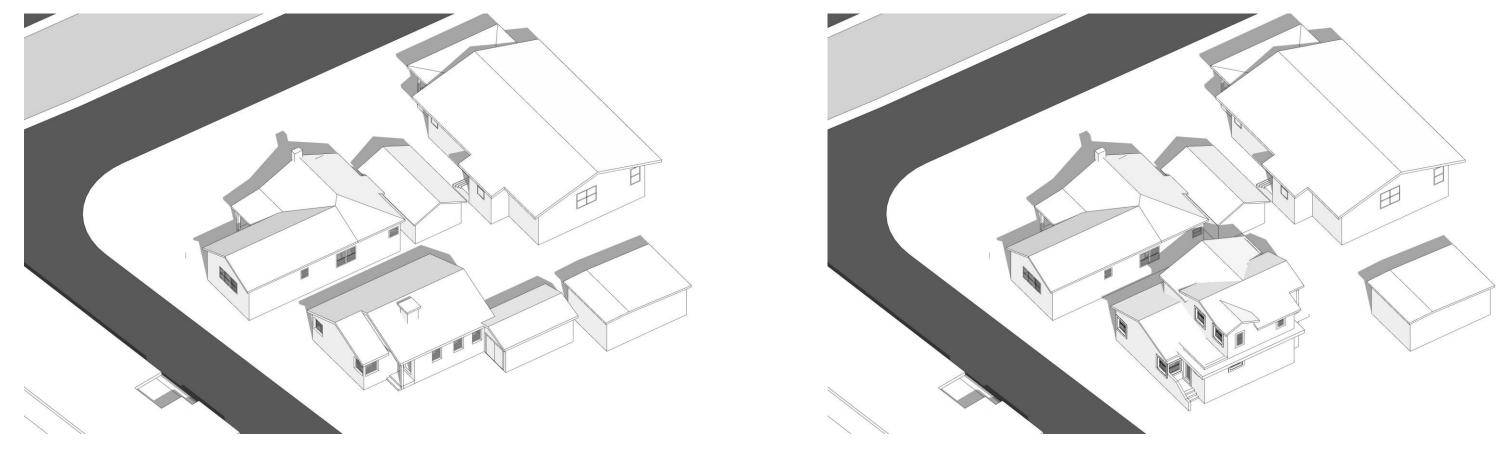


# 12:00 pm



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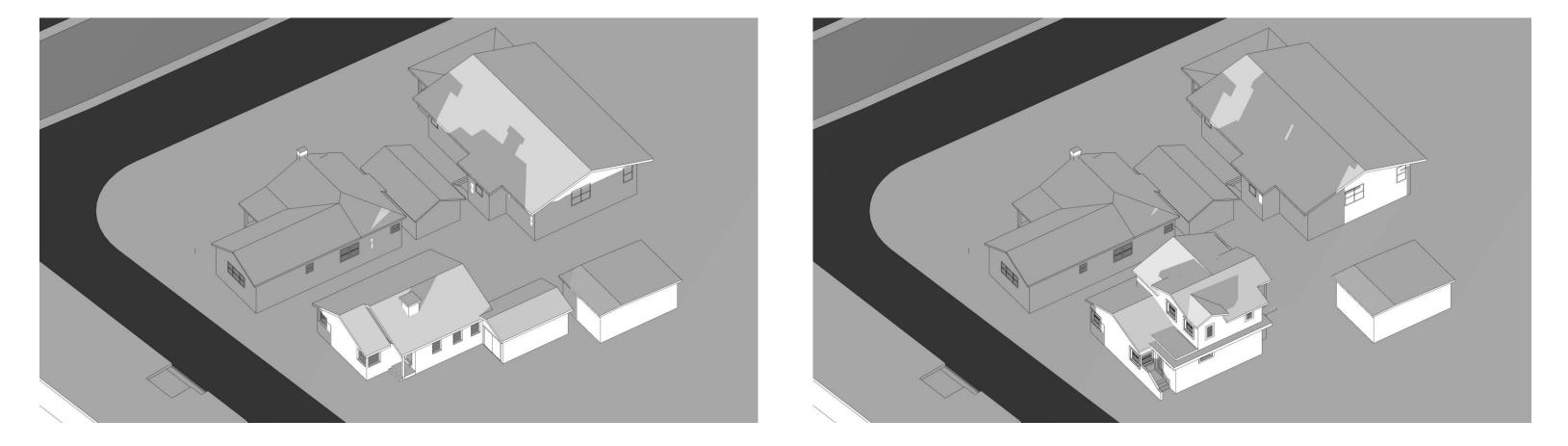
# 03:00 pm



EXISTING

# 06:00 pm

Sunset at 7:08 am



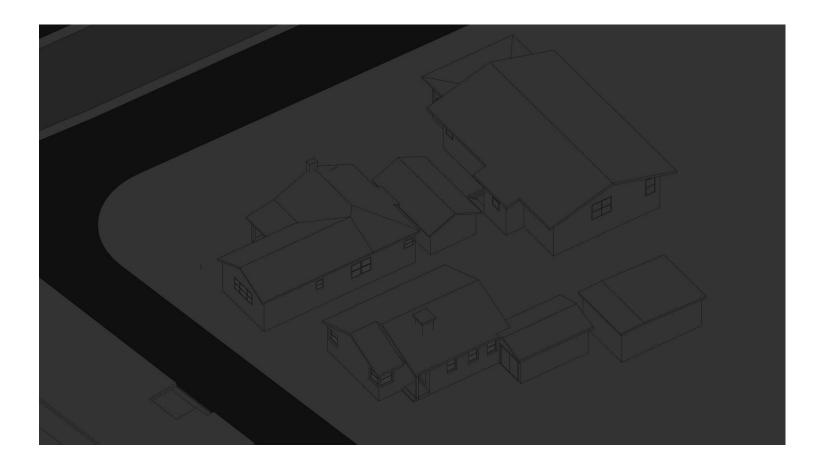
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

### 06:00 am

Sunrise at 7:25 am



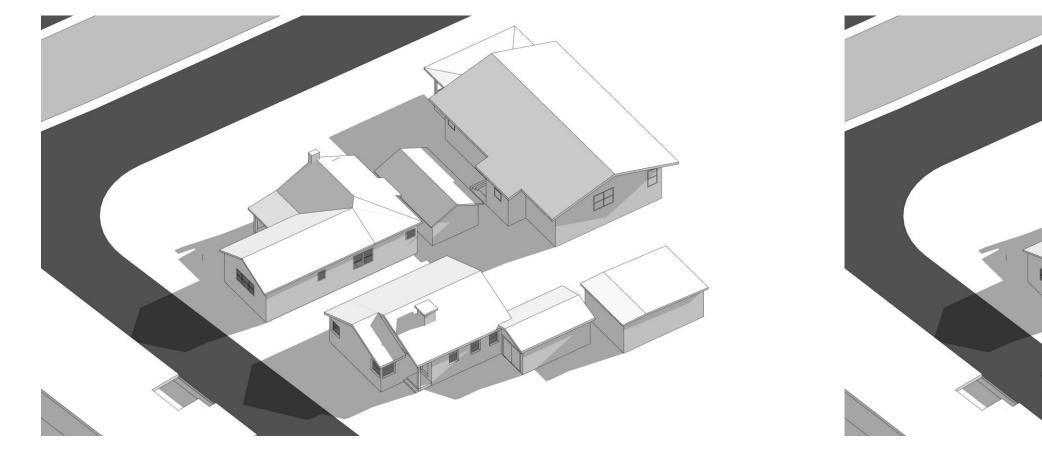


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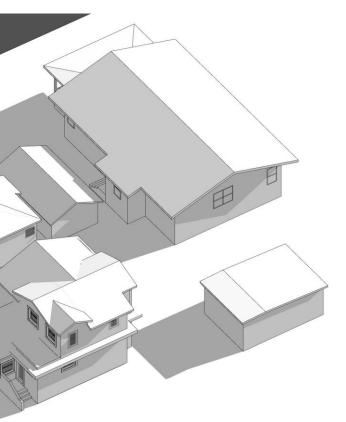
Shadow Study 9 Laurel Ave. San Anselmo

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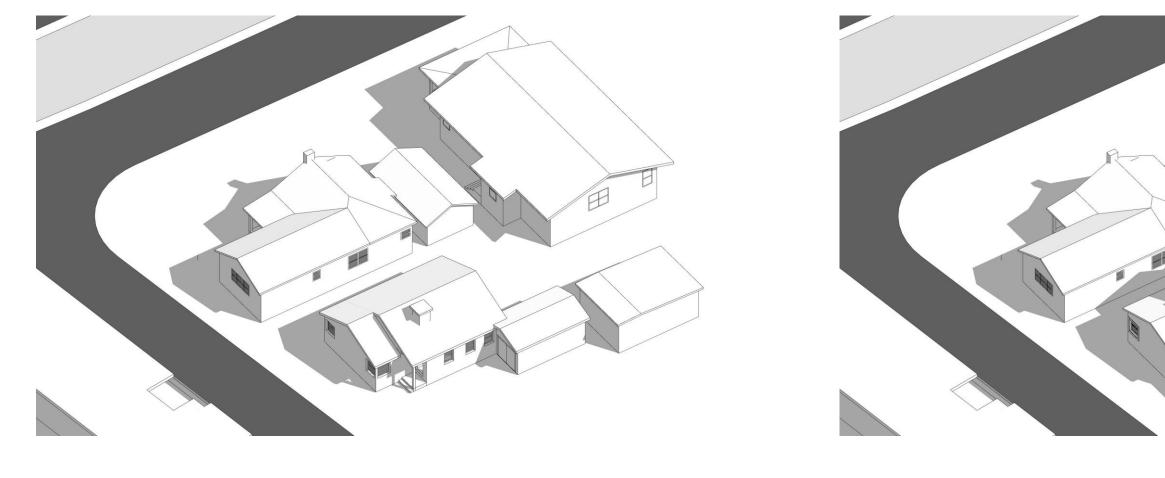
### 09:00 am



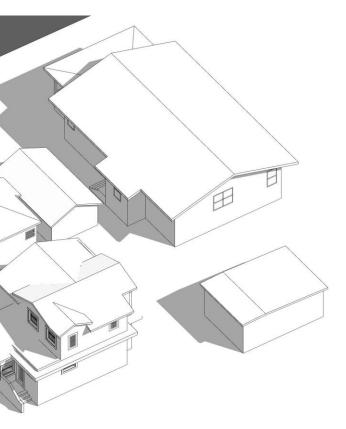
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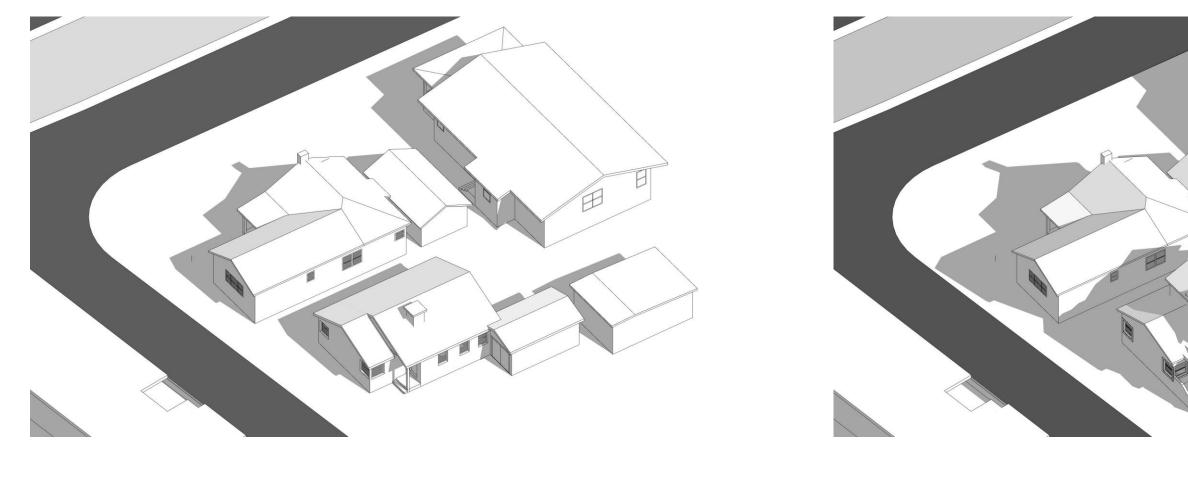
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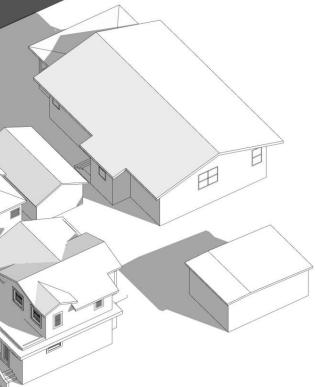
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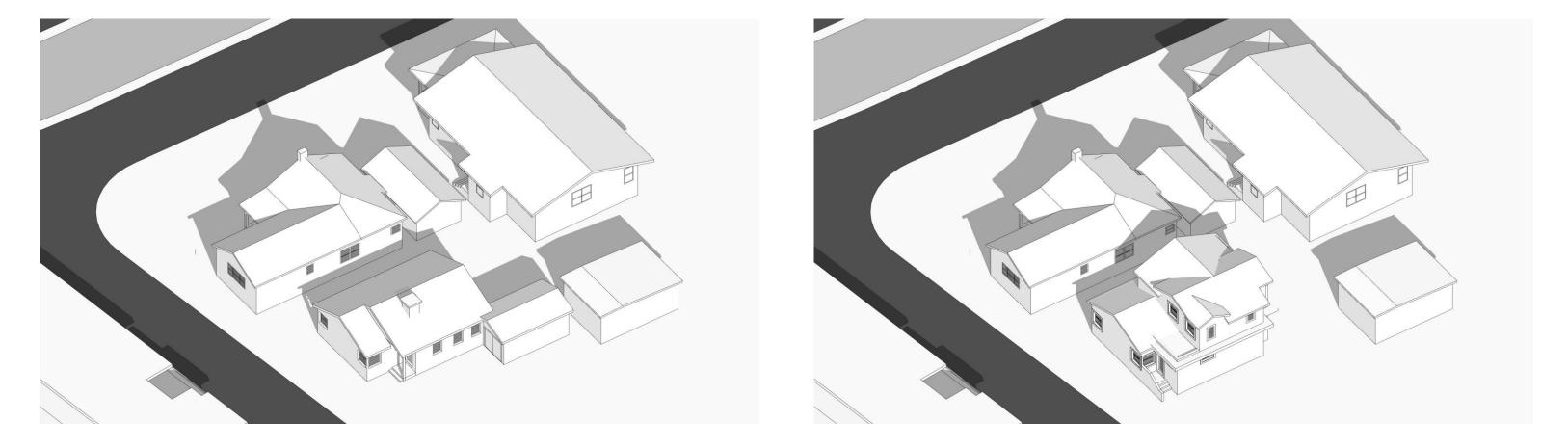
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EXISTING



03:00 pm

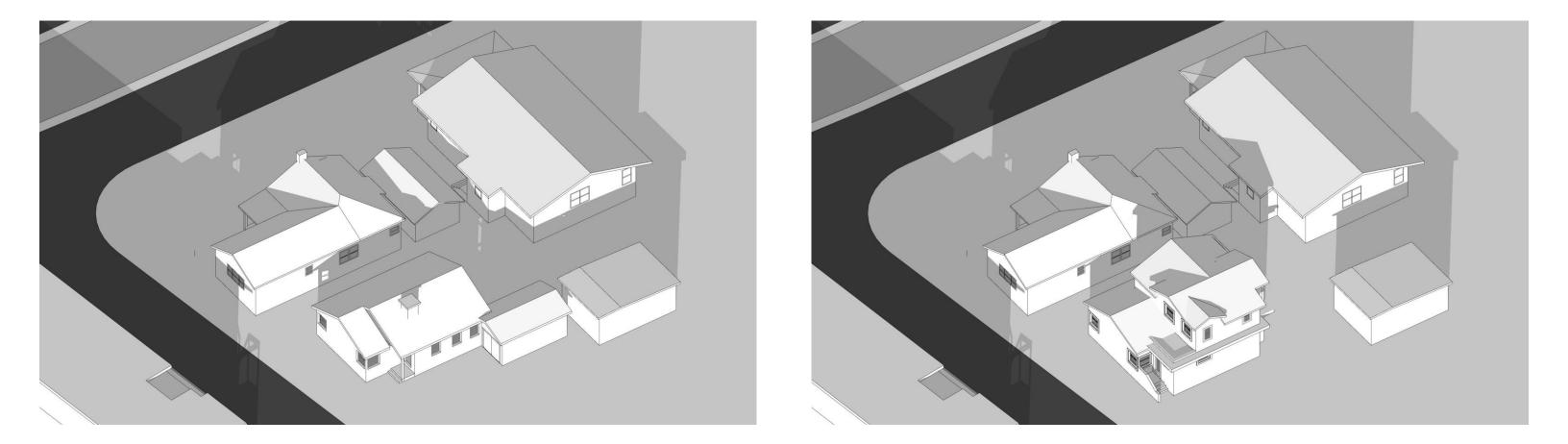


EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

04:30 pm



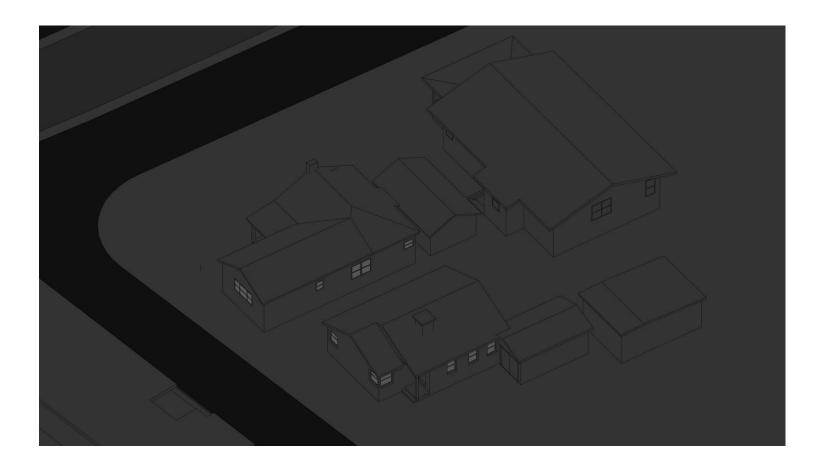
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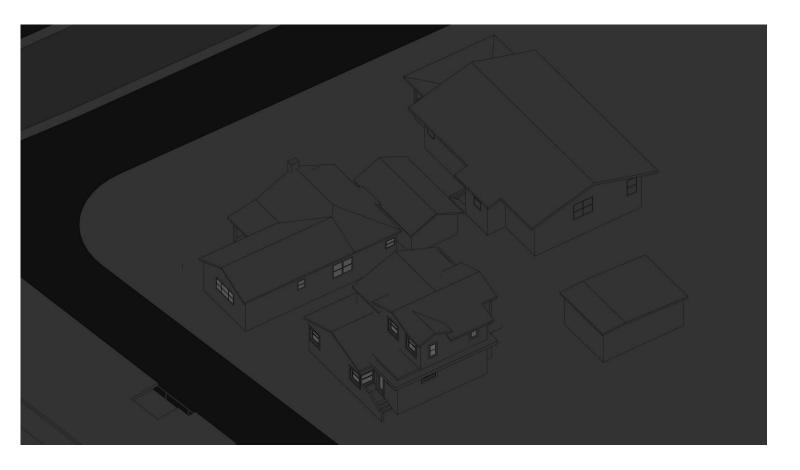
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

### 06:00 pm

Sunset at 6:23 pm





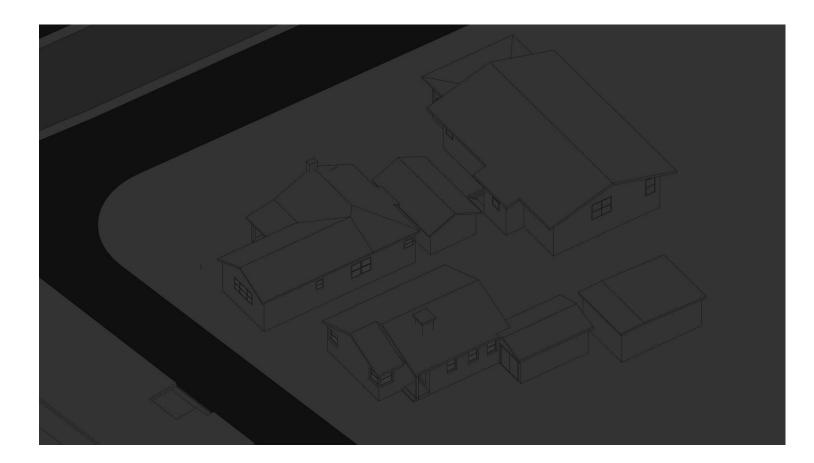
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

### 06:00 am

Sunrise at 6:57 am



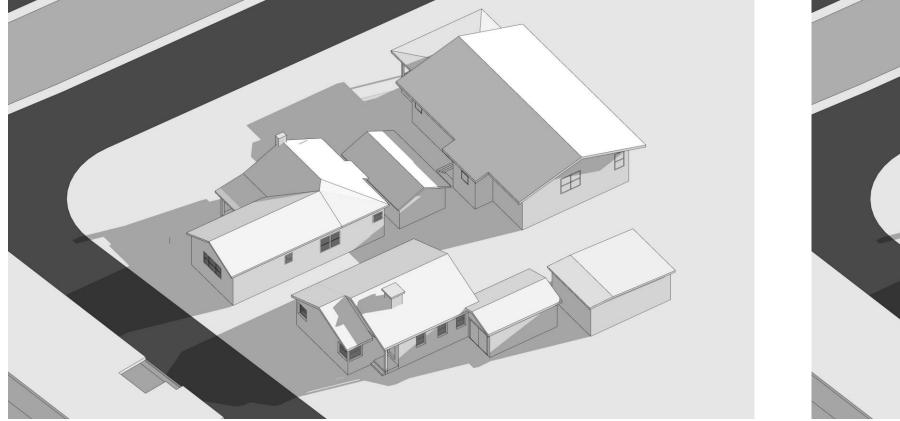


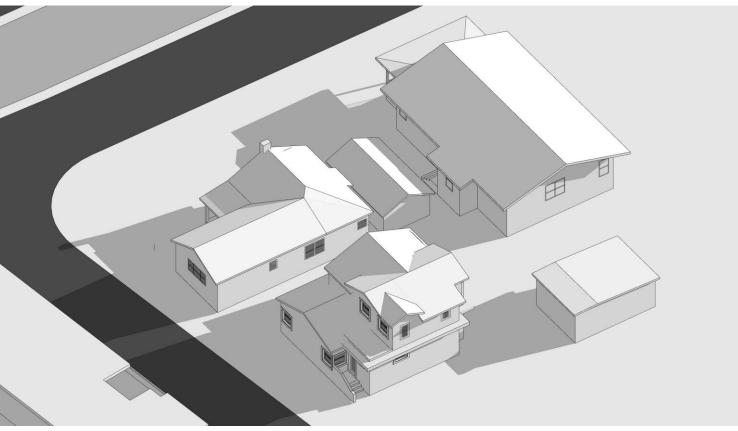
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Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

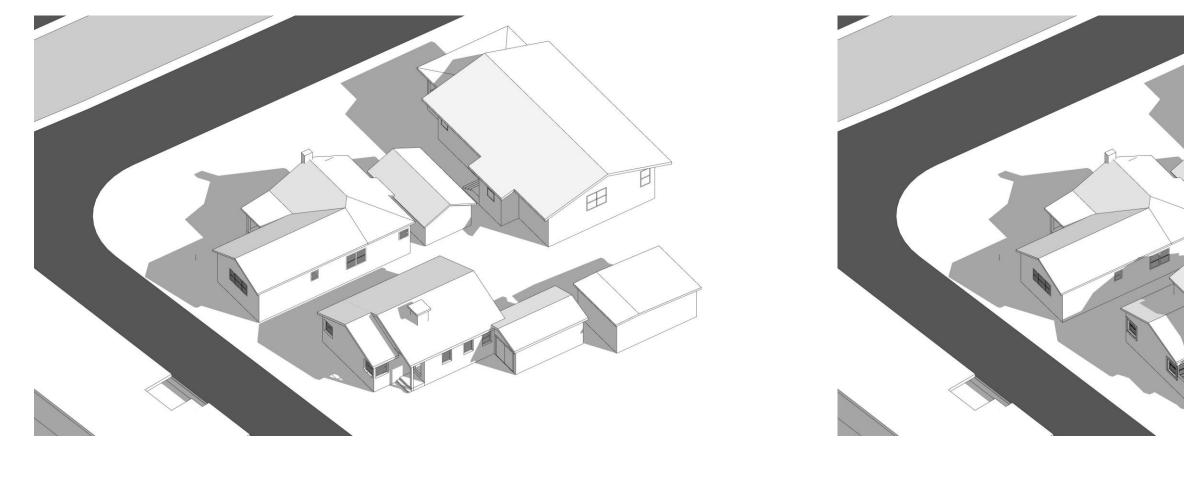
### 09:00 am



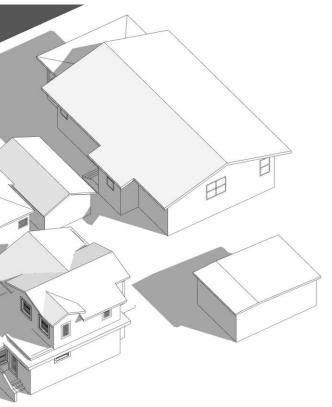


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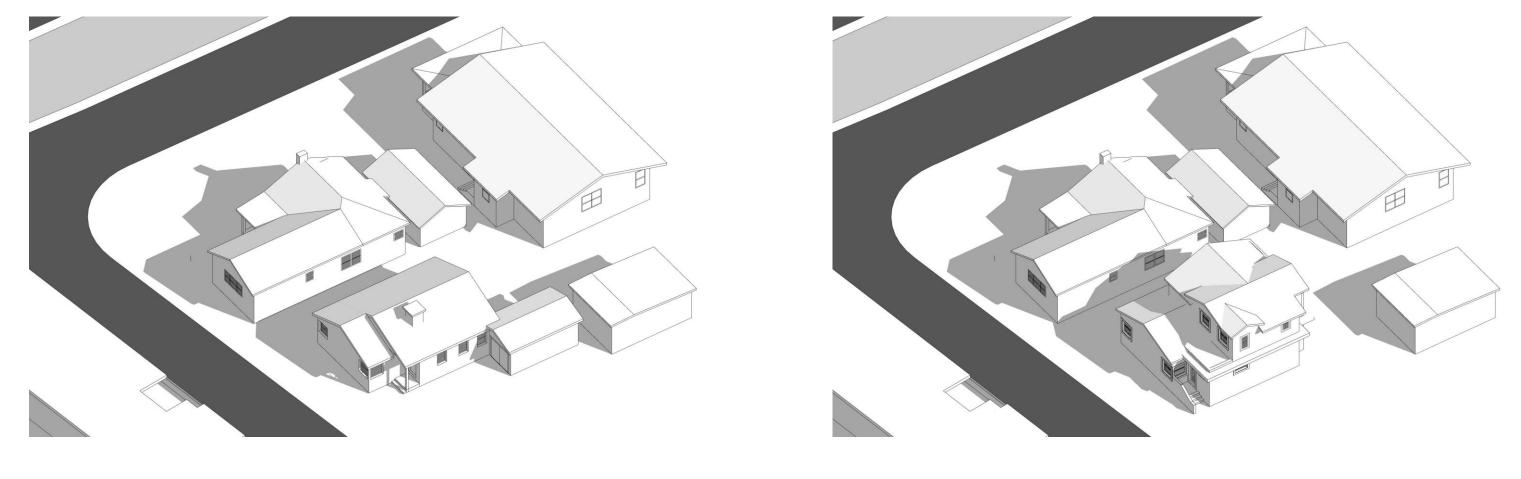
# 12:00 pm



EXISTING

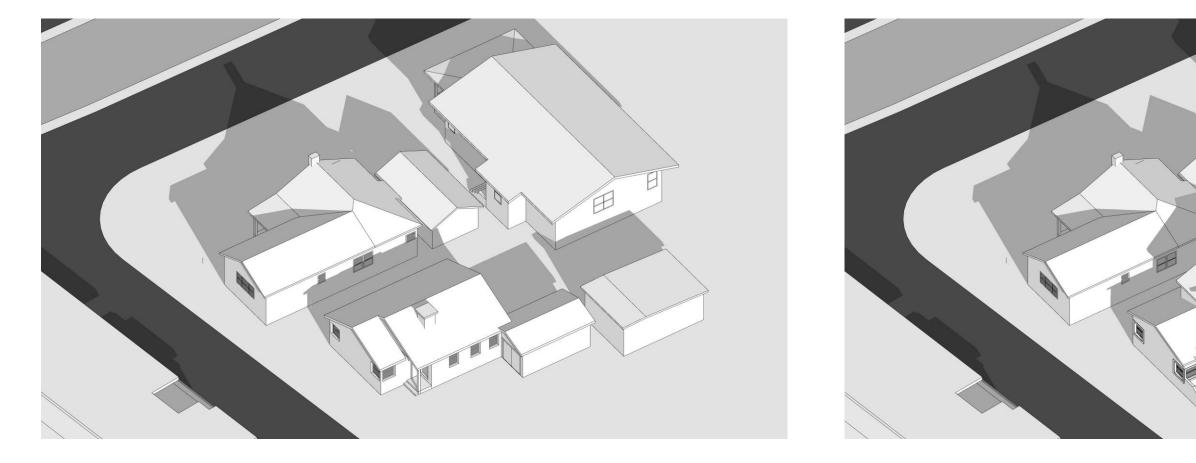


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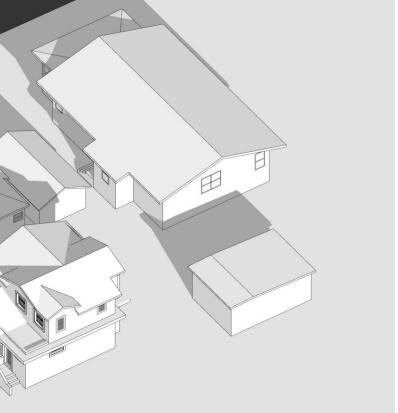


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# 03:00 pm



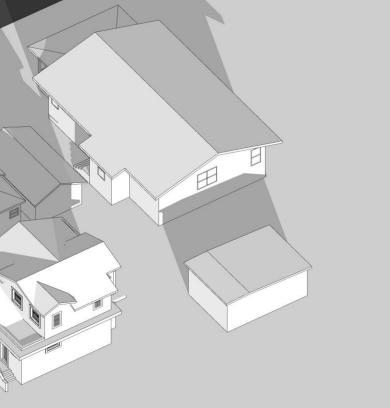
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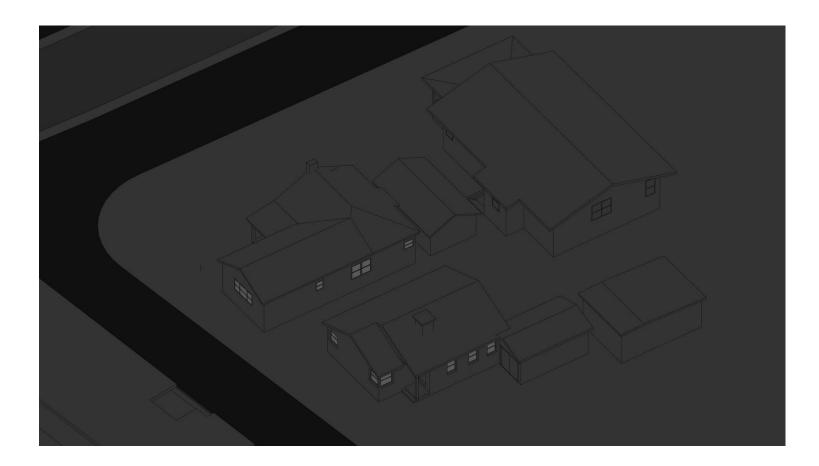


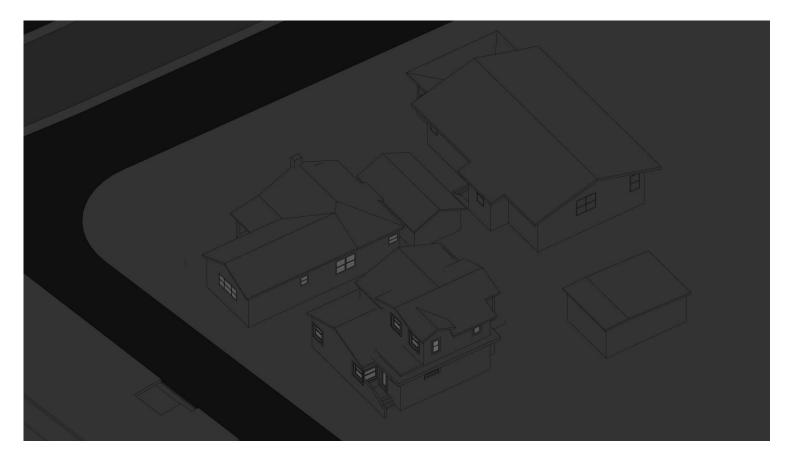
EXISTING



### 06:00 pm

Sunset at 4:54 pm





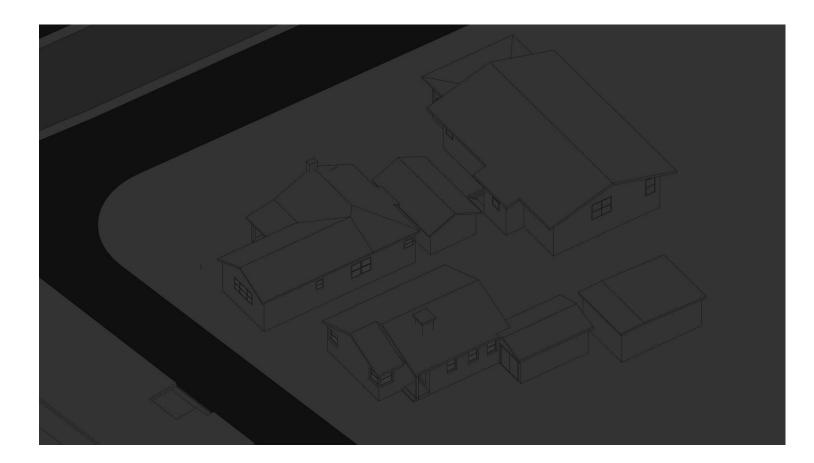
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

### 06:00 am

Sunrise at 7:22 am





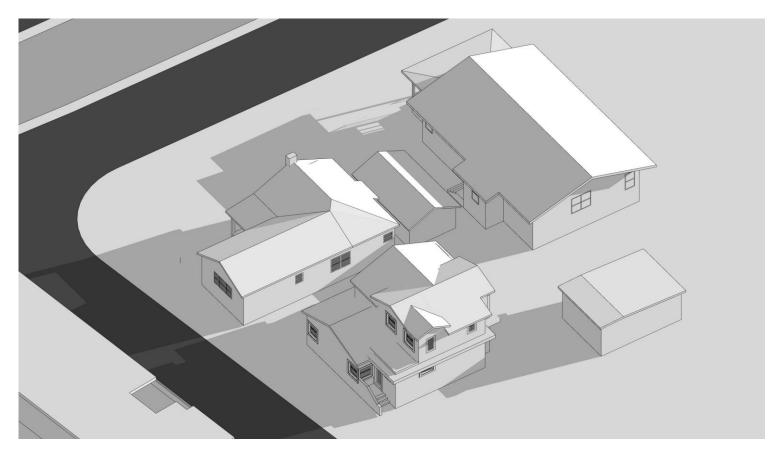
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

### 09:00 am

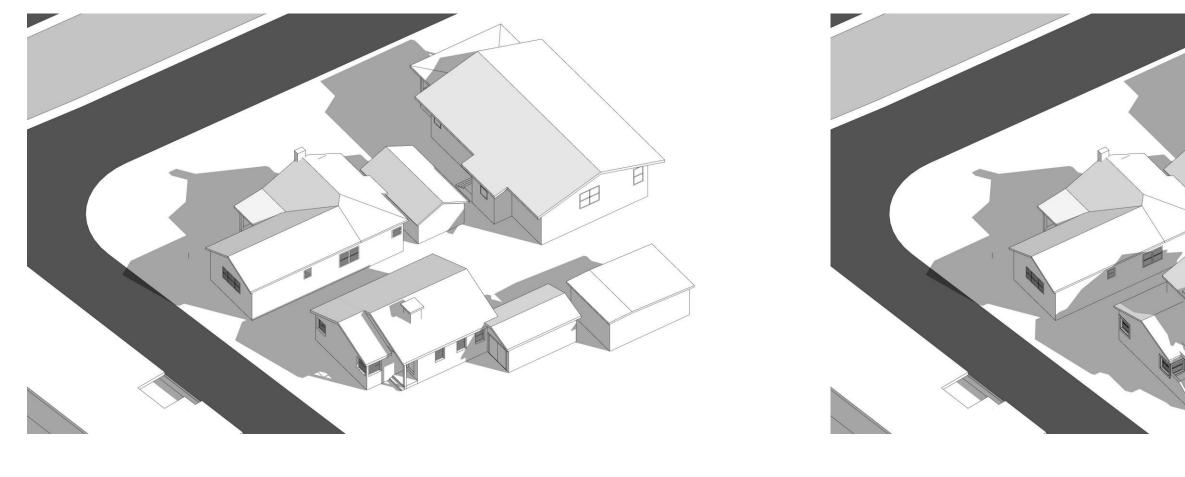




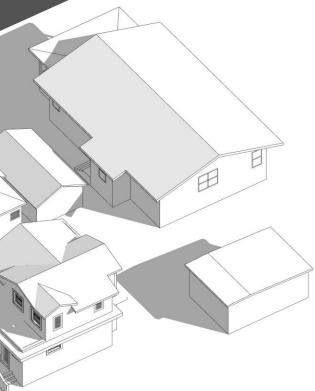
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

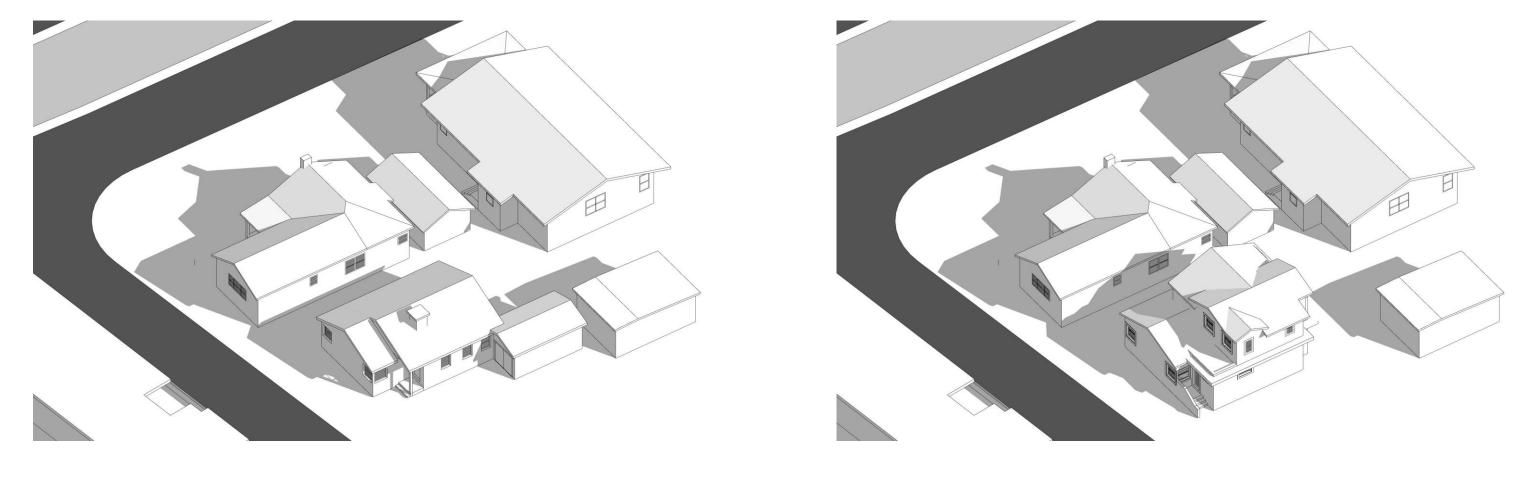
# 12:00 pm



EXISTING

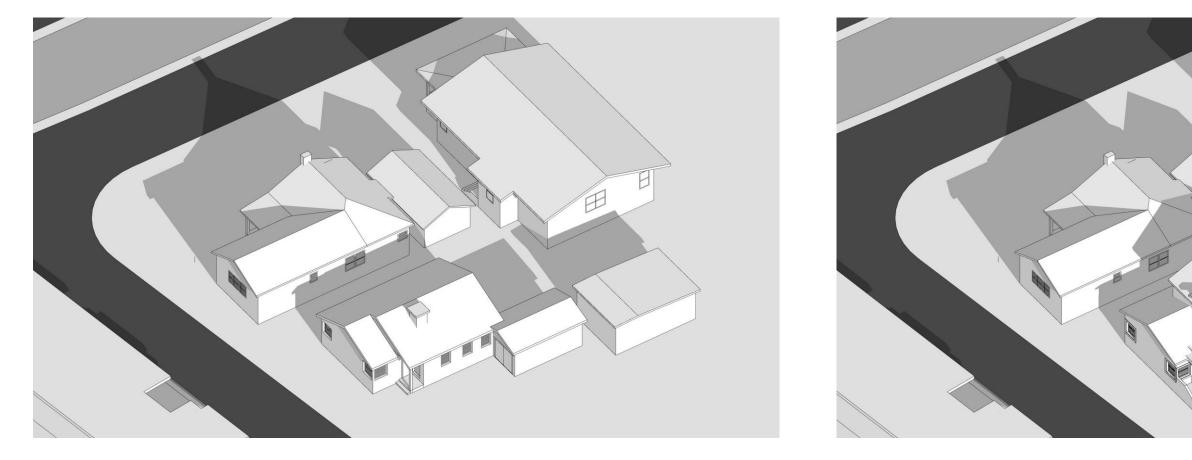


12:30 pm

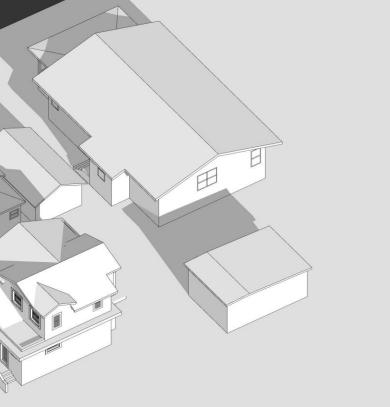


EXISTING

# 03:00 pm



EXISTING



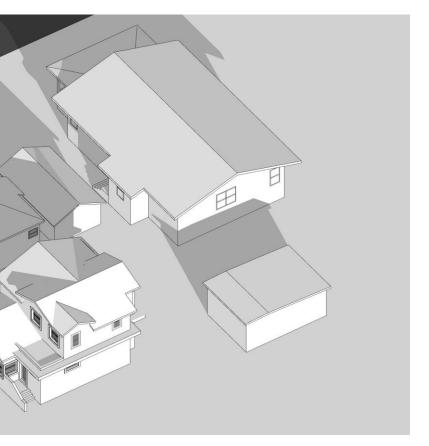
03:30 pm



EXISTING

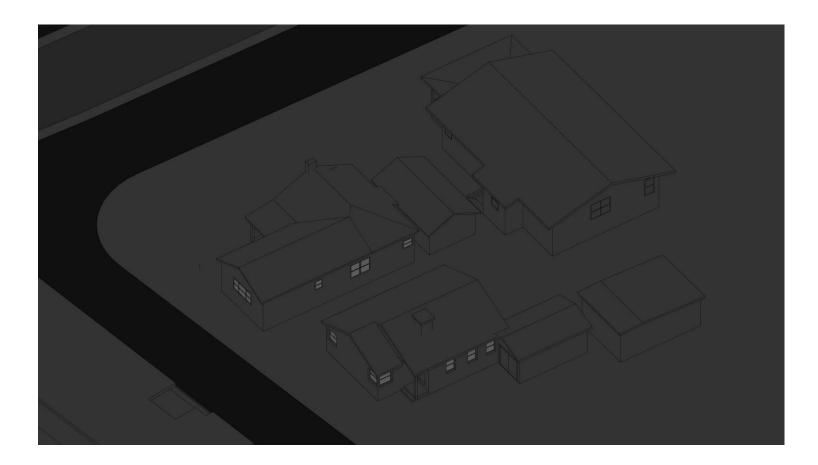
Shadow Study 9 Laurel Ave. San Anselmo

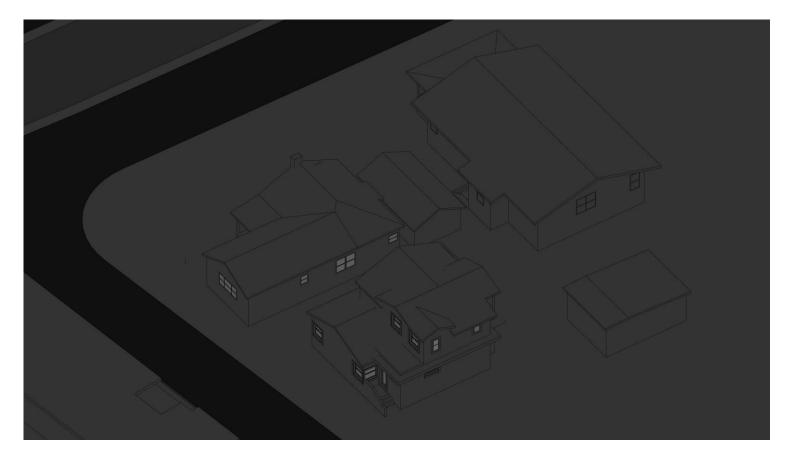
ITEM 7 - ATTACHMENT 8



### 06:00 pm

Sunset at 4:54 pm





EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

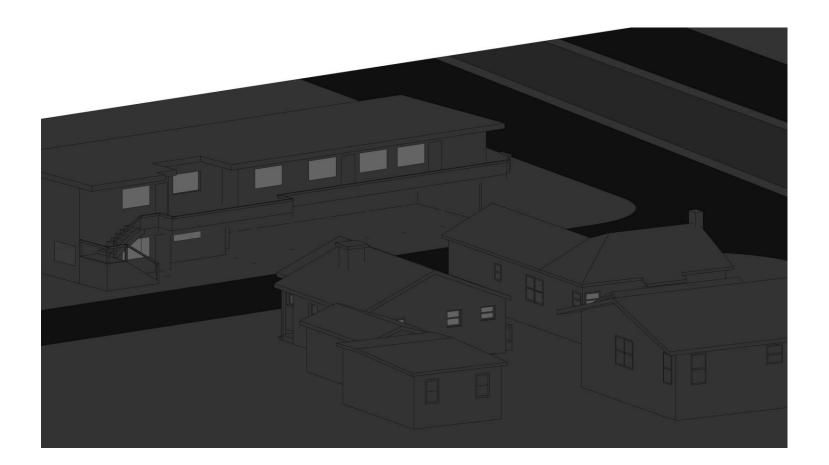
**ITEM 7 - ATTACHMENT 8** 

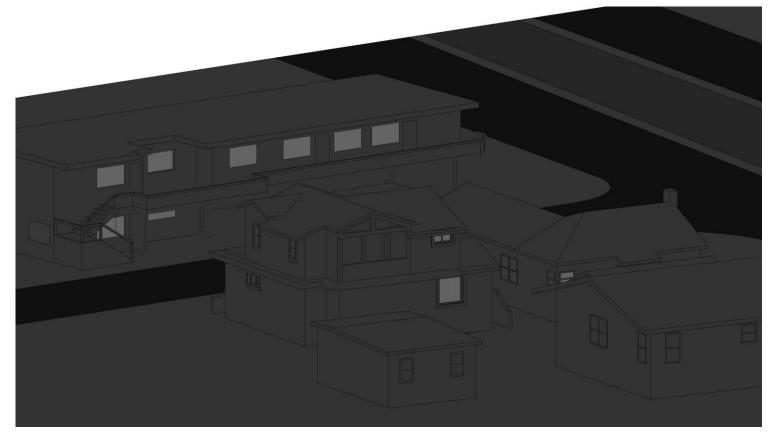
# Shadow Study #2 for 9 Laurel Ave.

#### ITEM 7 - ATTACHMENT 8

#### 06:00 am

Sunrise at 7:22 am



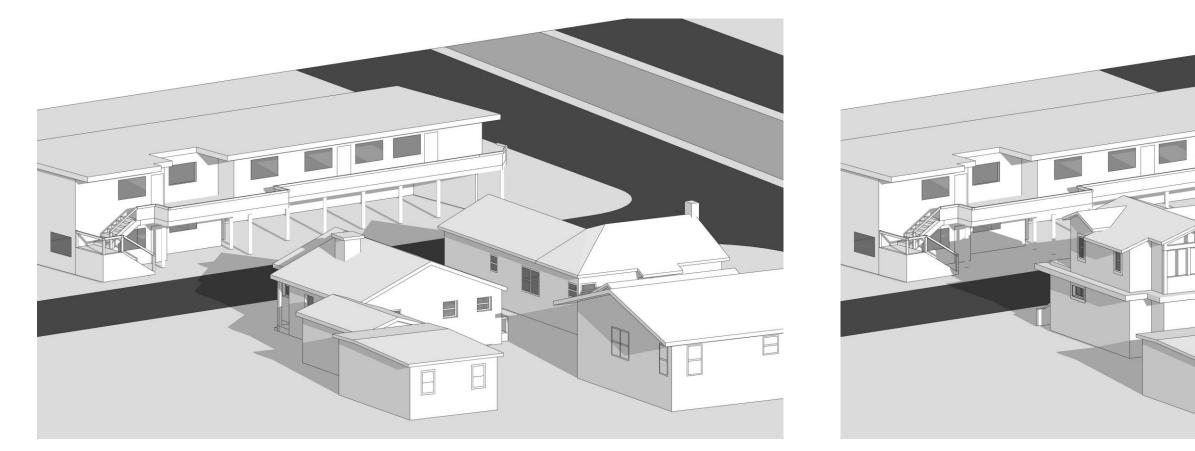


EXISTING

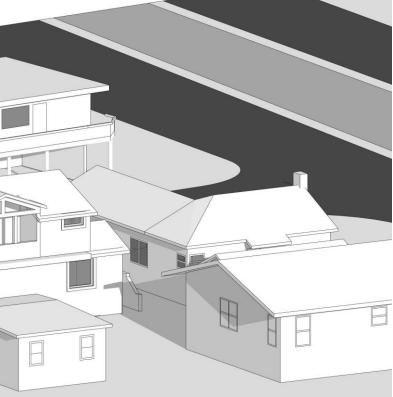
Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

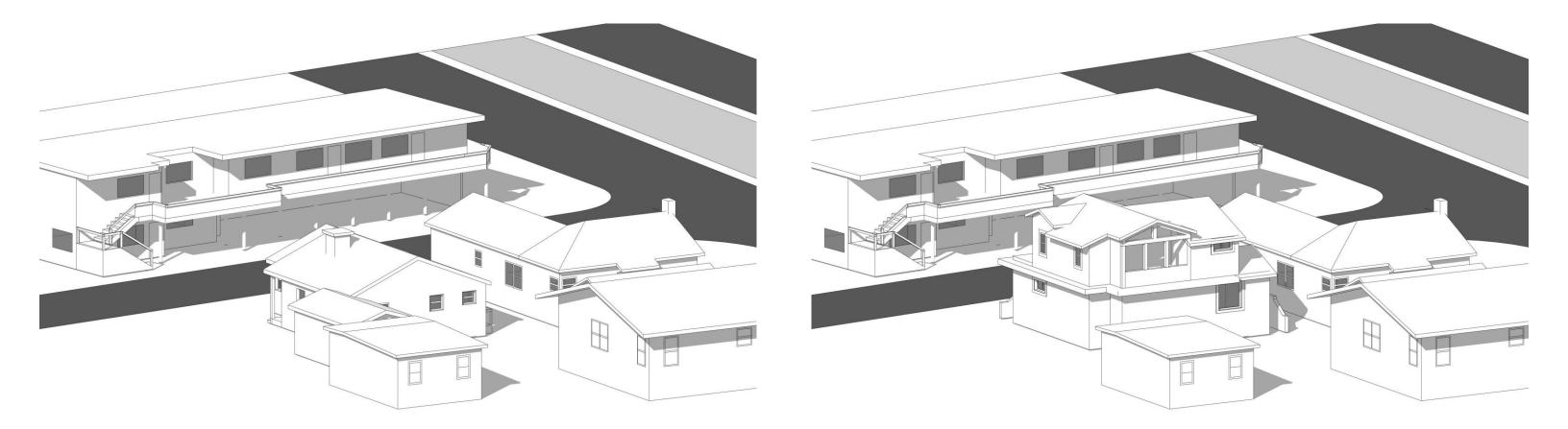
#### 09:00 am



EXISTING

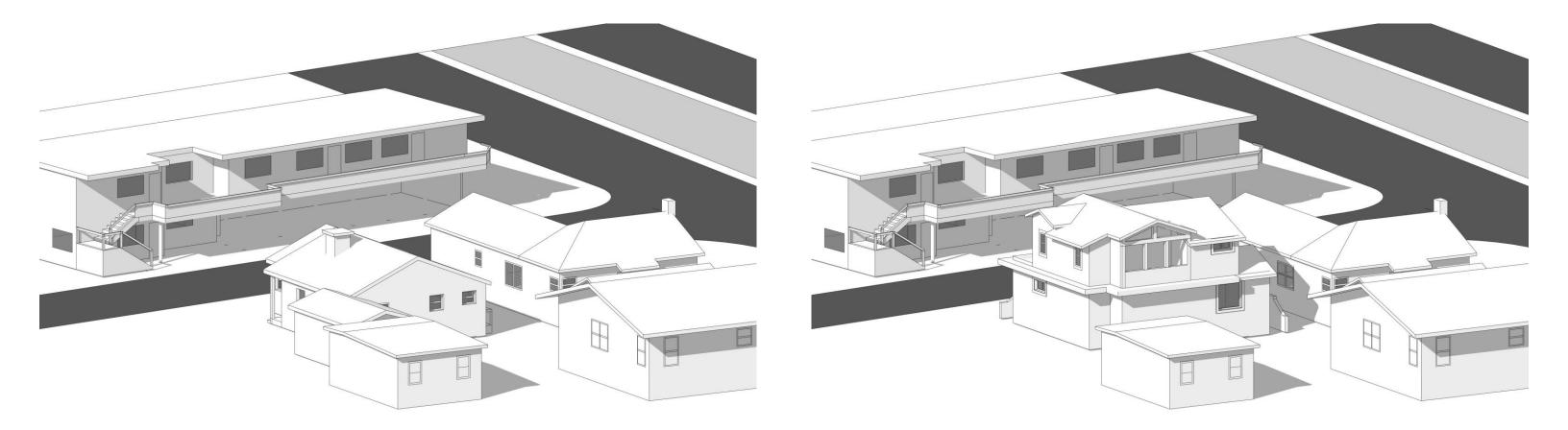


# 12:00 pm



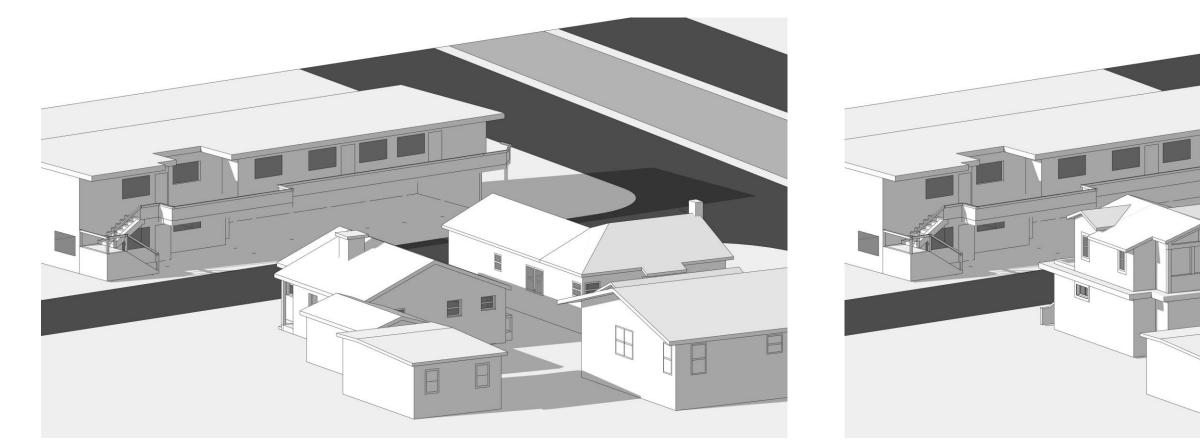
EXISTING

# 12:30 pm

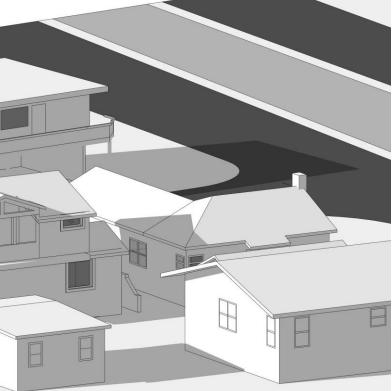


EXISTING

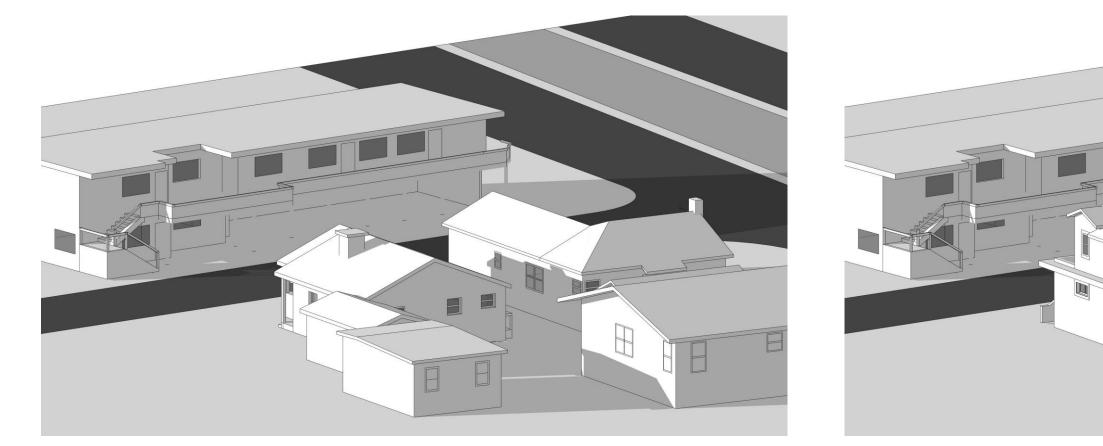
# 03:00 pm



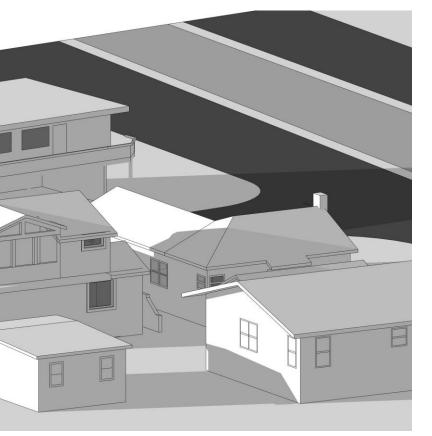
EXISTING



# 04:00 pm

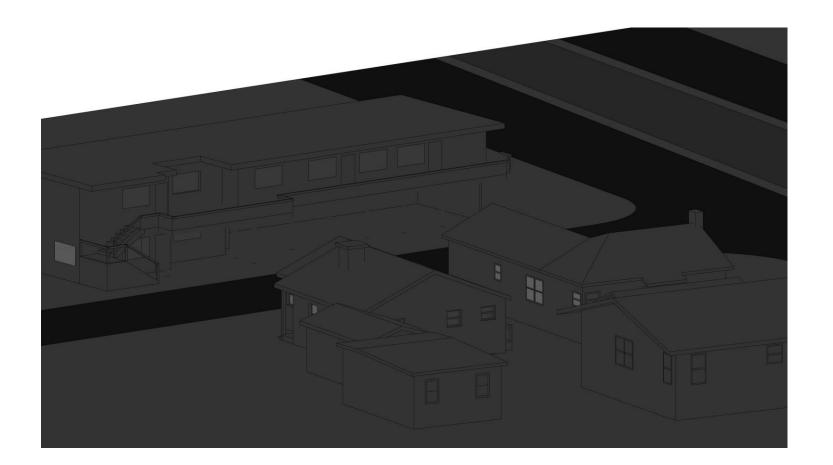


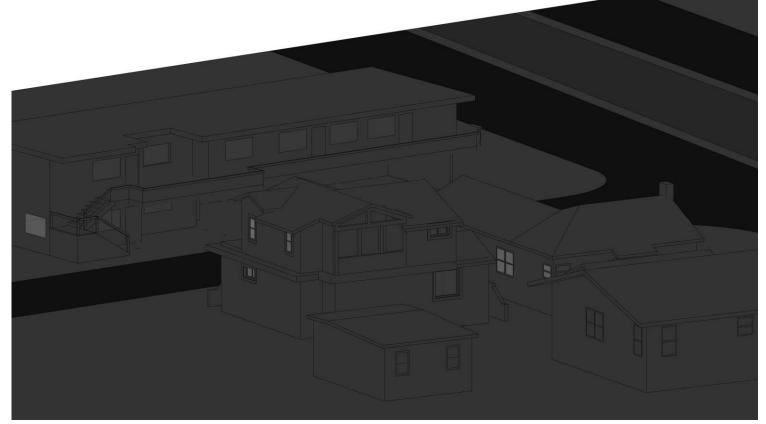
EXISTING



# 06:00 pm

Sunset at 5:21 pm





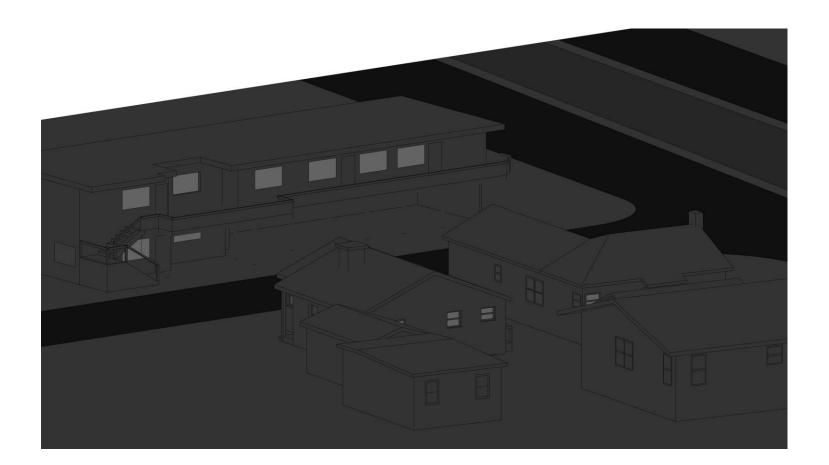
EXISTING

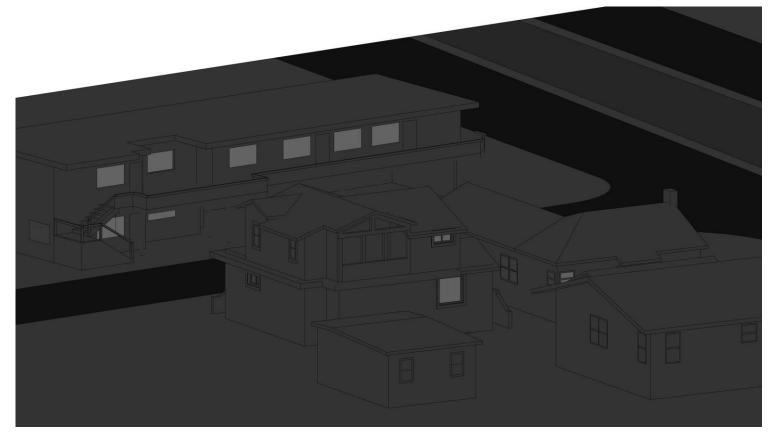
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

#### 06:00 am

Sunrise at 6:52 am



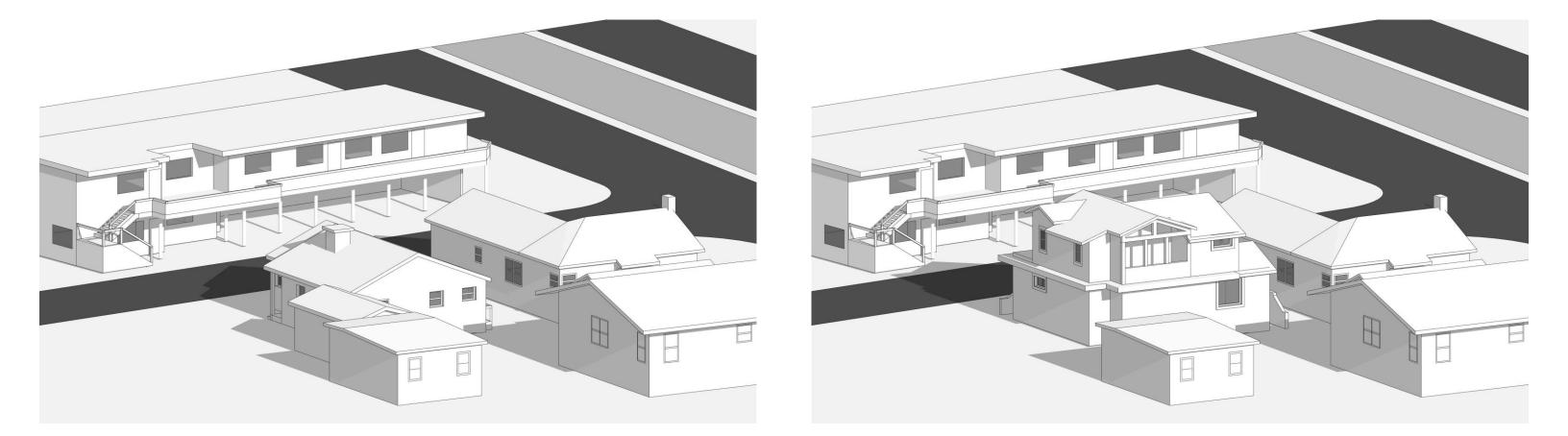


EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

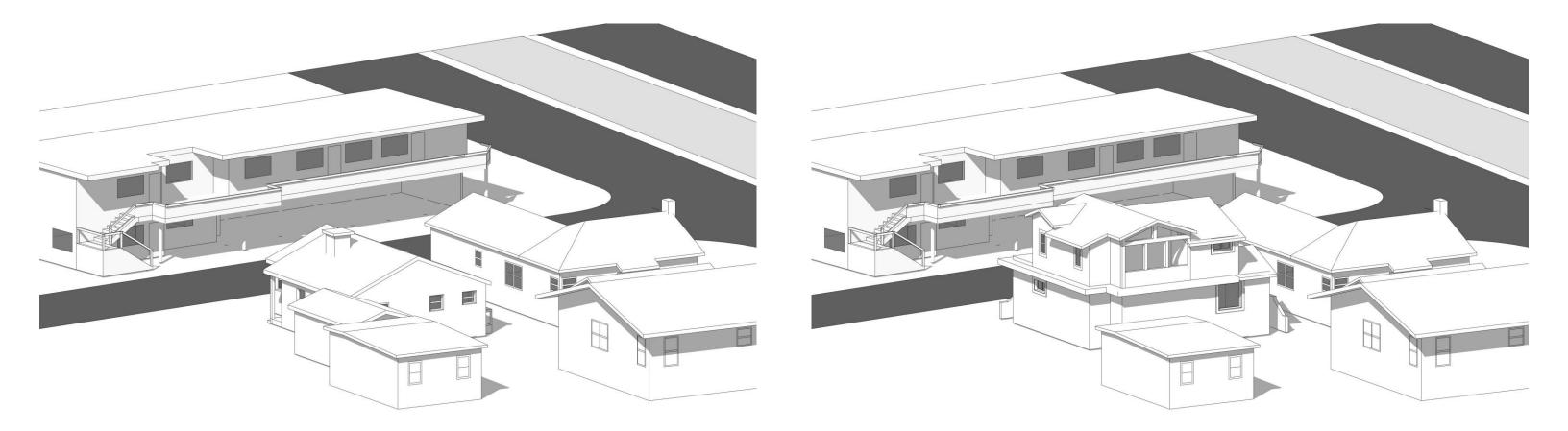
**ITEM 7 - ATTACHMENT 8** 

#### 09:00 am



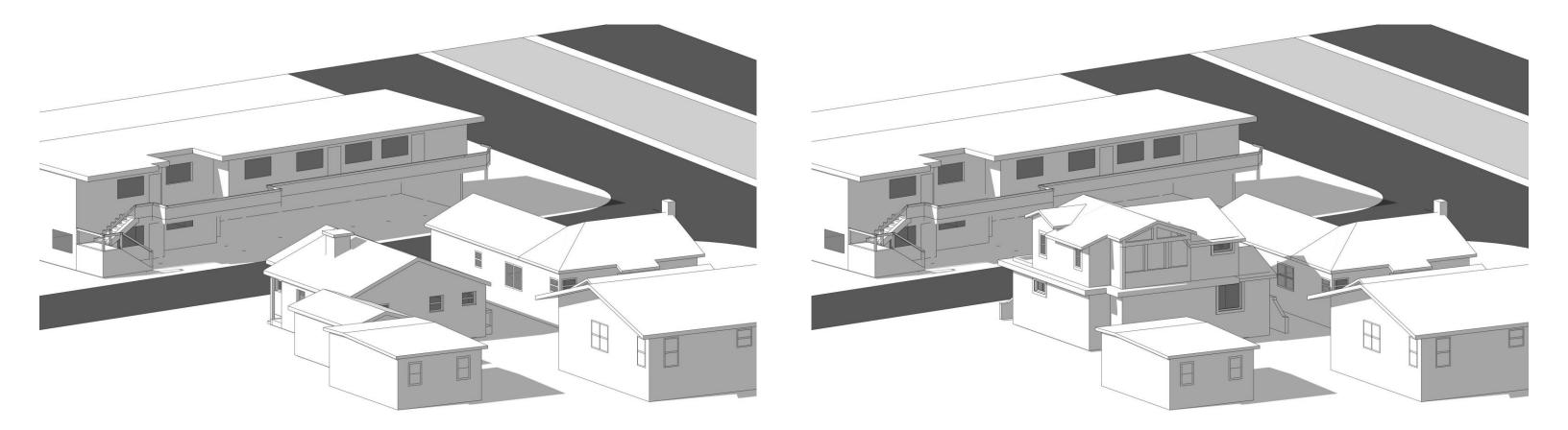
EXISTING

# 12:00 pm



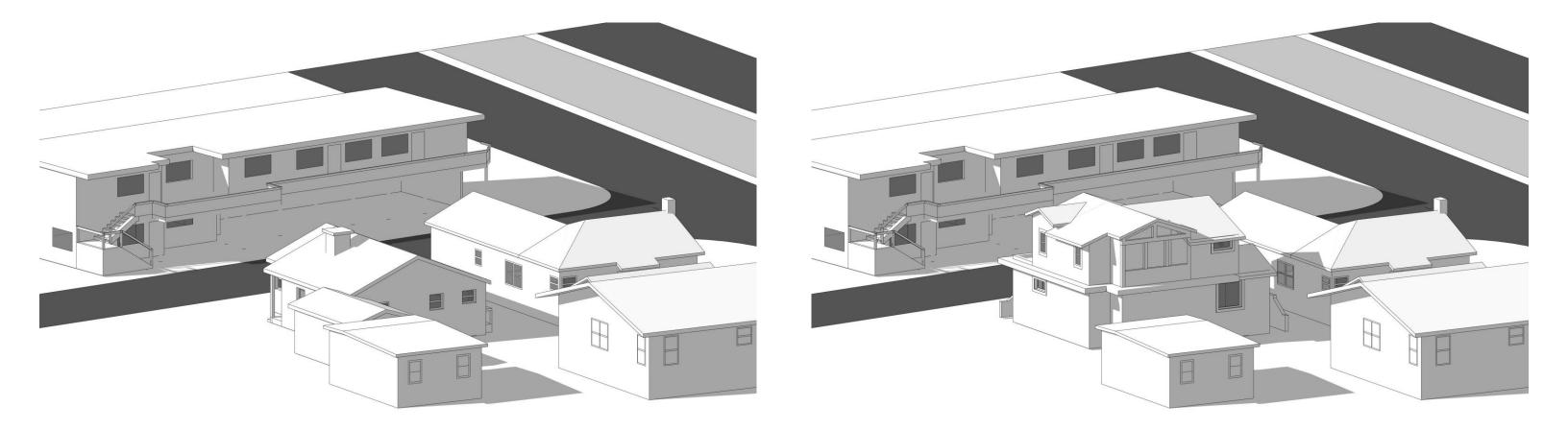
EXISTING

02:30 pm



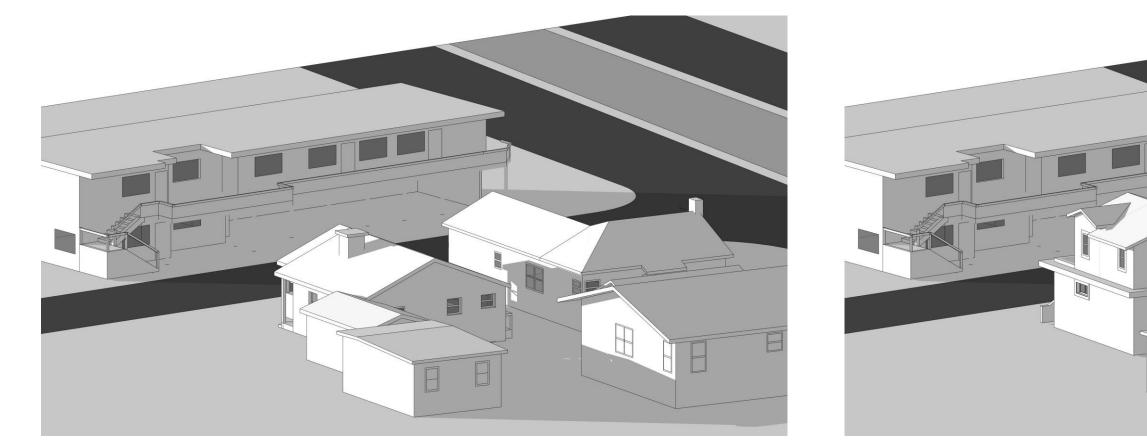
EXISTING

# 03:00 pm

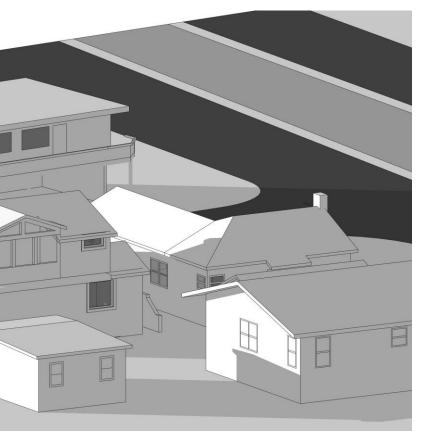


EXISTING

# 05:00 pm

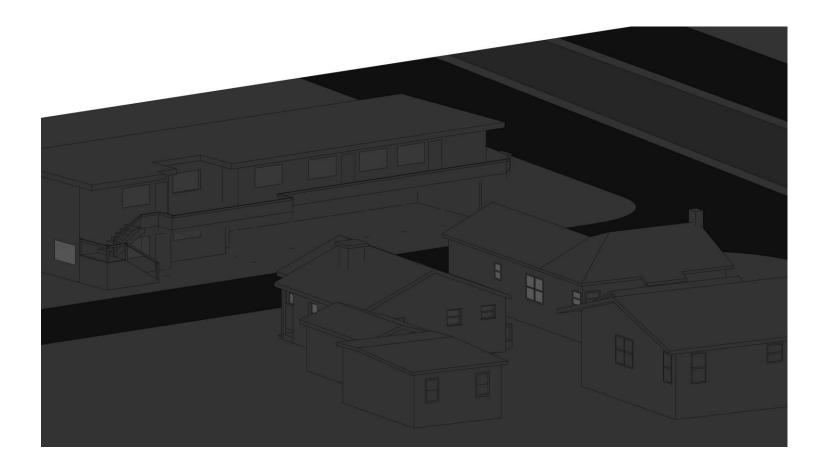


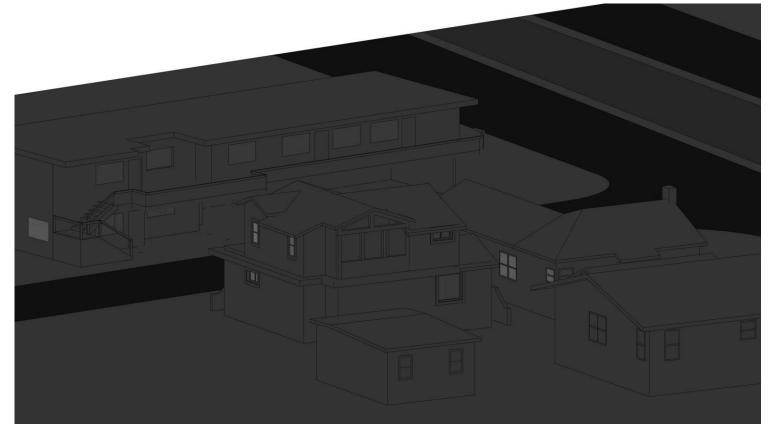
EXISTING



# 06:00 pm

Sunset at 5:55 pm





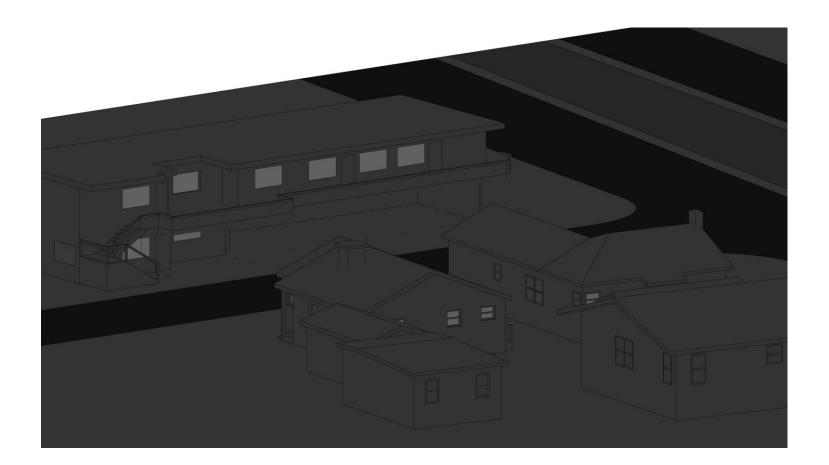
EXISTING

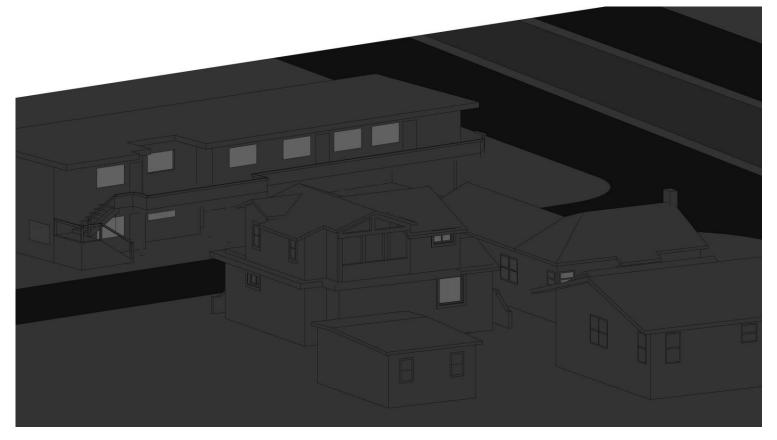
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

#### 06:00 am

Sunrise at 7:11 am



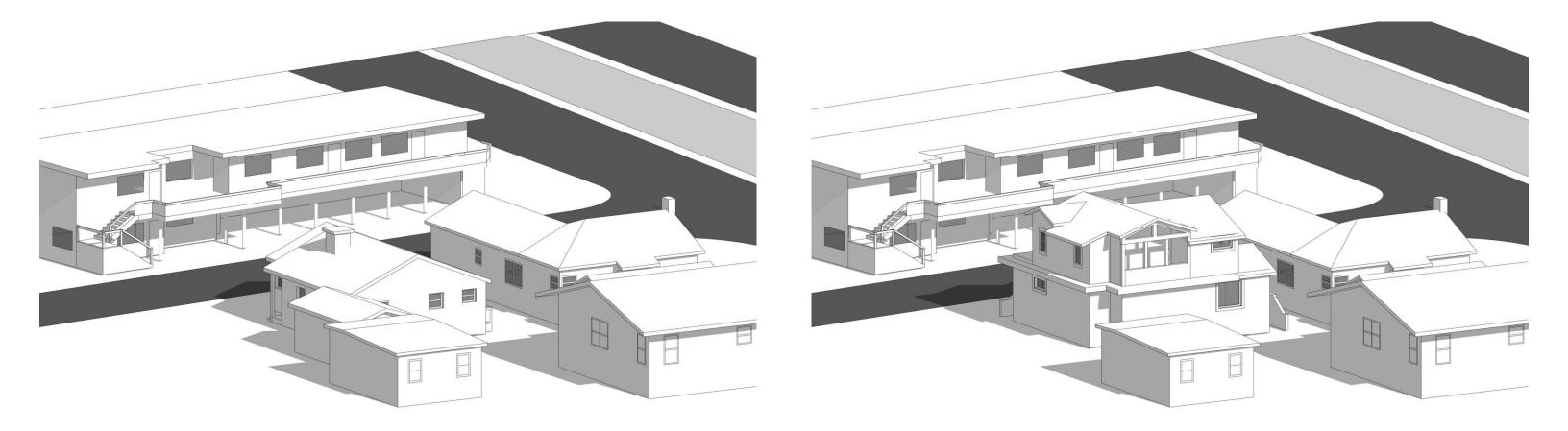


EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

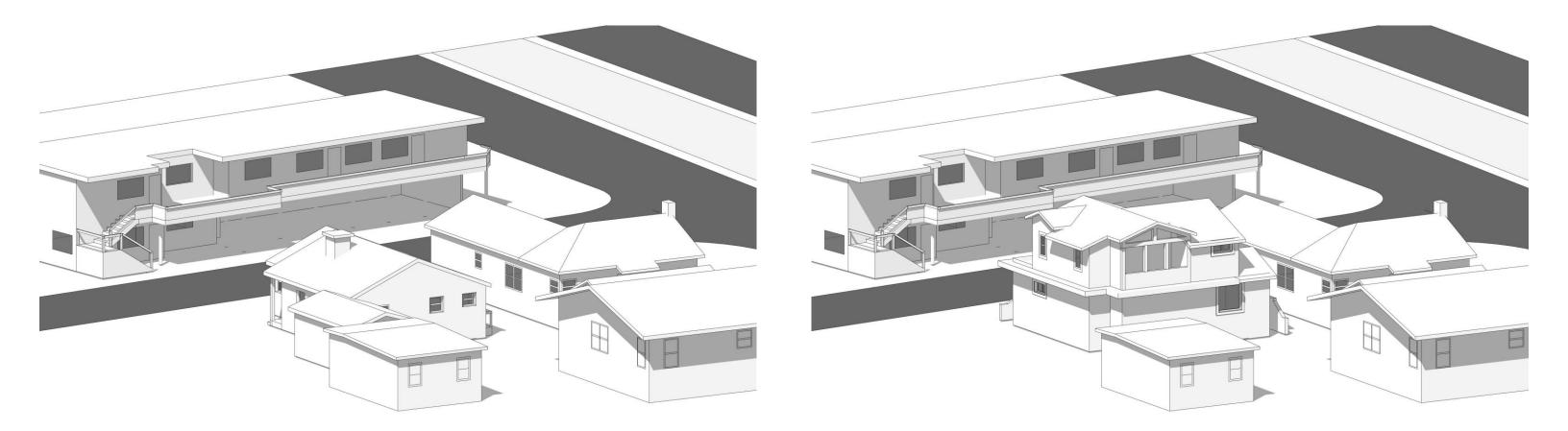
**ITEM 7 - ATTACHMENT 8** 

09:00 am



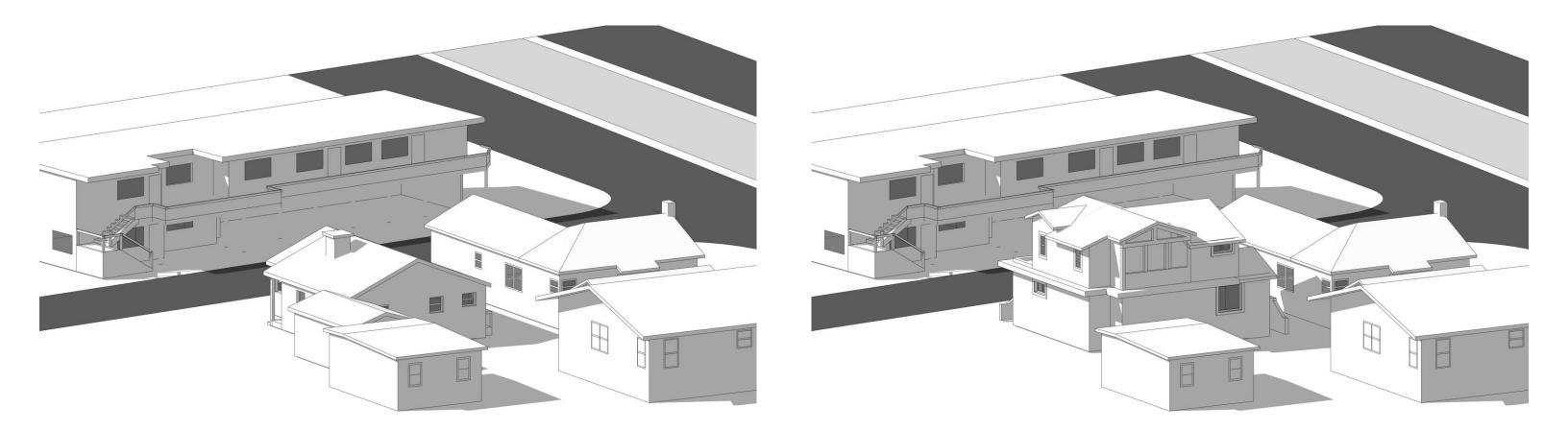
EXISTING

12:00 pm



EXISTING

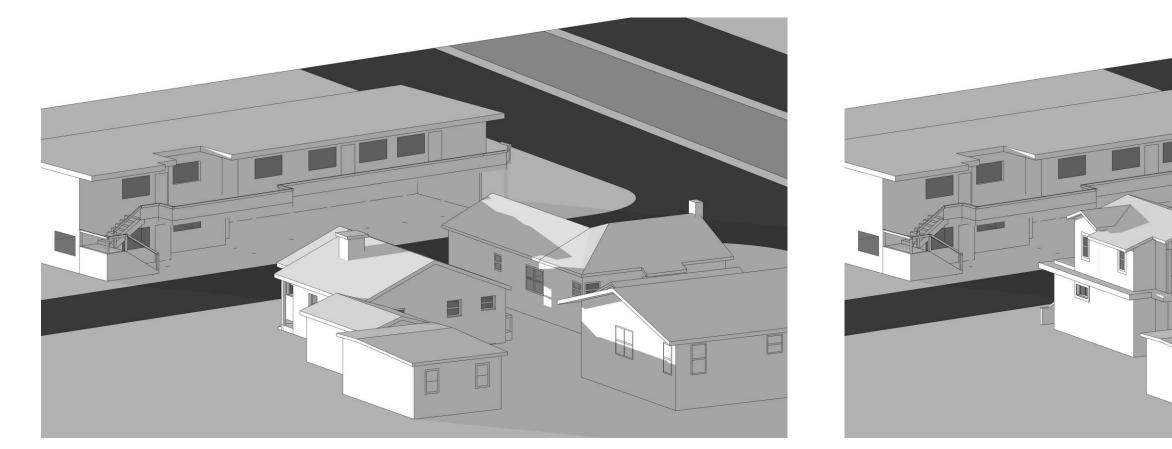
03:00 pm



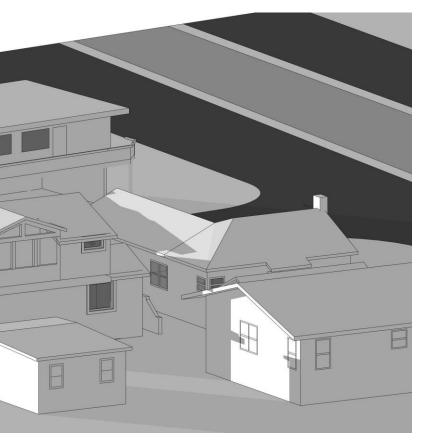
EXISTING

### 06:00 pm

Sunset at 7:23 pm



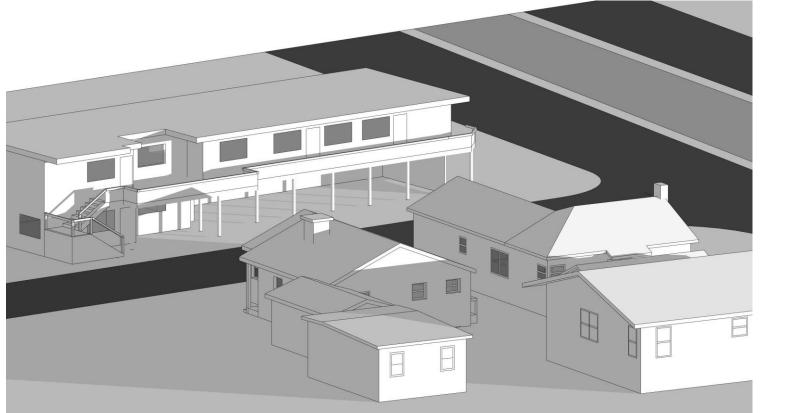
EXISTING

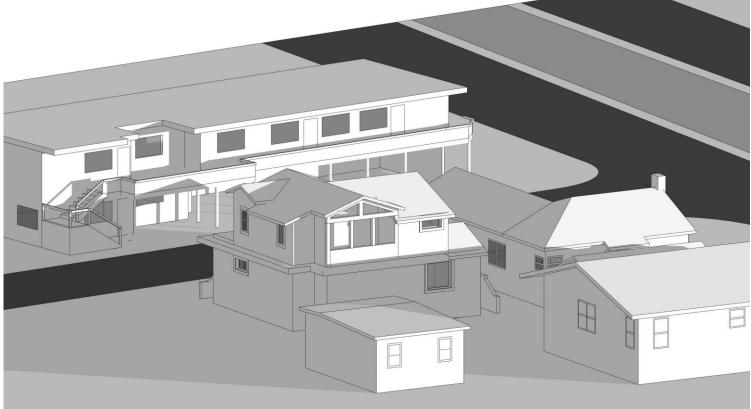


# April 21st

#### 06:00 am

Sunrise at 6:26 am





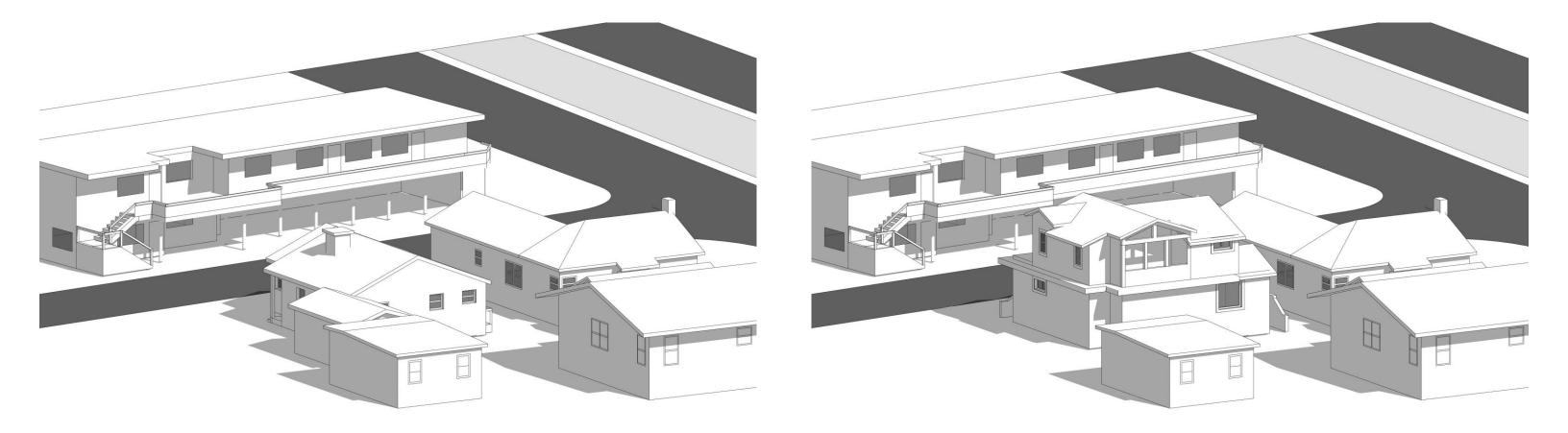
EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

# April 21st

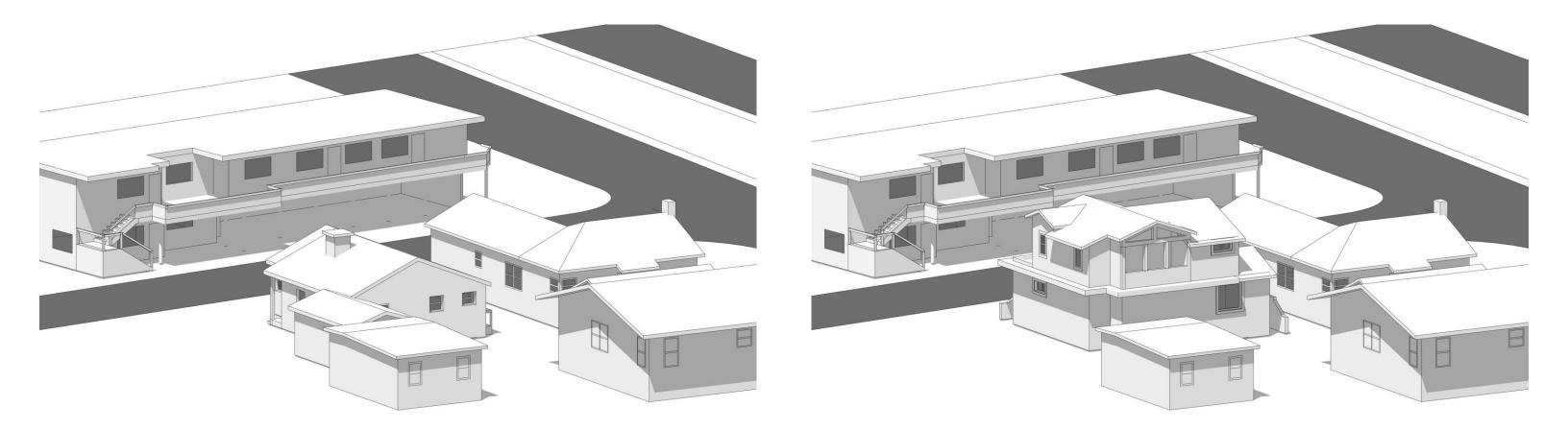
09:00 am



EXISTING

April 21st

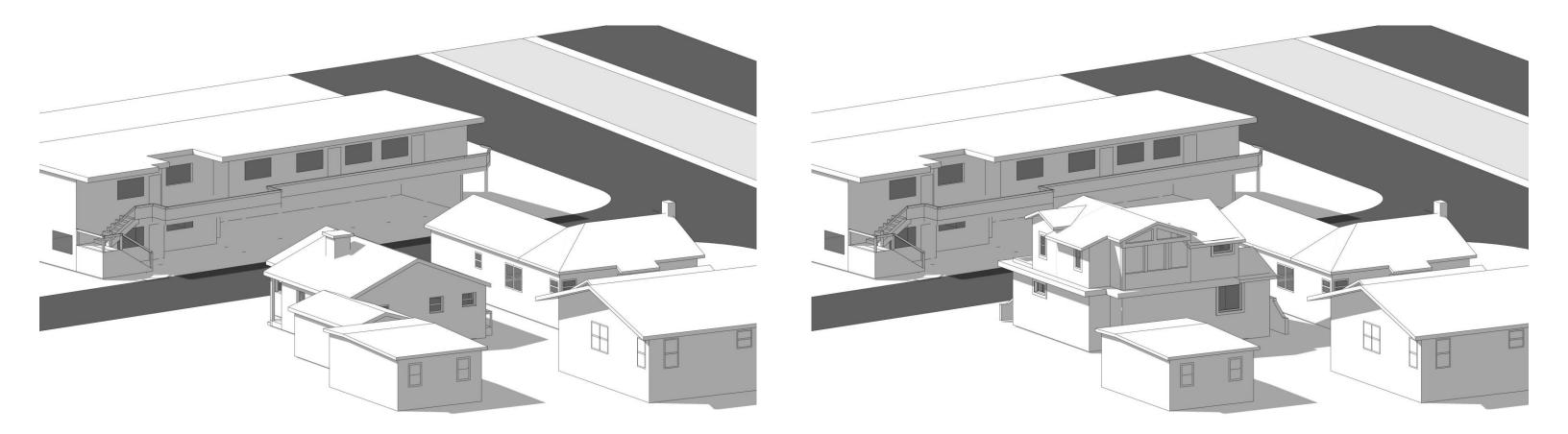
12:00 pm



EXISTING

April 21st

03:00 pm



EXISTING

PROPOSED

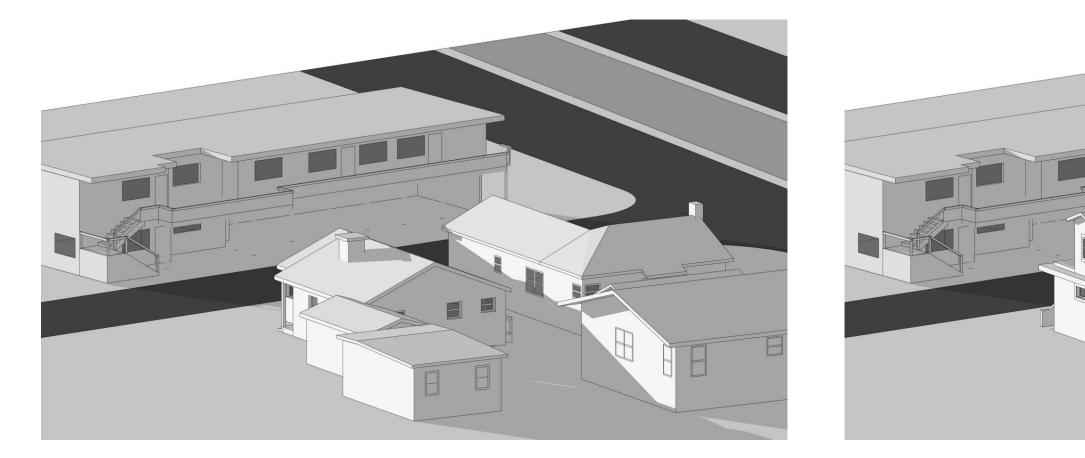
Shadow Study 9 Laurel Ave. San Anselmo

ITEM 7 - ATTACHMENT 8

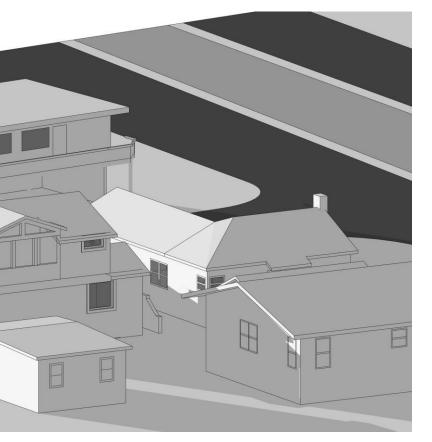
# April 21st

#### 06:00 pm

Sunset at 7:52 pm



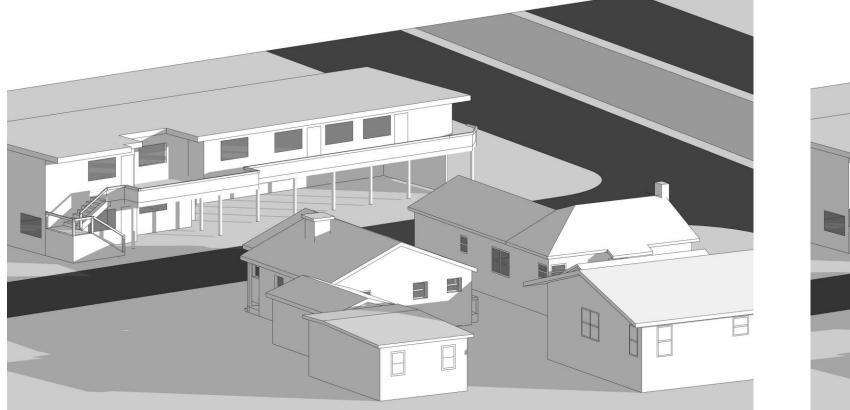
EXISTING

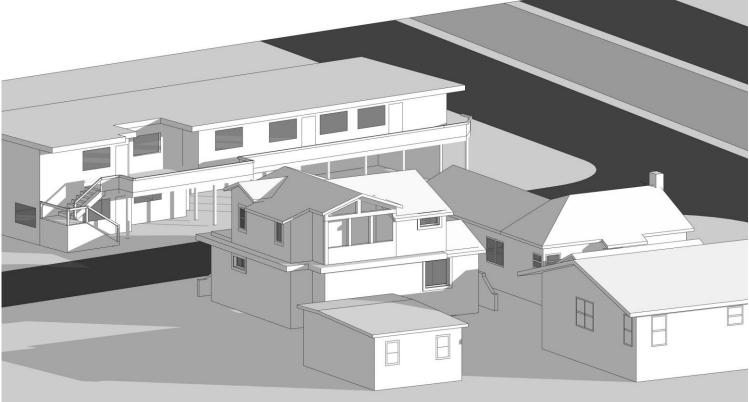


# May 21st

#### 06:00 am

Sunrise at 5:55 am

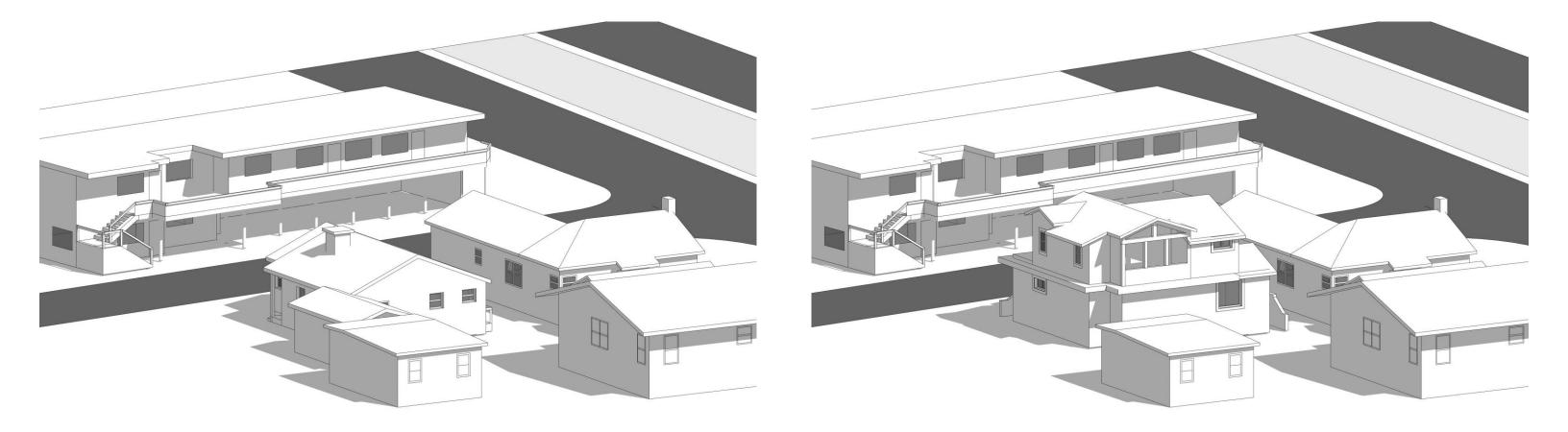




EXISTING



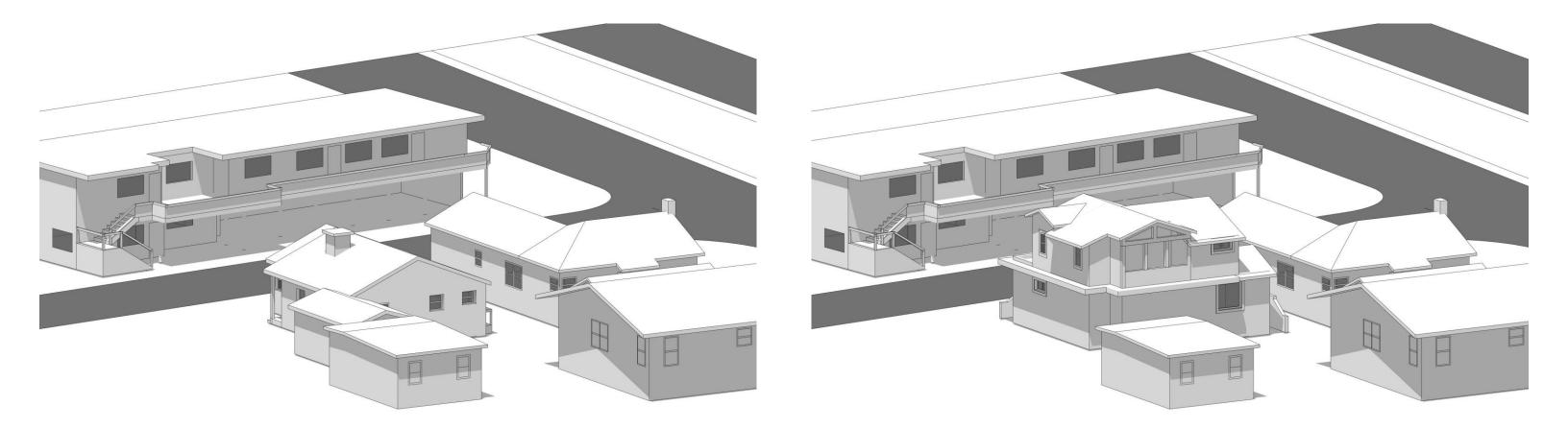
09:00 am



EXISTING

May 21st

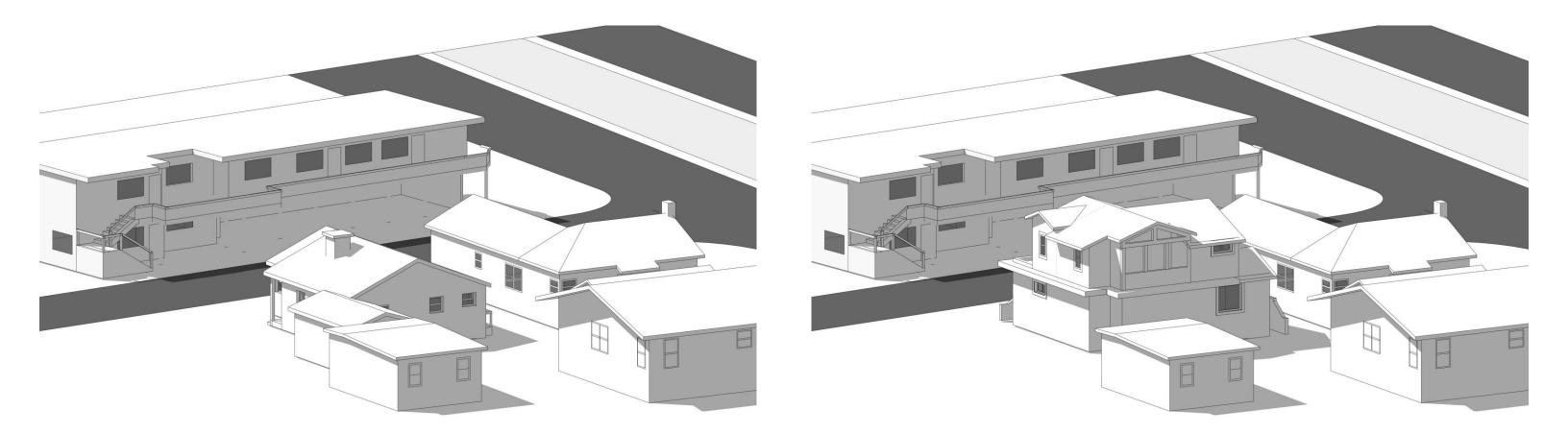
12:00 pm



EXISTING



03:00 pm

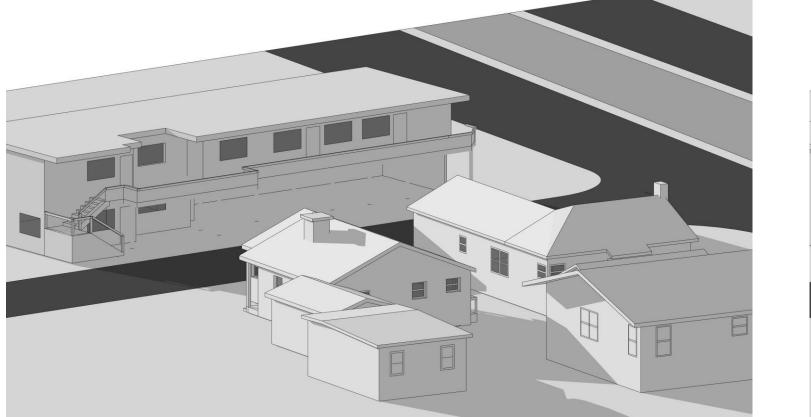


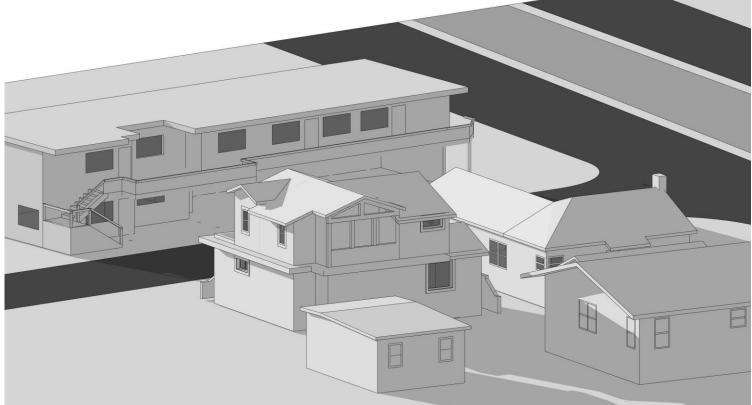
EXISTING

# May 21st

# 06:00 pm

Sunset at 8:19 pm



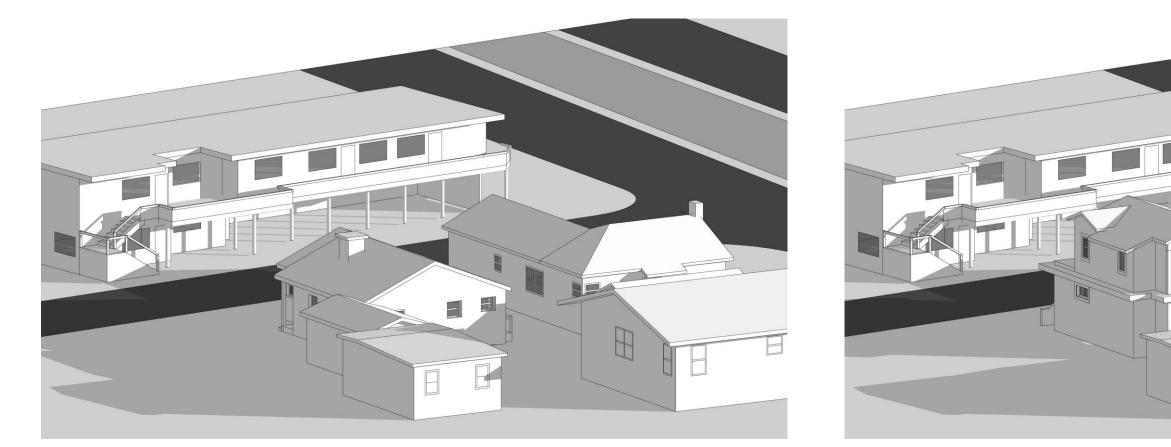


EXISTING

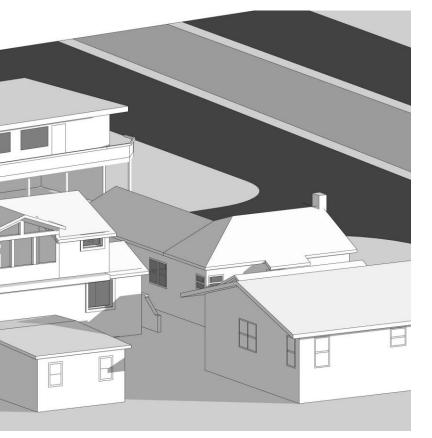
#### June 21st

#### 06:00 am

Sunrise at 5:48 am

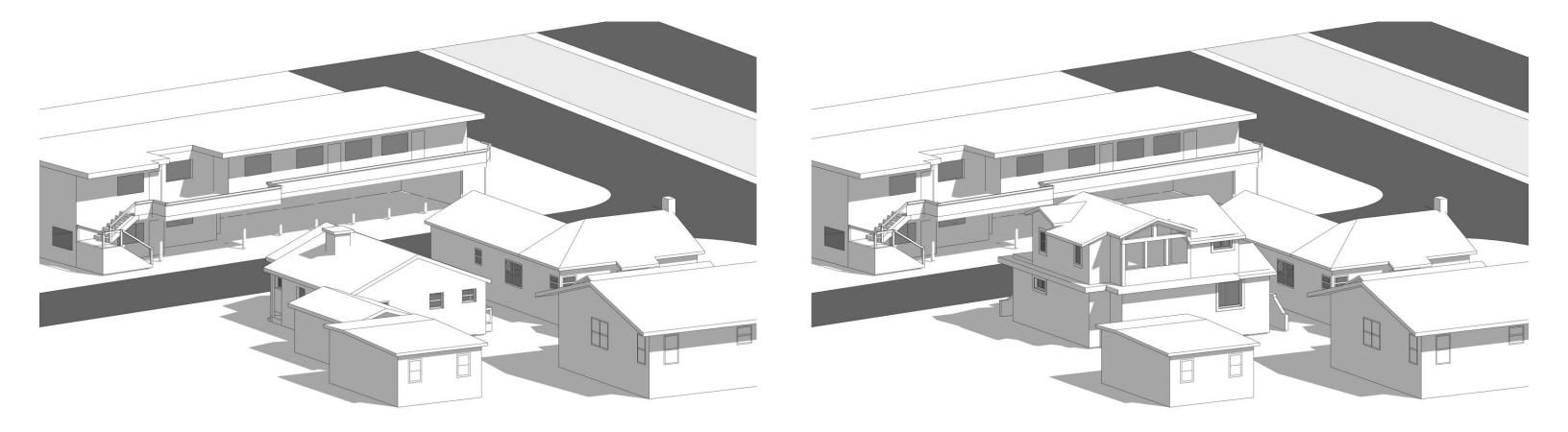


EXISTING





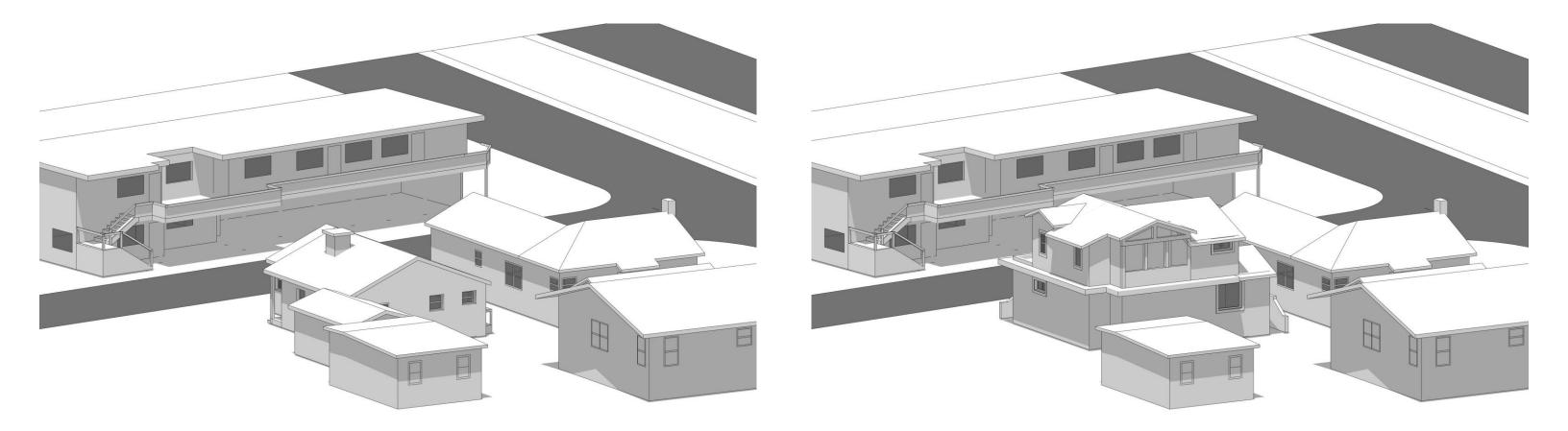
09:00 am



EXISTING

June 21st

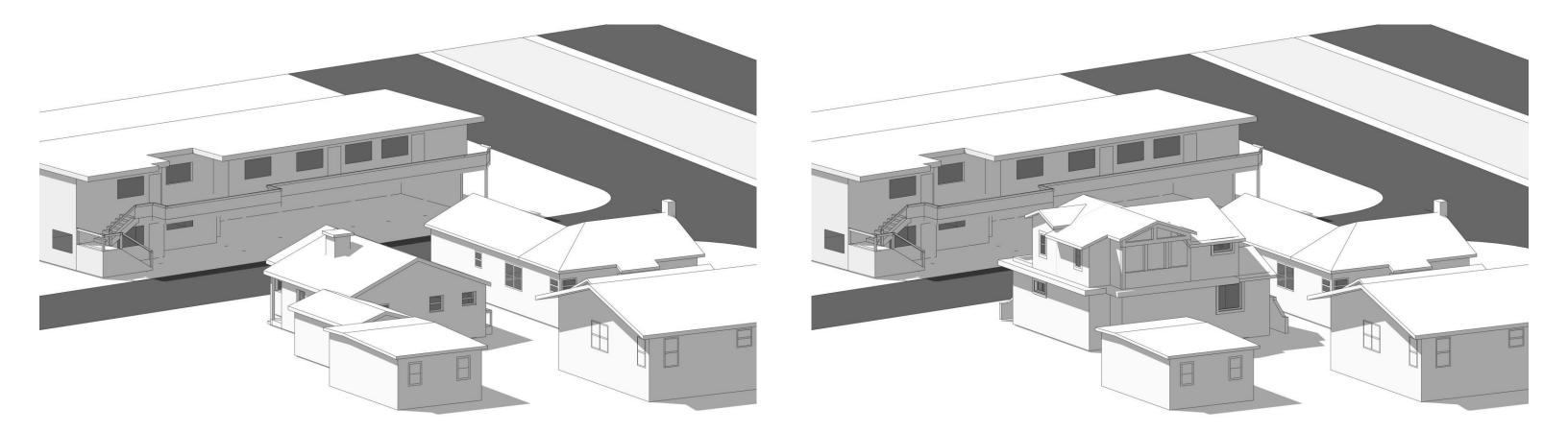
12:00 pm



EXISTING



03:00 pm

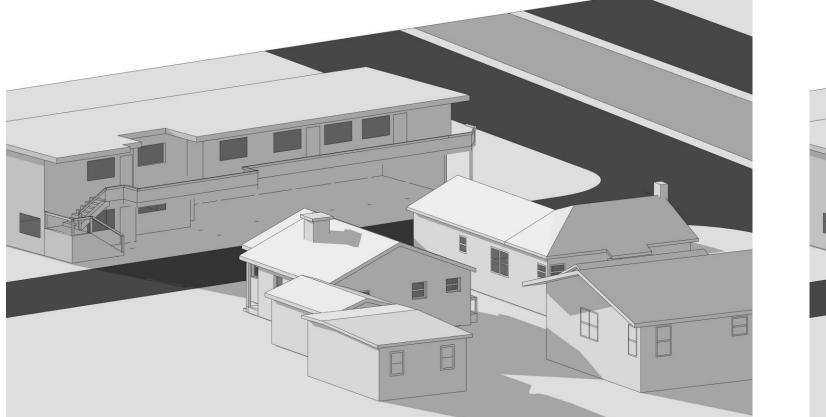


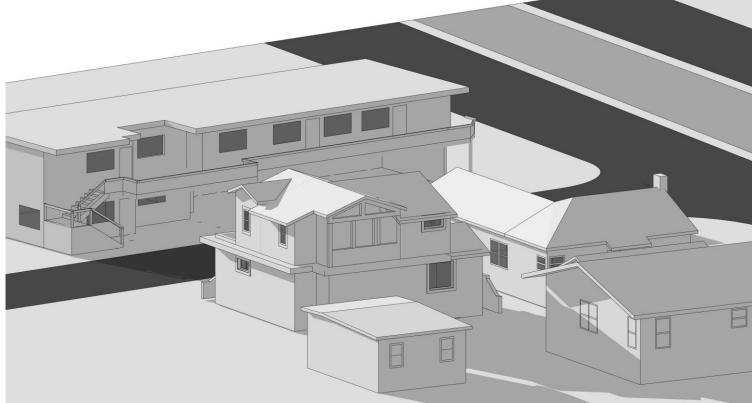
EXISTING

#### June 21st

### 06:00 pm

Sunset at 8:36 am



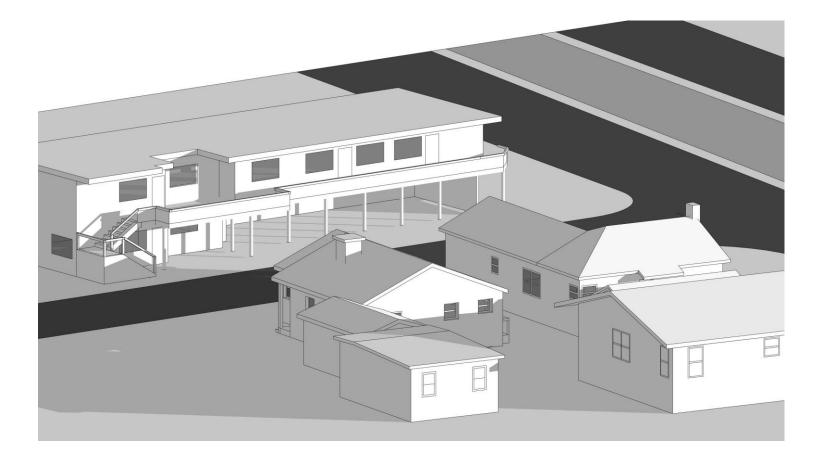


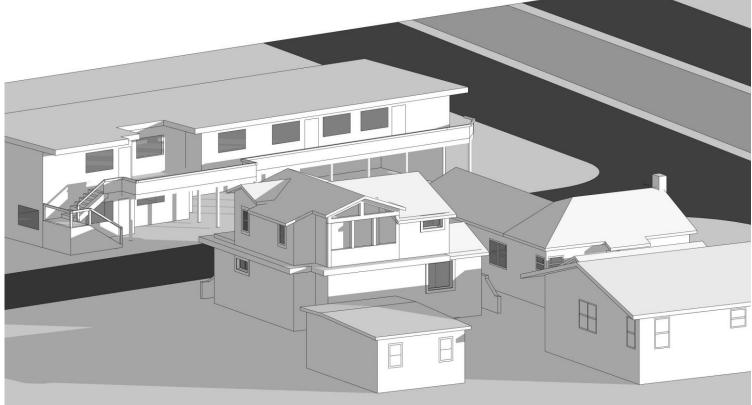
EXISTING

# July 21st

#### 06:00 am

Sunrise at 6:04 am

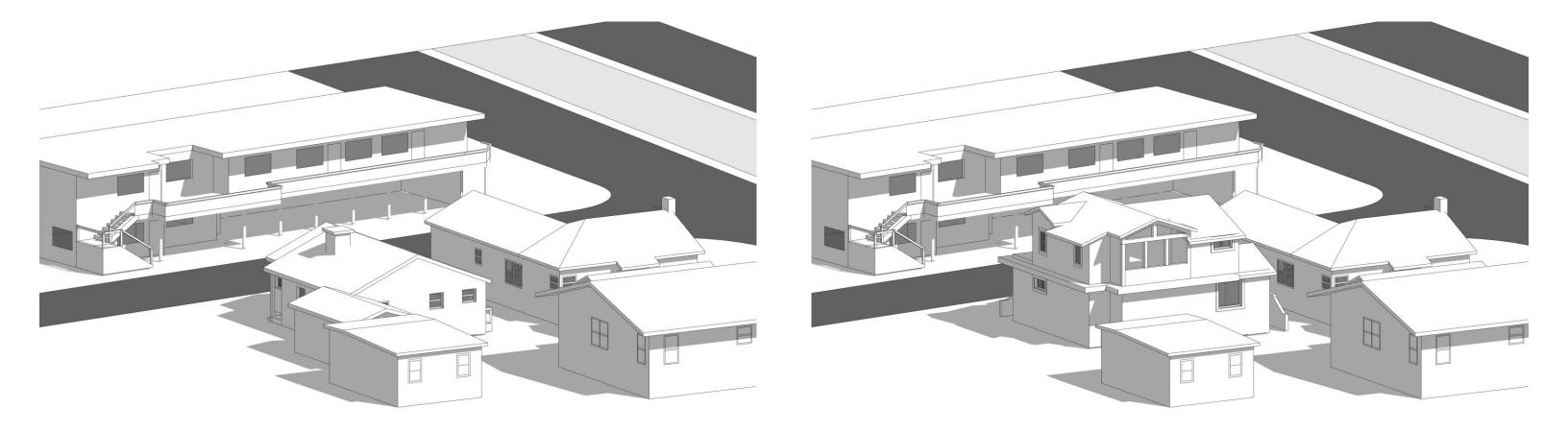




EXISTING



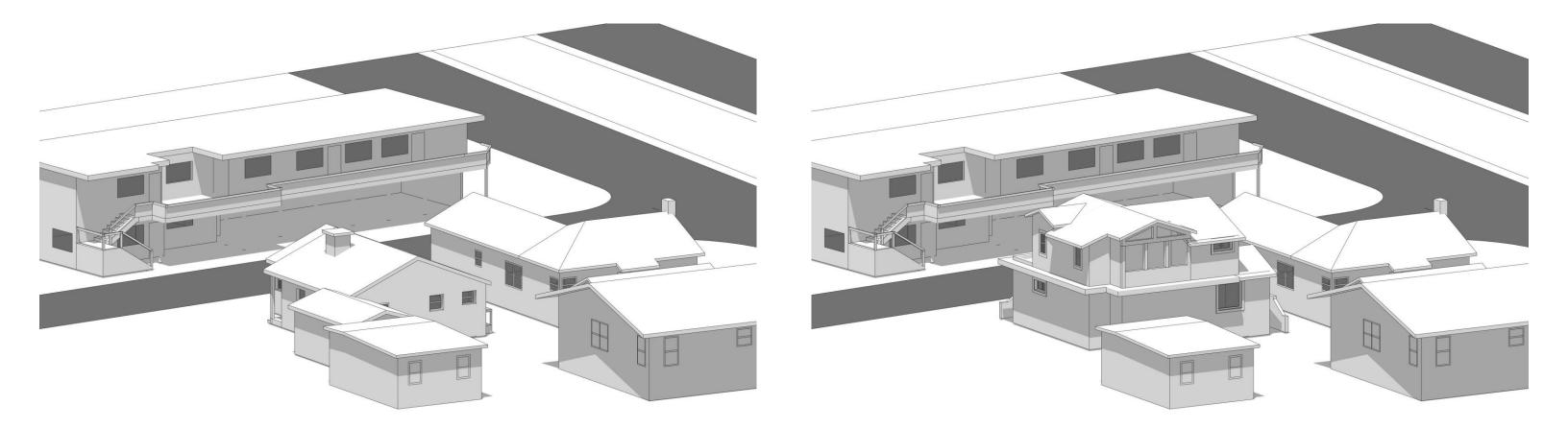
09:00 am



EXISTING

July 21st

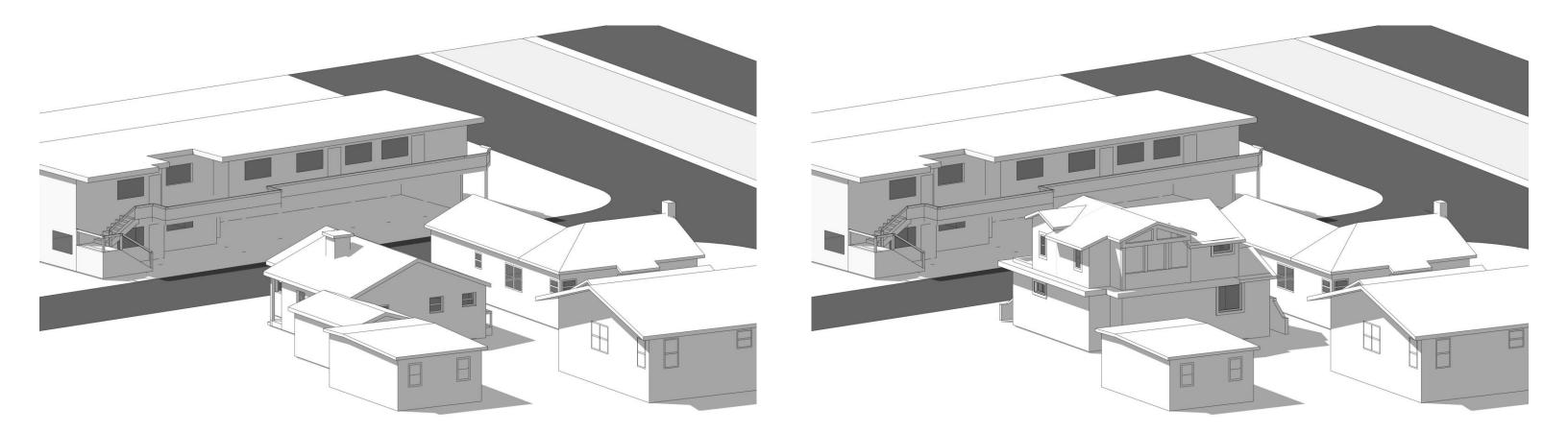
12:00 pm



EXISTING

July 21st

03:00 pm

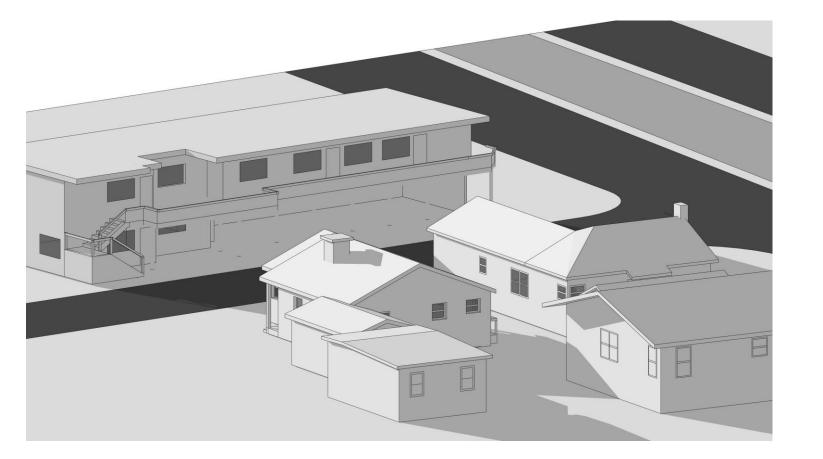


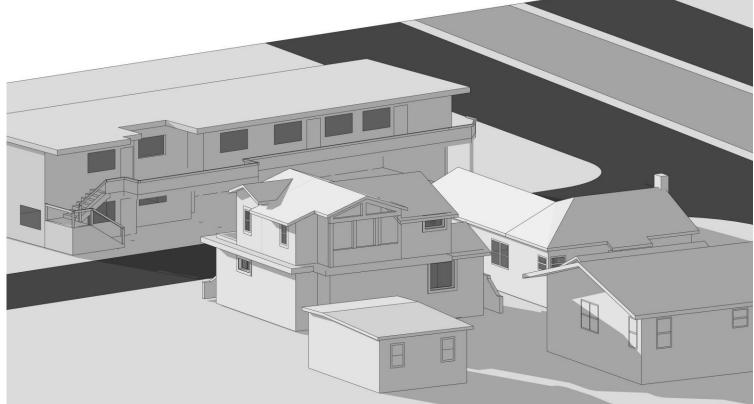
EXISTING

# July 21st

### 06:00 pm

Sunset at 8:28 pm

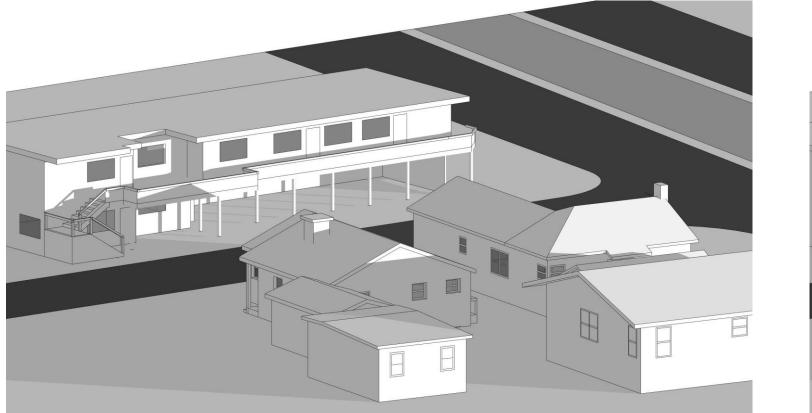


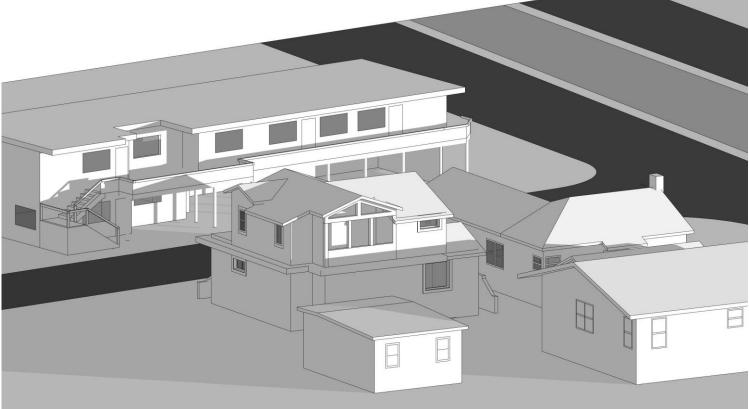


EXISTING

#### 06:00 am

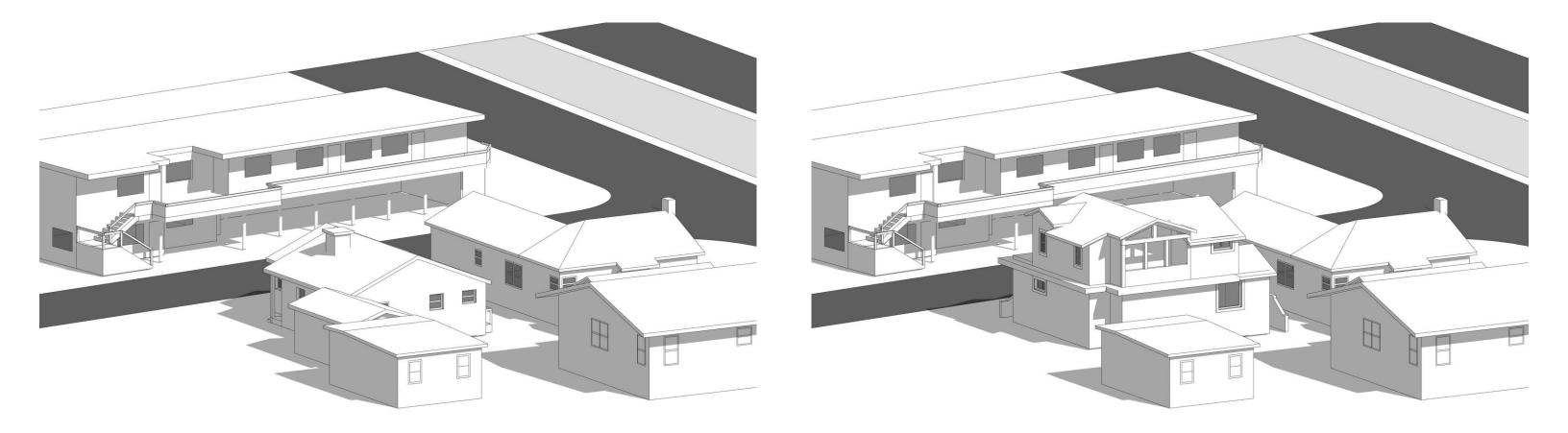
Sunrise at 6:31 am





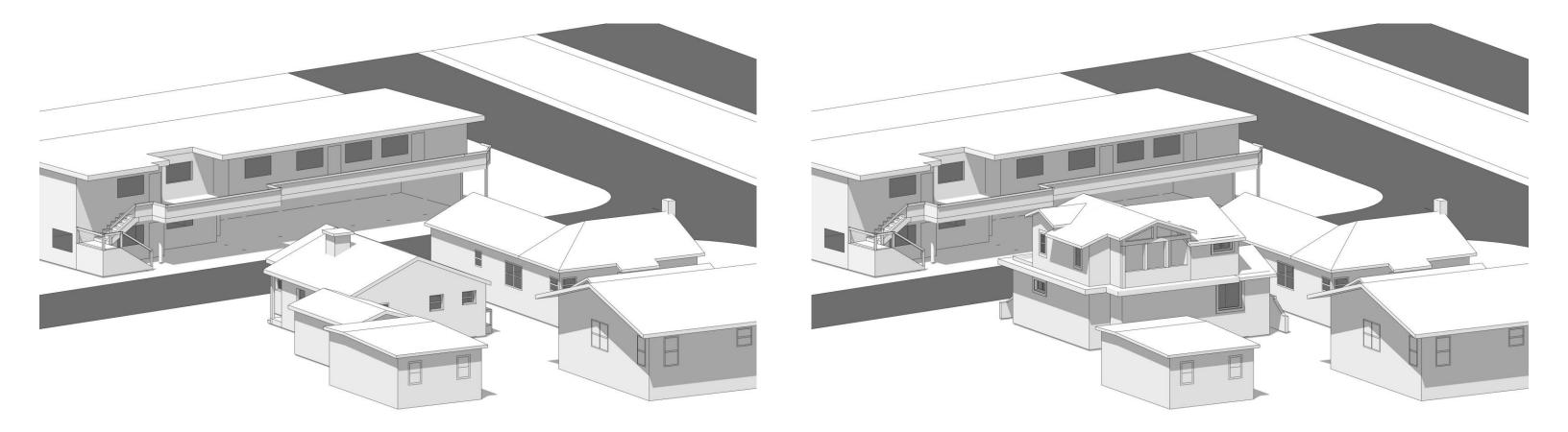
EXISTING

09:00 am



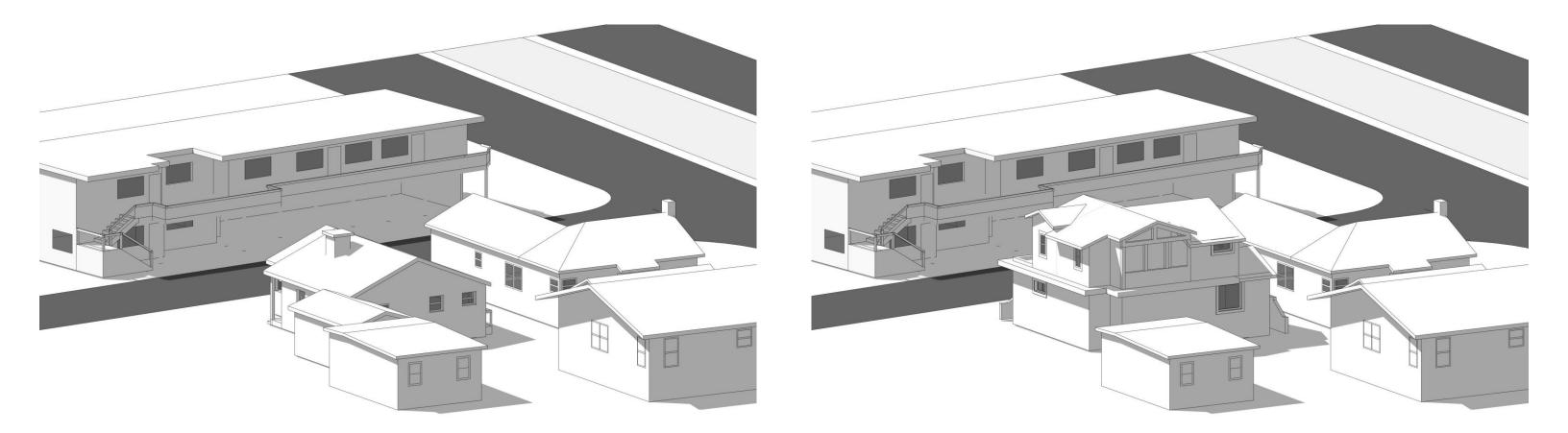
EXISTING

# 12:00 pm



EXISTING

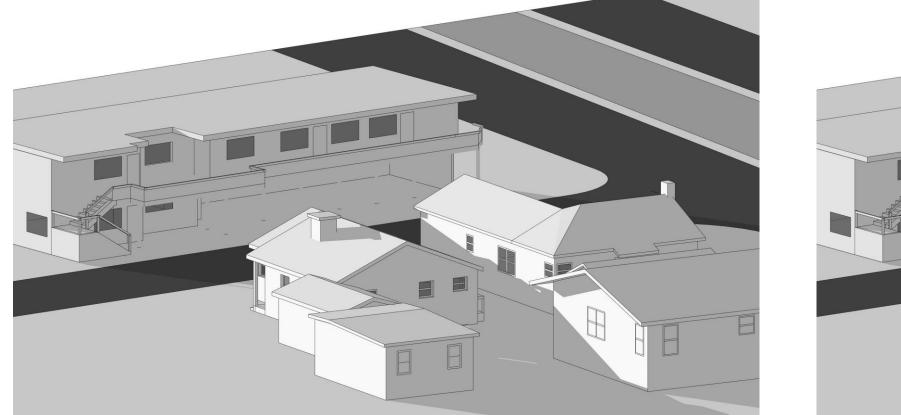
03:00 pm

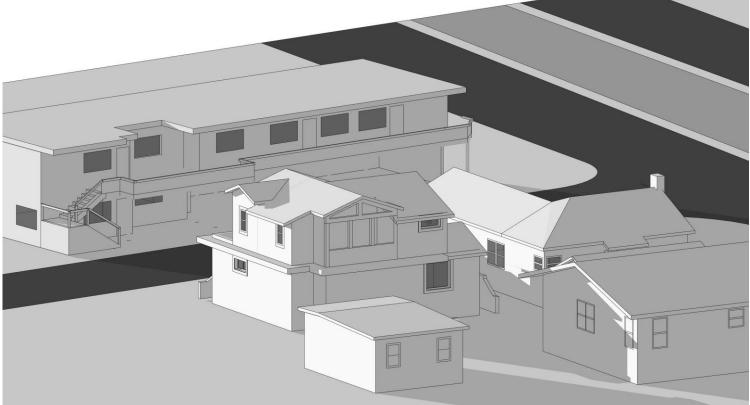


EXISTING

# 06:00 pm

Sunset at 7:54 pm

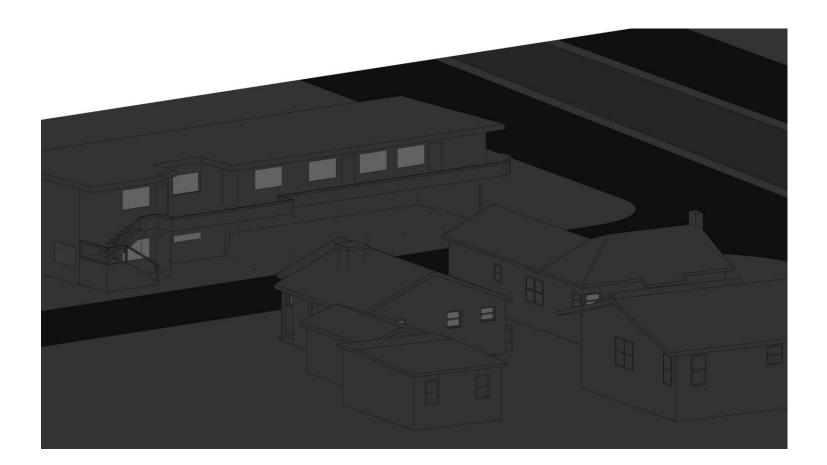


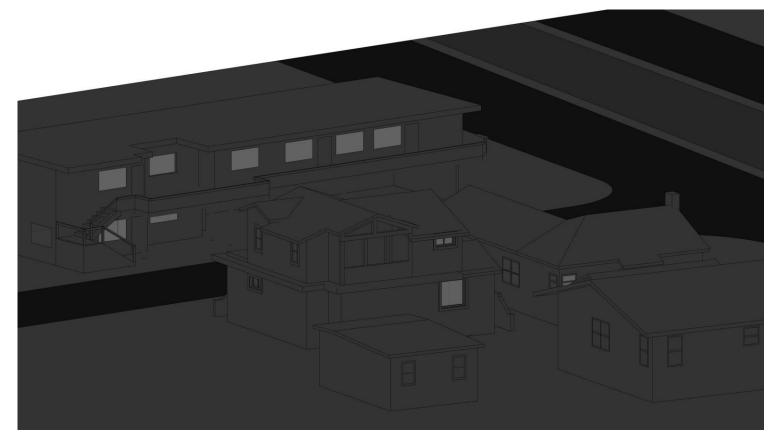


EXISTING

#### 06:00 am

Sunrise at 6:57 am



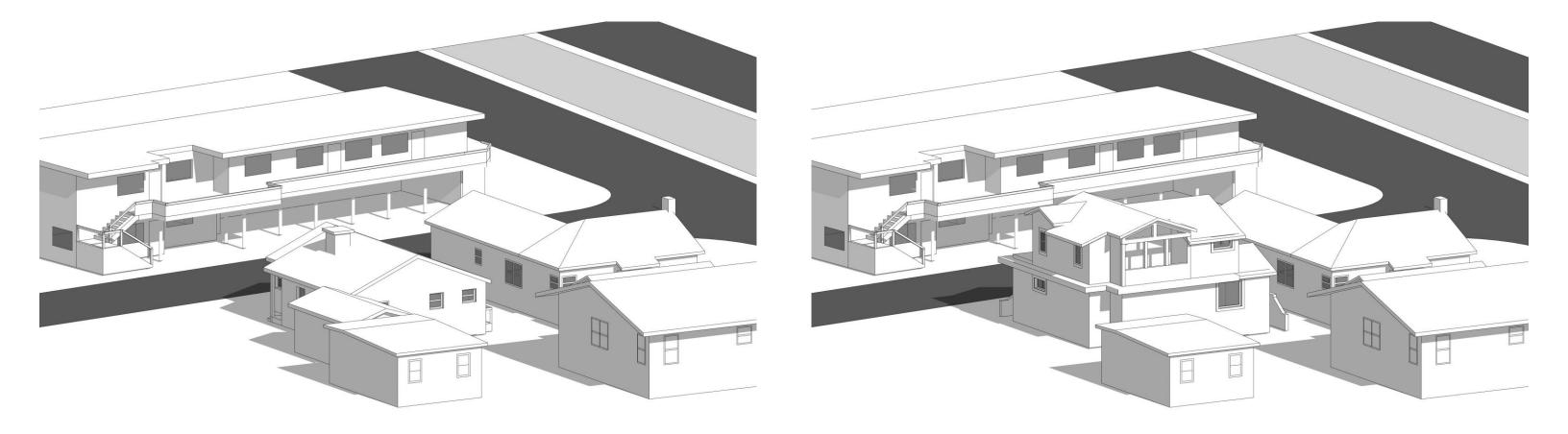


EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

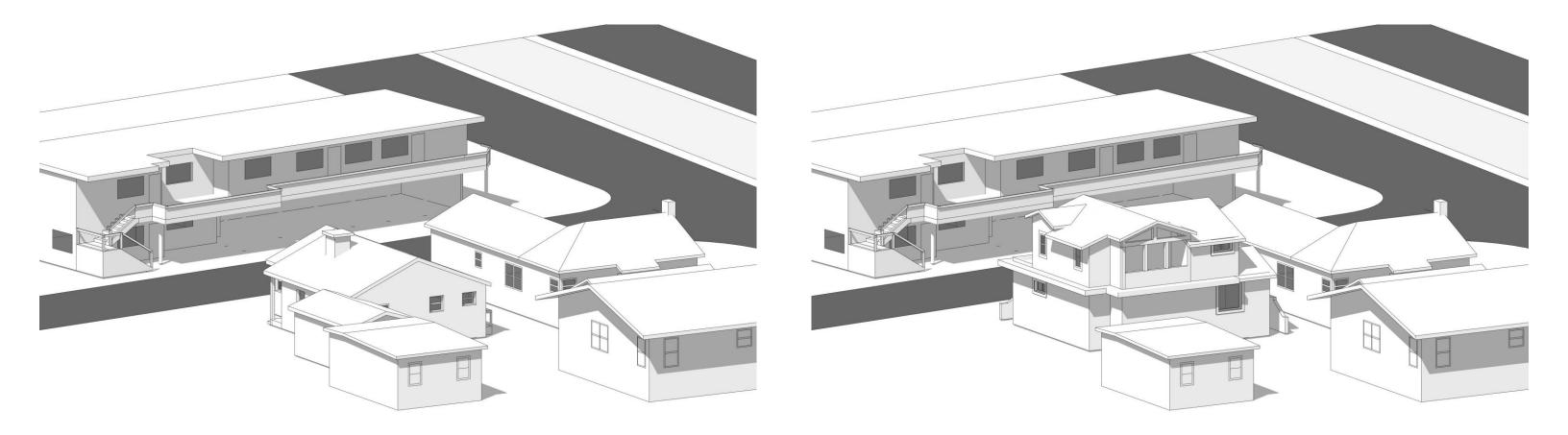
**ITEM 7 - ATTACHMENT 8** 

#### 09:00 am



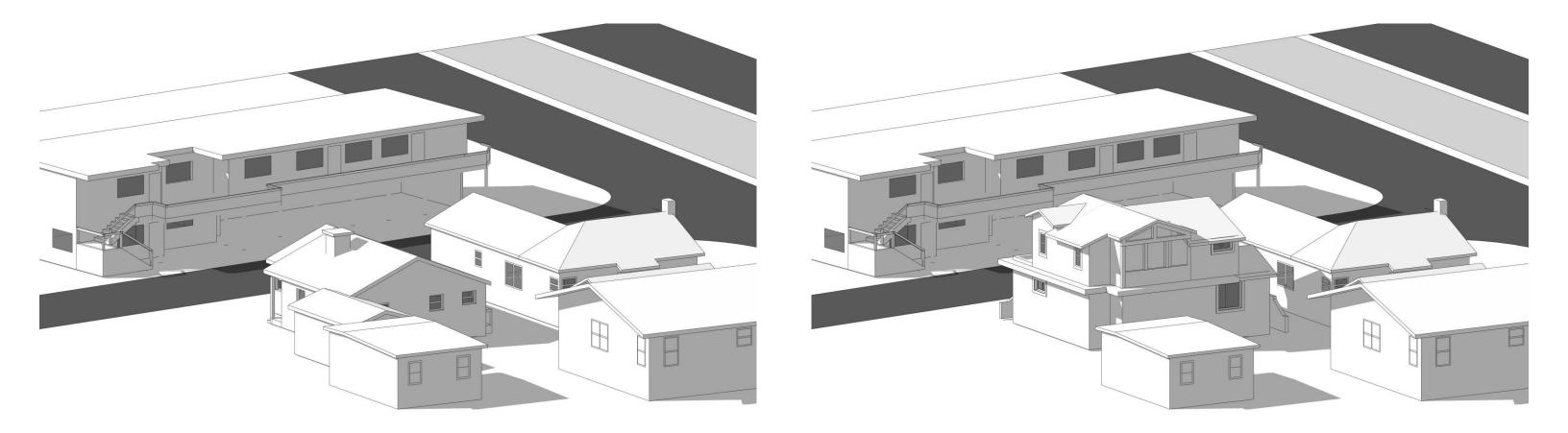
EXISTING

# 12:00 pm



EXISTING

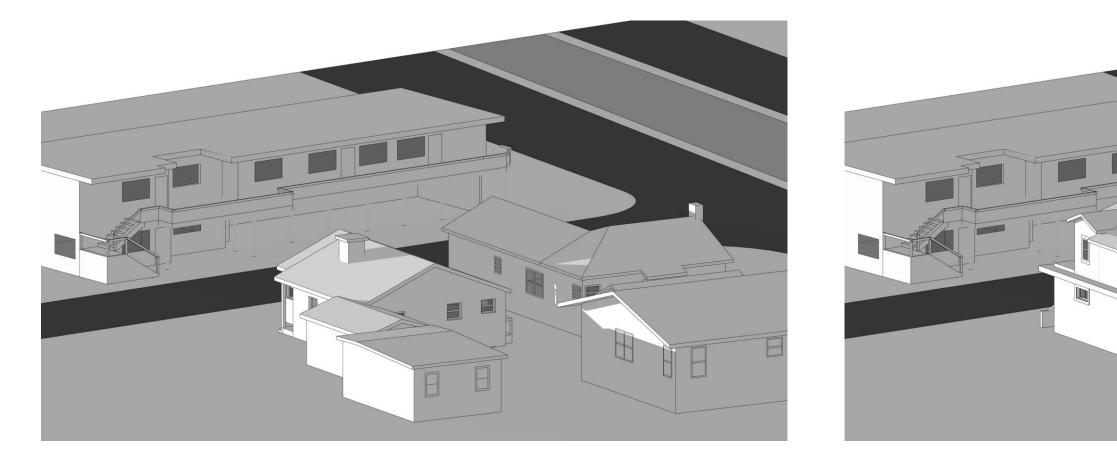
# 03:00 pm



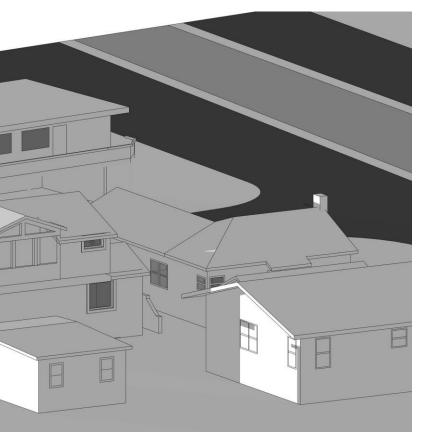
EXISTING

### 06:00 pm

Sunset at 7:08 am

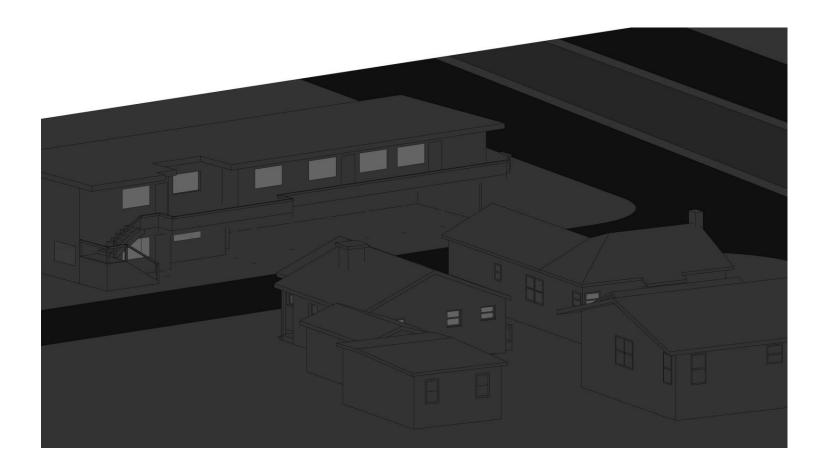


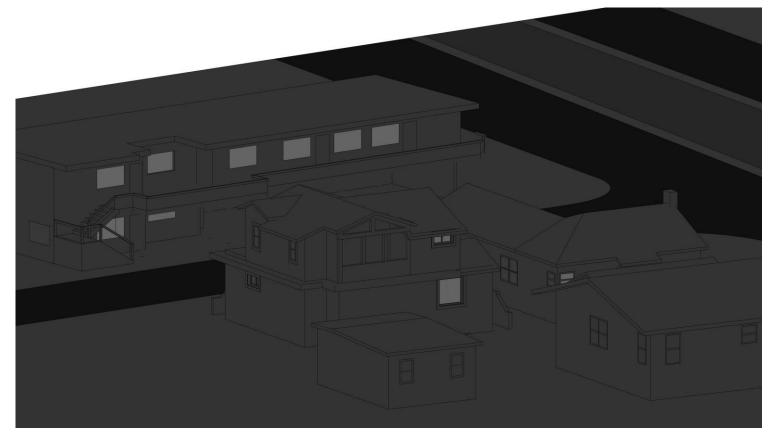
EXISTING



#### 06:00 am

Sunrise at 7:25 am



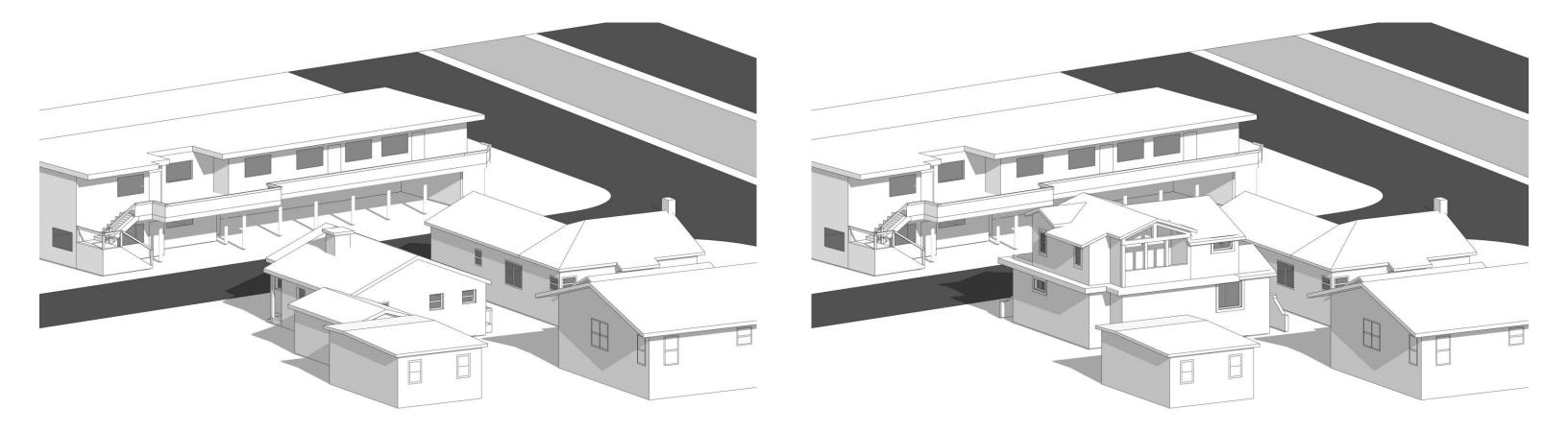


EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

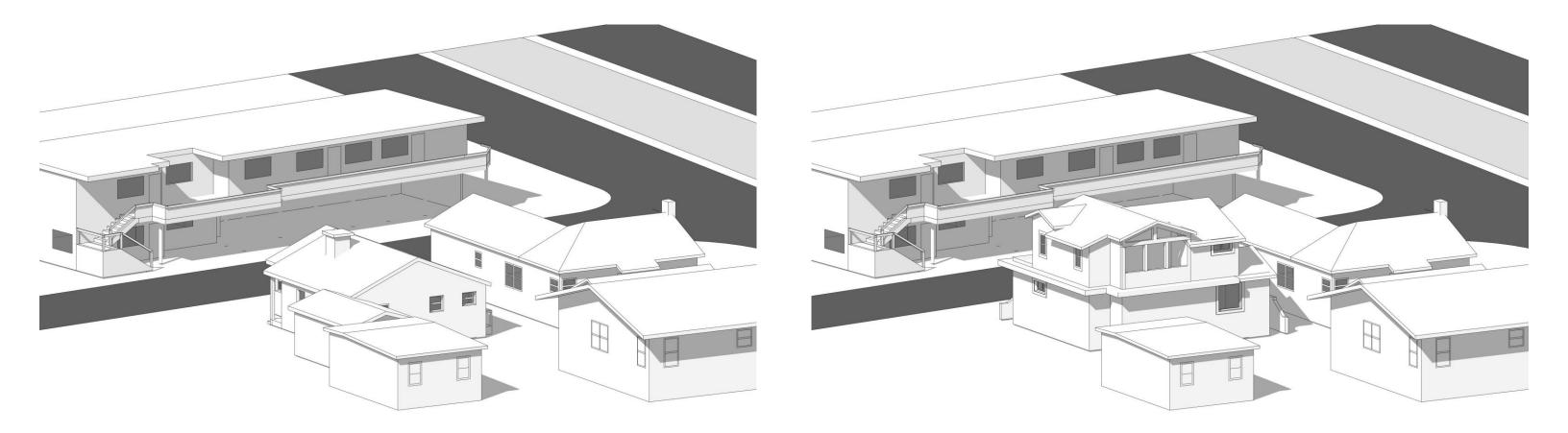
**ITEM 7 - ATTACHMENT 8** 

#### 09:00 am



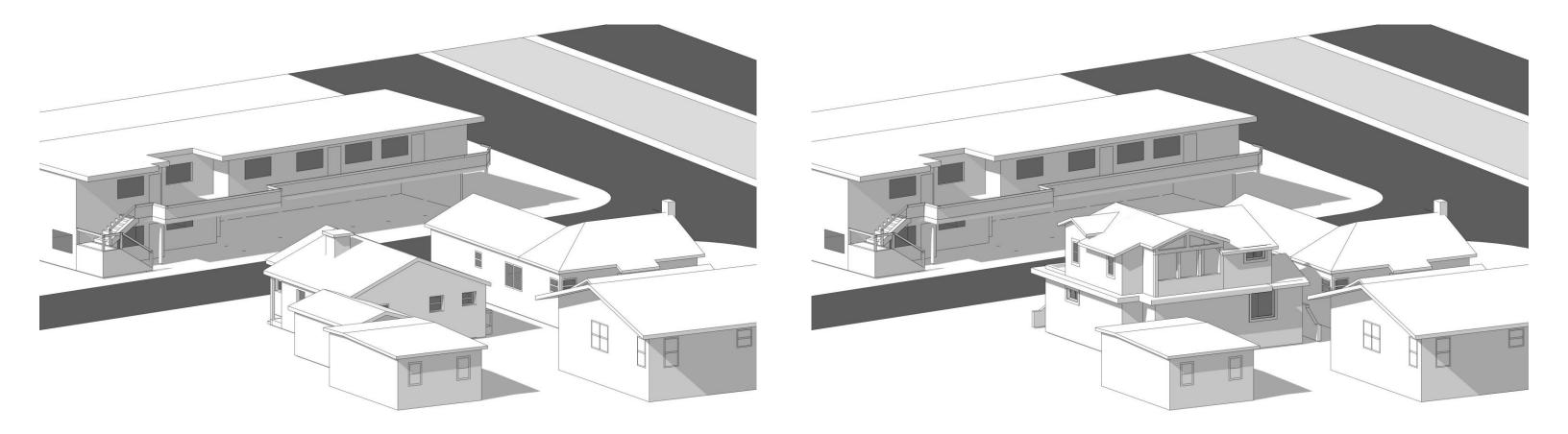
EXISTING

# 12:00 pm



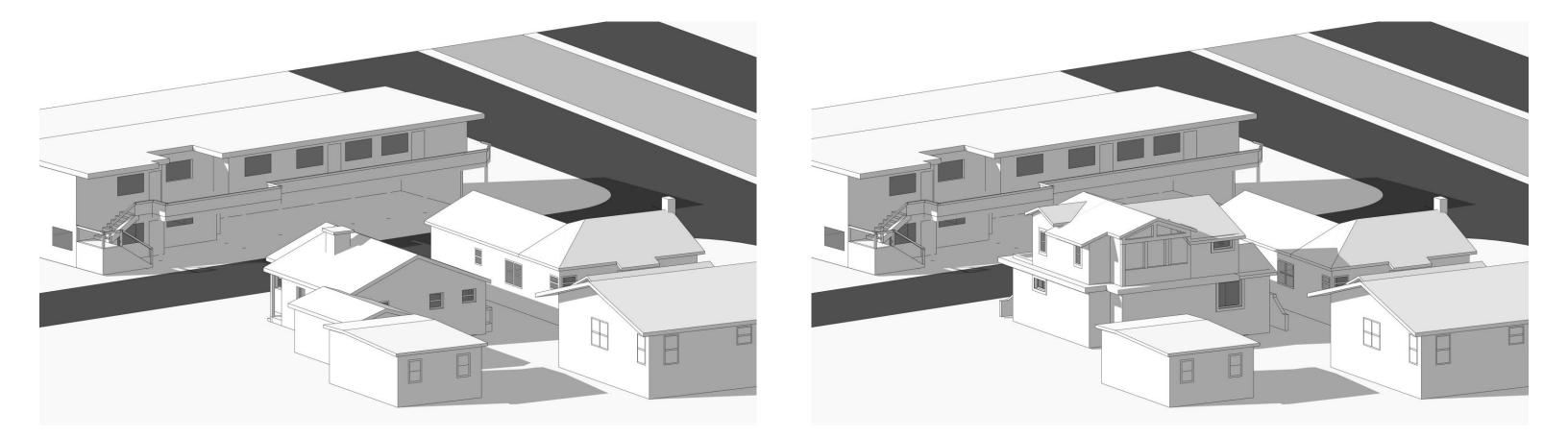
EXISTING

# 01:00 pm



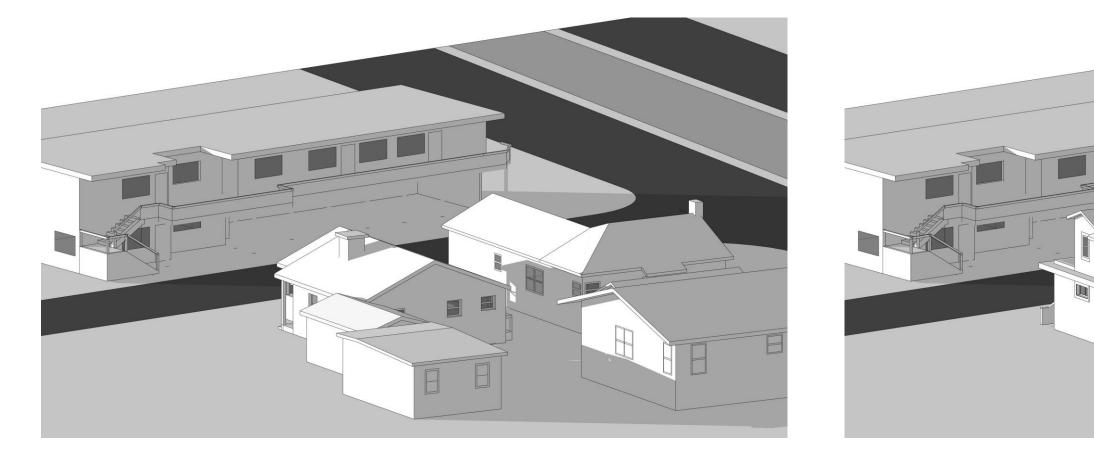
EXISTING

# 03:00 pm

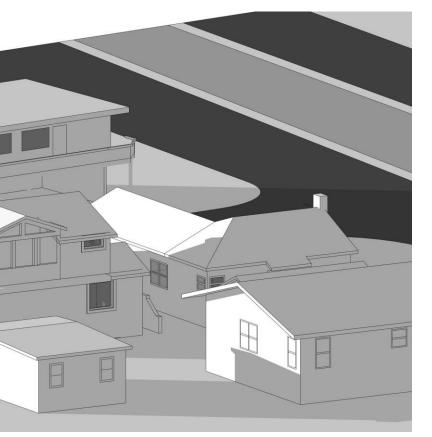


EXISTING

04:30 pm

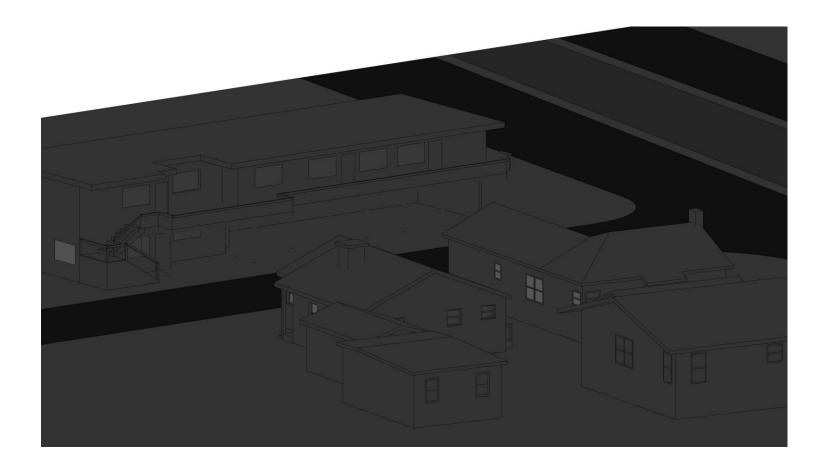


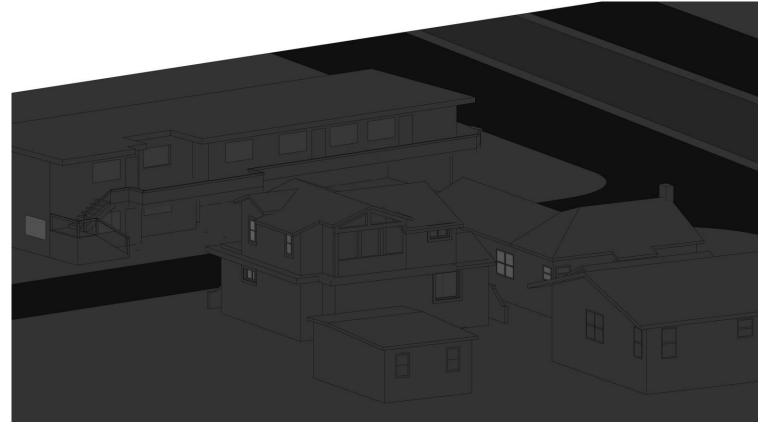
EXISTING



# 06:00 pm

Sunset at 6:23 pm





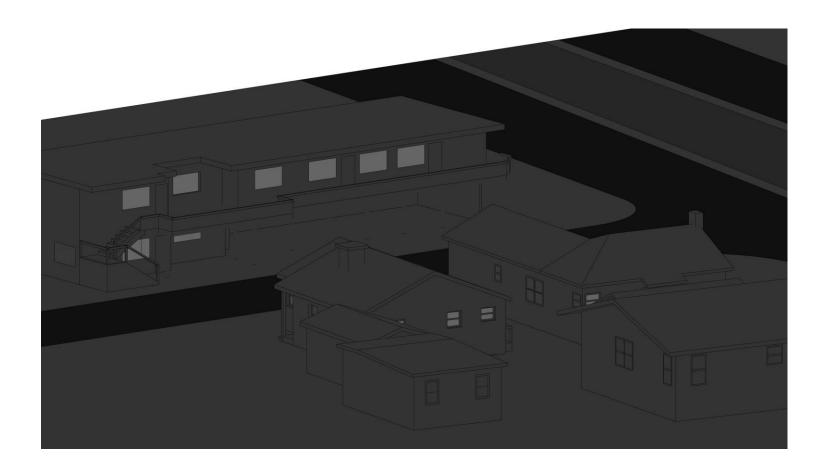
EXISTING

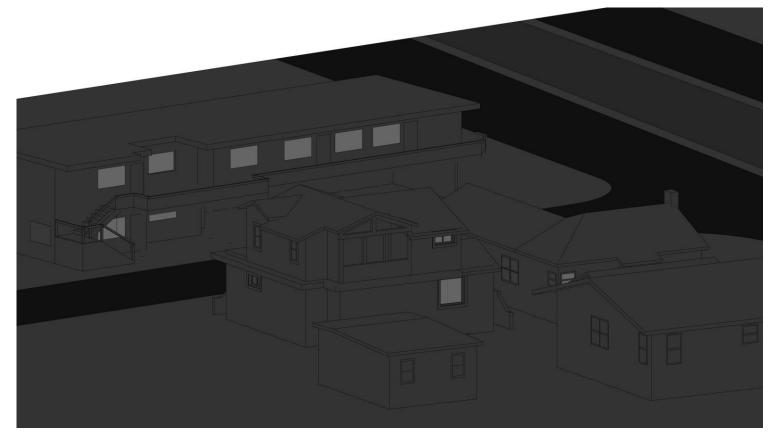
Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

#### 06:00 am

Sunrise at 6:57 am



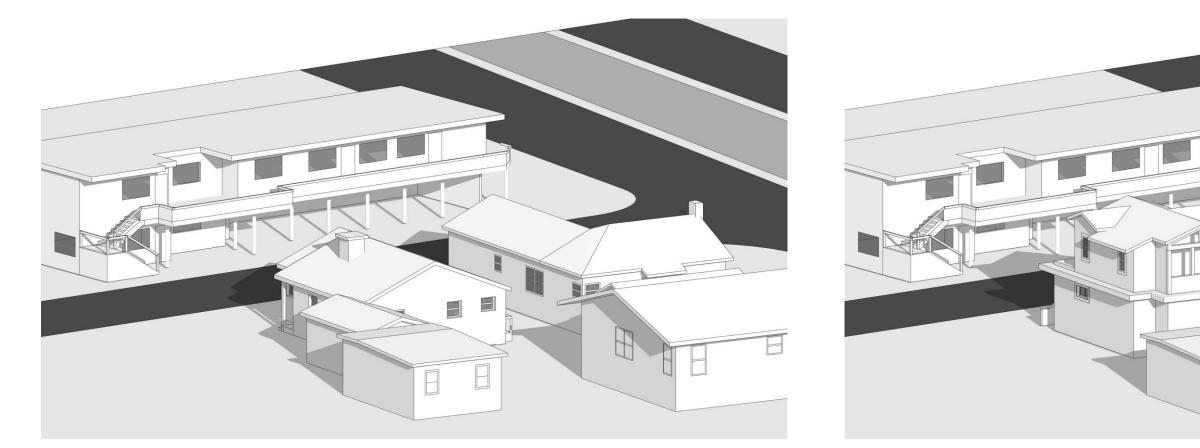


EXISTING

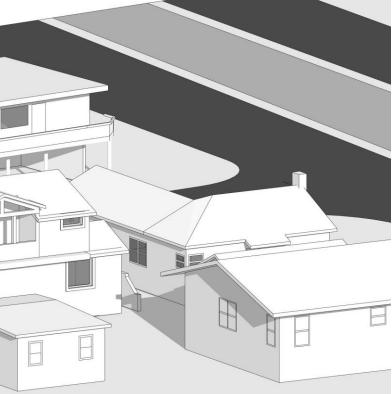
Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

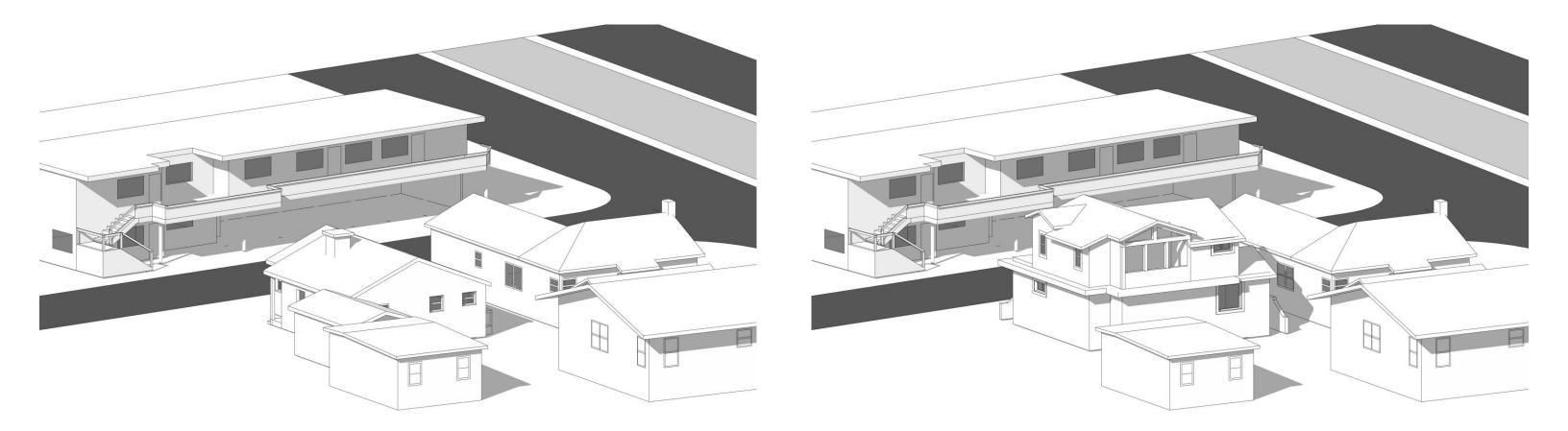
#### 09:00 am



EXISTING

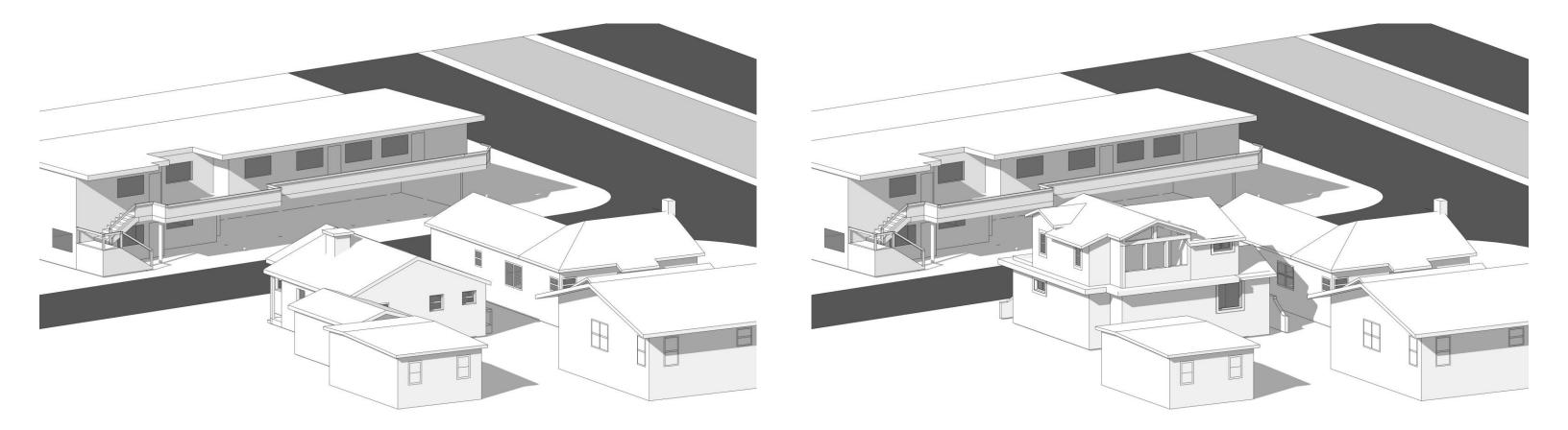


# 12:00 pm



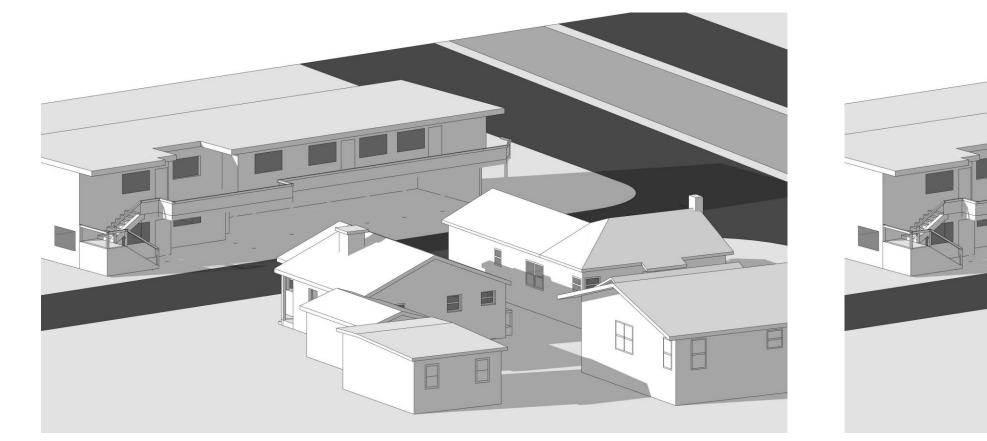
EXISTING

# 12:20 pm

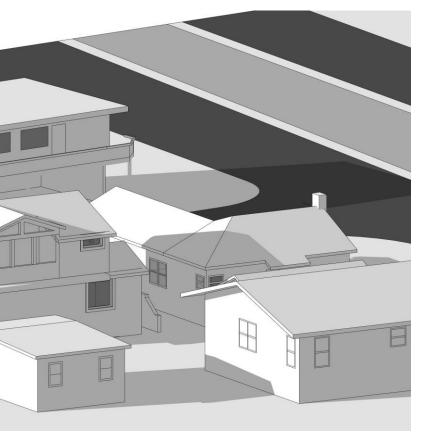


EXISTING

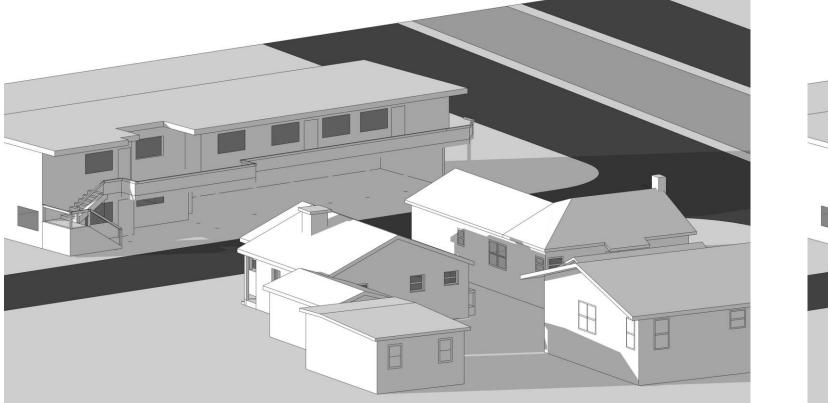
# 03:00 pm

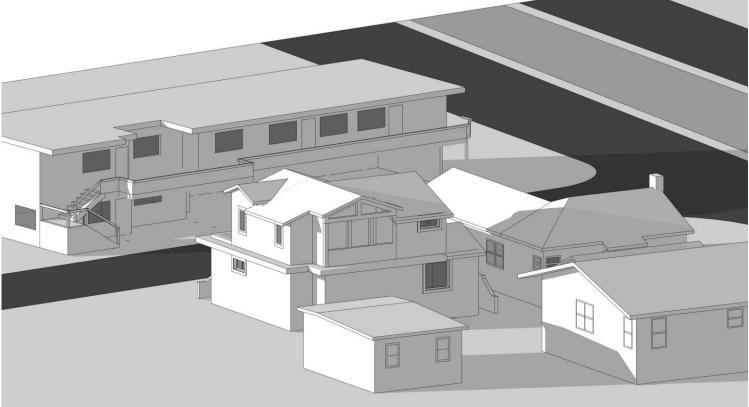


EXISTING



# 03:40 pm

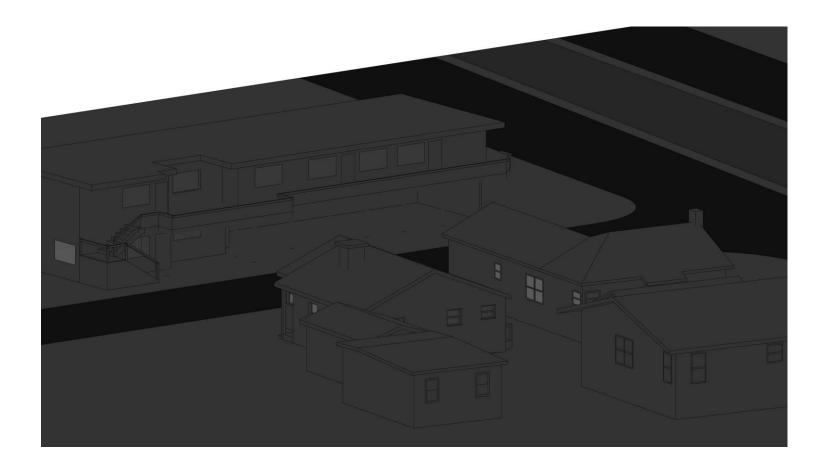


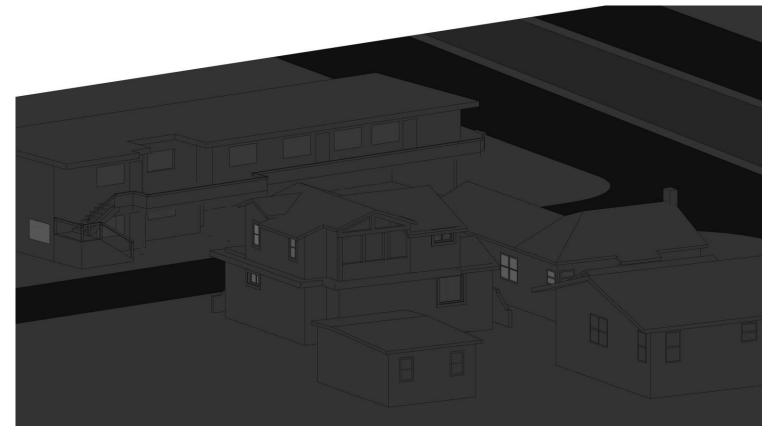


EXISTING

# 06:00 pm

Sunset at 4:54 pm





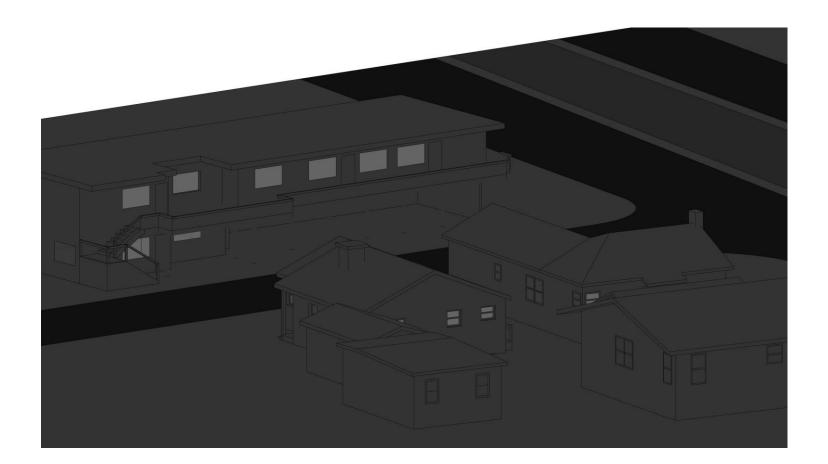
EXISTING

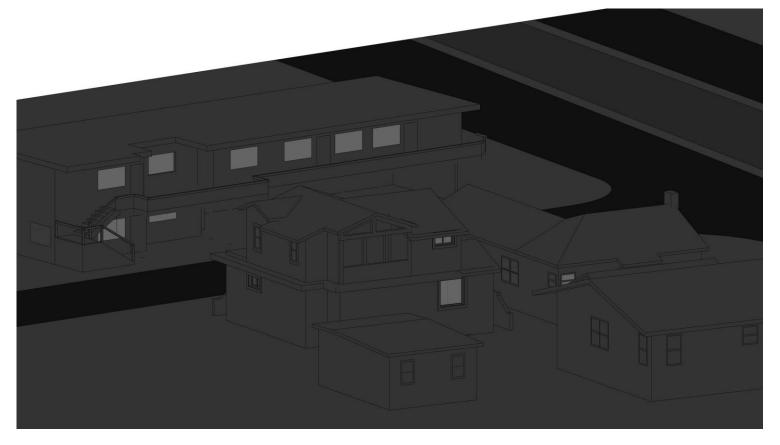
Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

#### 06:00 am

Sunrise at 7:22 am



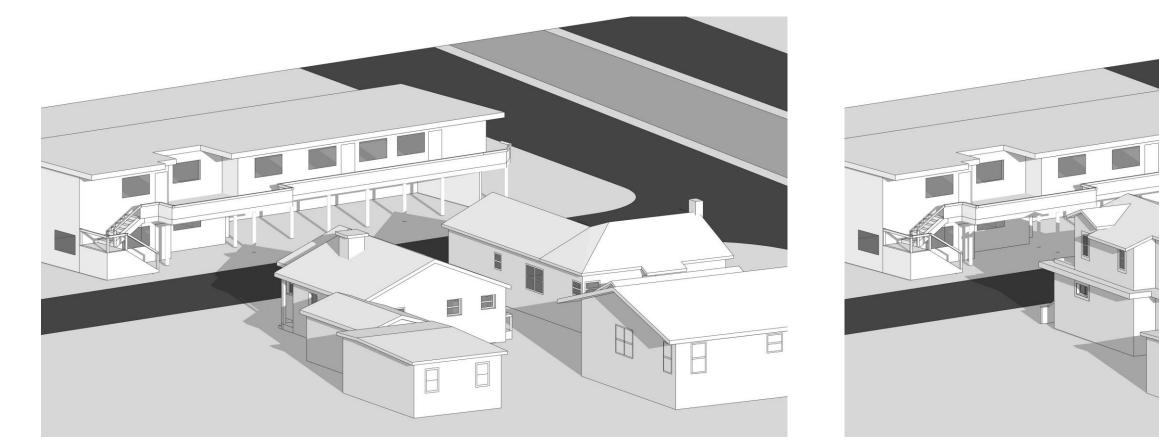


EXISTING

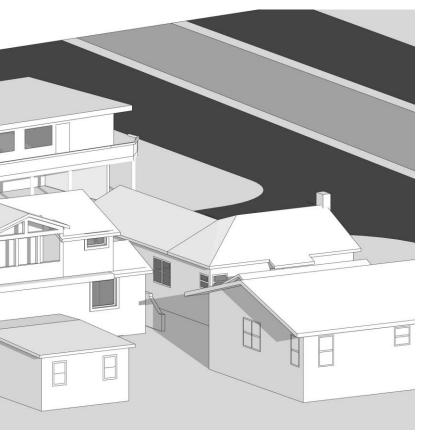
Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8** 

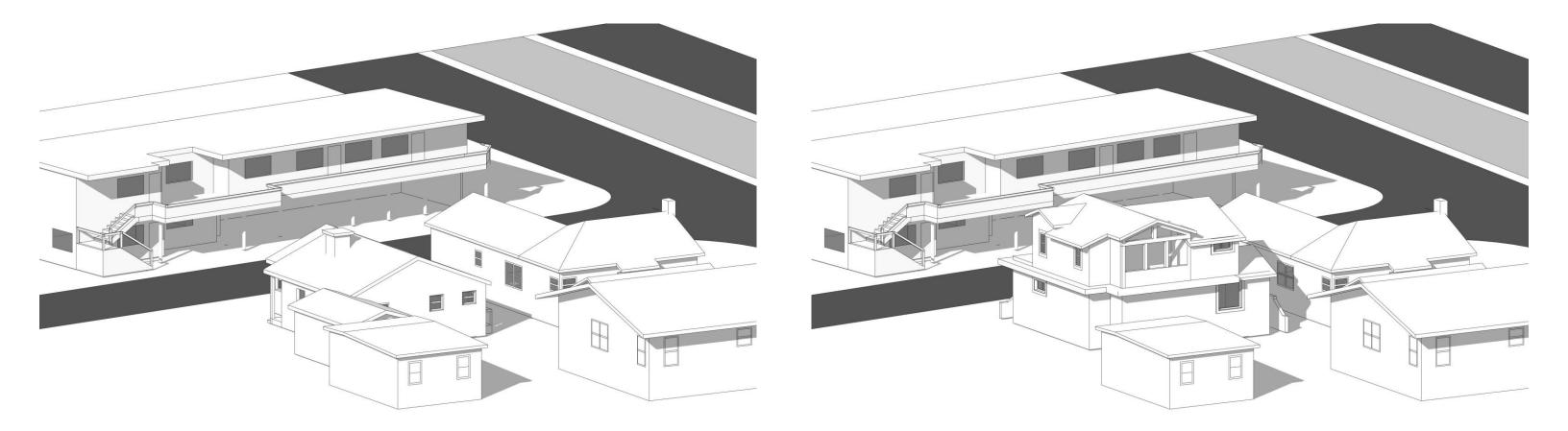
#### 09:00 am



EXISTING

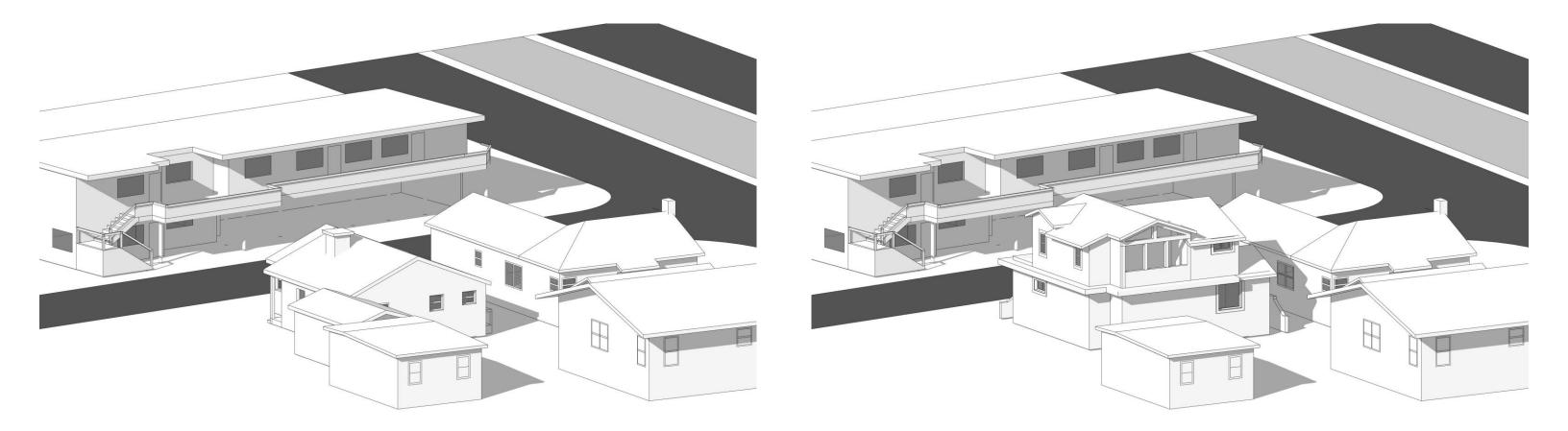


# 12:00 pm



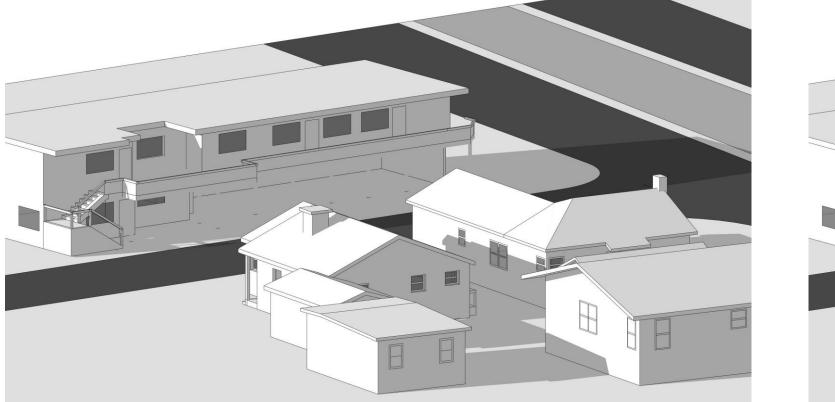
EXISTING

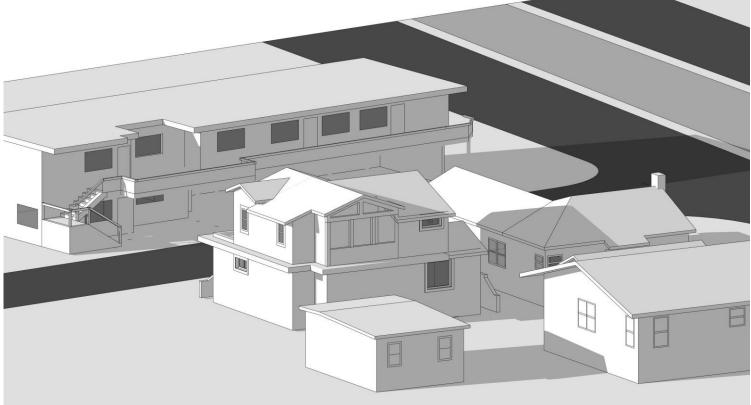
# 12:30 pm



EXISTING

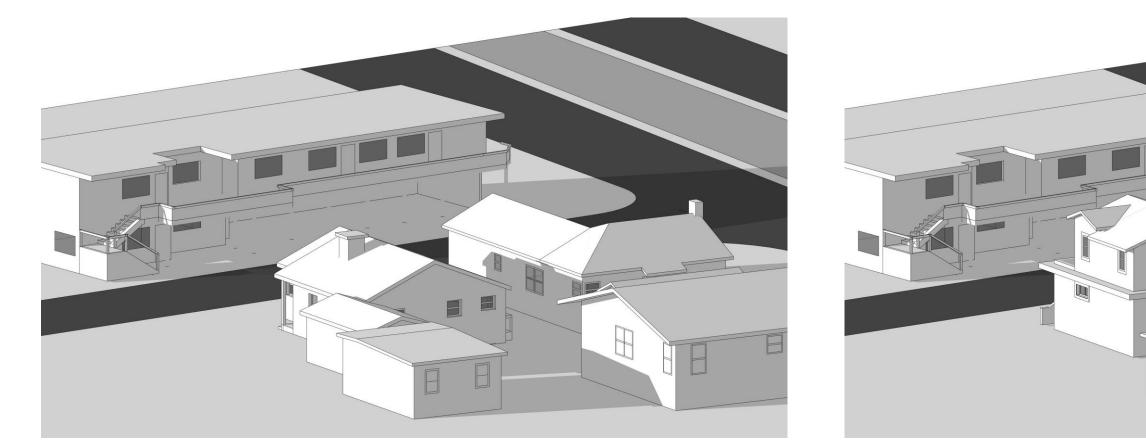
# 03:00 pm



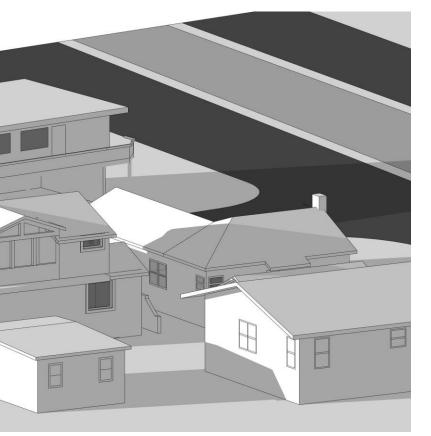


EXISTING

03:30 pm

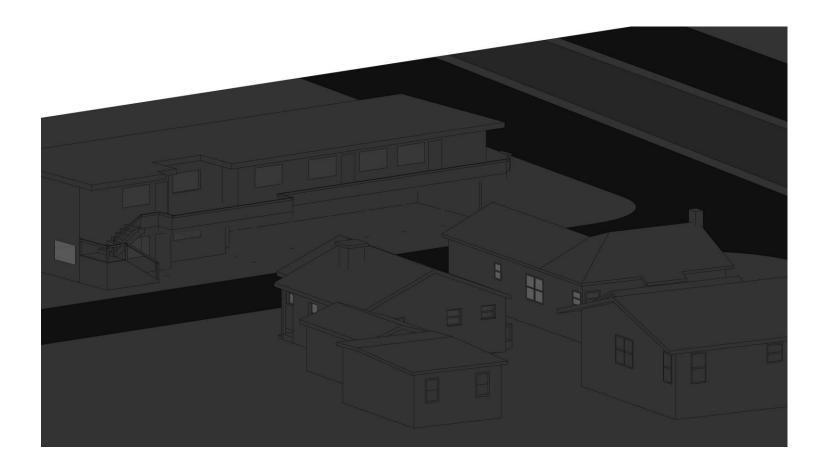


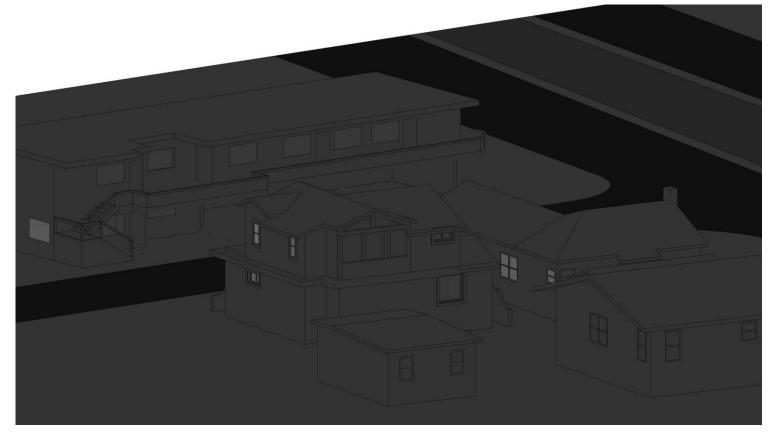
EXISTING



# 06:00 pm

Sunset at 4:54 pm





EXISTING

Shadow Study 9 Laurel Ave. San Anselmo

**ITEM 7 - ATTACHMENT 8**