

**TO:** Mr. Joel Lawson ([joel.lawson@dc.gov](mailto:joel.lawson@dc.gov)), DC Office of Planning.  
Ms. Elisa Vitale ([elisa.vitale@dc.gov](mailto:elisa.vitale@dc.gov)), DC Office of Planning.  
Ms. Allison Myers ([allison.myers@dc.gov](mailto:allison.myers@dc.gov)), DC Office of Planning.

**CC:** Mr. Frederick L. Hill; Ms. Lesyllee M. White; Ms. Lorna John; Mr. Carlton Hart and Member in Rotation, DC Board of Zoning Adjustments.  
Sam Jacknin ([sam@jacknin.com](mailto:sam@jacknin.com)), Applicant/1201 Staples St LLC.  
Edward Grass ([egrass@mac.com](mailto:egrass@mac.com)), Counsel to Applicant/1201 Staples St LLC.  
Will Teass ([will@teass-warren.com](mailto:will@teass-warren.com)); Ian McLaughlin ([IMcLaughlin@teass-warren.com](mailto:IMcLaughlin@teass-warren.com)) and Charles Warren ([charles@teass-warren.com](mailto:charles@teass-warren.com)), Architects to 1201 Staples St LLC.  
Mr. Clarence Lee ([5D07@anc.dc.gov](mailto:5D07@anc.dc.gov)), ANC 5D/ANC 5D07.  
Ms. Yvonne H. Buggs ([5D06@anc.dc.gov](mailto:5D06@anc.dc.gov)), ANC 5D06.  
Ms. Alexandra Cain ([alexandra.cain@dc.gov](mailto:alexandra.cain@dc.gov)) and BZA Submissions ([bzasubmissions@dc.gov](mailto:bzasubmissions@dc.gov) & via <https://app.dcoz.dc.gov/>), DC Board of Zoning Adjustments.

**FROM:** Mark Stilp, 1203 Staples St, ([mstilp@gmail.com](mailto:mstilp@gmail.com)), Party to BZA Case 19757

**DATE:** July 24, 2018.

**RE:** **Subtitles E § 206.1(c) and/or U § 301.2(g) Apply in BZA Case 19757.**  
**Requesting Correction to the Office of Planning’s 6/29/2018 Report on BZA Case 19757.**

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Please accept this request to correct the Office of Planning’s June 29, 2018 Report on BZA Case 19757 and submit a corrected Report to the BZA. As explained below, the Office of Planning’s June 29, 2018 Report on BZA Case 19757 incorrectly states and implies that neither Subtitles E § 206.1(c) nor U § 301.2(g) apply in this case.

**SUBTITLES E § 206.1(c) AND/OR U § 301.2(g) APPLY IN BZA CASE 19757.**

The applicant’s proposed third floor addition is subject to Subtitles E § 206.1(c) and/or U § 301.2(g) because the addition would “*significantly interfere* with the operation of an *existing solar energy system* of at least 2kW on an adjacent property.” E § 206.1(c) and/or U § 301.2(g).

**EXISTING SOLAR ENERGY SYSTEM**

Under both E § 206.1(c)(2) and U § 301.2(g)(2), the solar energy system at 1203 Staples was an *existing solar energy system* on March 28, 2018 because solar energy permit SOL1800411, which permitted the system at 1203 Staples, was issued on March 28, 2018, and the permitted system was operative within six (6) months of the permit issue date. *See* Solar Energy Permit SOL1800411 (showing the permit Issue Date of March 28, 2018) (attached below at page 3); Affidavit and email of Solar Solution LLC (attesting to the March 28, 2018 permit issue date of SOL1800411 and attesting to the subject solar energy system being operative within six months of permit issuance) (attached below at pages 4-5).

**SIGNIFICANTLY INTERFERE**

Under both E § 206.1(c)(1) and U § 301.2(g)(1), the applicant’s proposed third floor

Board of Zoning Adjustment  
District of Columbia  
CASE NO. 19757  
EXHIBIT NO. 53

addition to 1201 Staples would *significantly interfere* with the existing solar energy system at 1203 Staples because the addition would decrease the energy production of the adjacent solar energy system by more than five percent on an annual basis. *See* Solar Solution Shade Analysis (demonstrating an approximately 42% reduction in solar energy production at 1203 Staples caused by the applicant's proposed third floor addition 1201 Staples St) (attached below beginning on 6).

## **CONCLUSION**

The solar energy system at 1203 Staples was an existing solar energy system before BZA application 19757 was complete, and therefore, Subtitles E § 206.1(c) and/or U § 301.2(g) apply in BZA case 19757. Accordingly, the Office of Planning's June 29, 2018 Report on BZA Case 19757 contains an error and should be corrected and resubmitted to the BZA.

If the Office of Planning, the BZA or Parties to BZA Case 19757 have any questions or concerns about this request, please contact Mark Stilp at [mstilp@gmail.com](mailto:mstilp@gmail.com) or 312.505.6275.



Department of Consumer and Regulatory Affairs

Permit Operations Division

1100 4th Street SW

Washington DC 20024

Tel. (202) 442 - 4589

Fax (202) 442 - 4862



**SOL** 2036

**SOLAR PERMIT**

THIS PERMIT MUST ALWAYS BE CONSPICUOUSLY DISPLAYED AT THE ADDRESS OF WORK UNTIL WORK IS COMPLETED AND APPROVED

Issue Date: 03/28/2018

**PERMIT NO. SOL1800411**

Expiration Date: 03/28/2019

|  |  |  |  |                       |                            |                                |  |                     |
|--|--|--|--|-----------------------|----------------------------|--------------------------------|--|---------------------|
| Address of Project:<br><b>1203 STAPLES ST NE</b>   |  |  |  | Zone:<br><b>RF-1</b>  | Ward:<br><b>5</b>          | Square:<br><b>4067</b>         | Suffix:  | Lot:<br><b>0003</b> |
| Description Of Work:<br><b>To install 6.2 kW size of solar panels with a system height of 1.9 feet on the roof of the building.</b>  |  |  |  |                       |                            |                                |  |                     |
| Permission Is Hereby Granted To:<br><b>Mark Stilp</b>  |  |  | Owner Address:<br><b>1203 STAPLES ST NE<br/>WASHINGTON, DC 200023923</b> |                       |                            | PERMIT FEE:<br><b>\$275.00</b> |  |                     |
| Permit Type:<br><b>Solar System</b>  |  | Existing Use:<br><b>Single Family Dwelling - R-3</b>               |  | No. of Stories:       |                            | Mounting System:               |  |                     |
| Agent Name:<br><b>Solar Solution Dc Llc</b>  |  | Agent Address:<br><b>4700 14th St. Nw<br/>Washington, DC 20011</b> |  | Modules:<br><b>20</b> | Module Size:<br><b>310</b> | System Size:<br><b>6.2</b>     | Building Construction Type<br><b>Type I - Fire-Resistive<br/>Non-combustible</b> |                     |
| Conditions/ Restrictions:<br><br><div style="border: 1px solid black; height: 20px; width: 100%;"></div>   |  |  |  |                       |                            |                                |  |                     |
| <p><b>This Permit Expires if no Construction is Started Within 1 Year or if the Inspection is Over 1 Year.</b></p> <p><b>All Construction Done According To The Current Building Codes And Zoning Regulations;</b></p> <p><b>As a condition precedent to the issuance of this permit, the owner agrees to conform with all conditions set forth herein, and to perform the work authorized hereby in accordance with the approved application and plans on file with the District Government and in accordance with all applicable laws and regulations of the District of Columbia. The District of Columbia has the right to enter upon the property and to inspect all work authorized by this permit and to require any change in construction which may be necessary to ensure compliance with the permit and with all the applicable regulations of the District of Columbia. Work authorized under this Permit must start within one(1) year of the date appearing on this permit or the permit is automatically void. If work is started, any application for partial refund must be made within six months of the date appearing on this permit.</b></p> <p><b>Lead Paint Abatement</b><br/>Whenever any such work related to this Permit could result in the disturbance of lead based paint, the permit holder shall abide by all applicable paint activities provisions of the 'Lead Hazard Prevention and Elimination Act of 2008' and the EPA 'Lead Renovation, Repair and Painting rule' regarding lead-based include adherence to lead-safe work practices. For more information, go to <a href="http://ddoe.dc.gov">http://ddoe.dc.gov</a>, Lead and Healthy Housing.</p> |  |  |  |                       |                            |                                |  |                     |
| Director:<br><b>Melinda Bolling</b>  |  |  | Permit Clerk<br><b>TCARRINGTON</b>                                       |                       |                            |                                |  |                     |
| <p>TO REPORT WASTE, FRAUD OR ABUSE BY ANY DC GOVERNMENT OFFICIAL, CALL THE DC INSPECTOR GENERAL AT 1-800-521-1639</p> <p>FOR CONSTRUCTION INSPECTION INQUIRIES CALL (202) 442-9557</p> <p>TO SCHEDULE INSPECTIONS PLEASE CALL (202) 442-9557.</p>  |  |  |  |                       |                            |                                |  |                     |



Solar Solution hereby attests that the "Issue Date" for SOL1800411, the DC Department of Consumer and Regulatory Affairs permit to install a Solar Photovoltaic System at 1203 Staples St NE, Washington, DC 20002, is March 28, 2018. The Solar Photovoltaic System at above-referenced location is operative.

If you have any questions, feel free to request assistance from our office at: 202-249-1112 or [utilities@solarsolutionllc.com](mailto:utilities@solarsolutionllc.com)

Best Regards,

A handwritten signature in black ink, appearing to read "James Stilt".

Asst. Manager  
Solar Solution  
4700 14<sup>th</sup> St NW  
Washington, DC 20011



Mark Stilp &lt;mstilp@gmail.com&gt;

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**quick question**

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**James Sheats** <jsheats@solarsolutionllc.com>  
To: Mark Stilp <mstilp@gmail.com>

Tue, Jul 10, 2018 at 12:50 PM

Hi Mark,

Here is your V1 letter signed with title [REDACTED]  
[REDACTED] . Irrelevant & redacted to protect personal privacy  
[REDACTED]

Best,

James

**From:** Mark Stilp <mstilp@gmail.com>  
**Sent:** Monday, July 9, 2018 8:51 PM

[Quoted text hidden]

[Quoted text hidden]

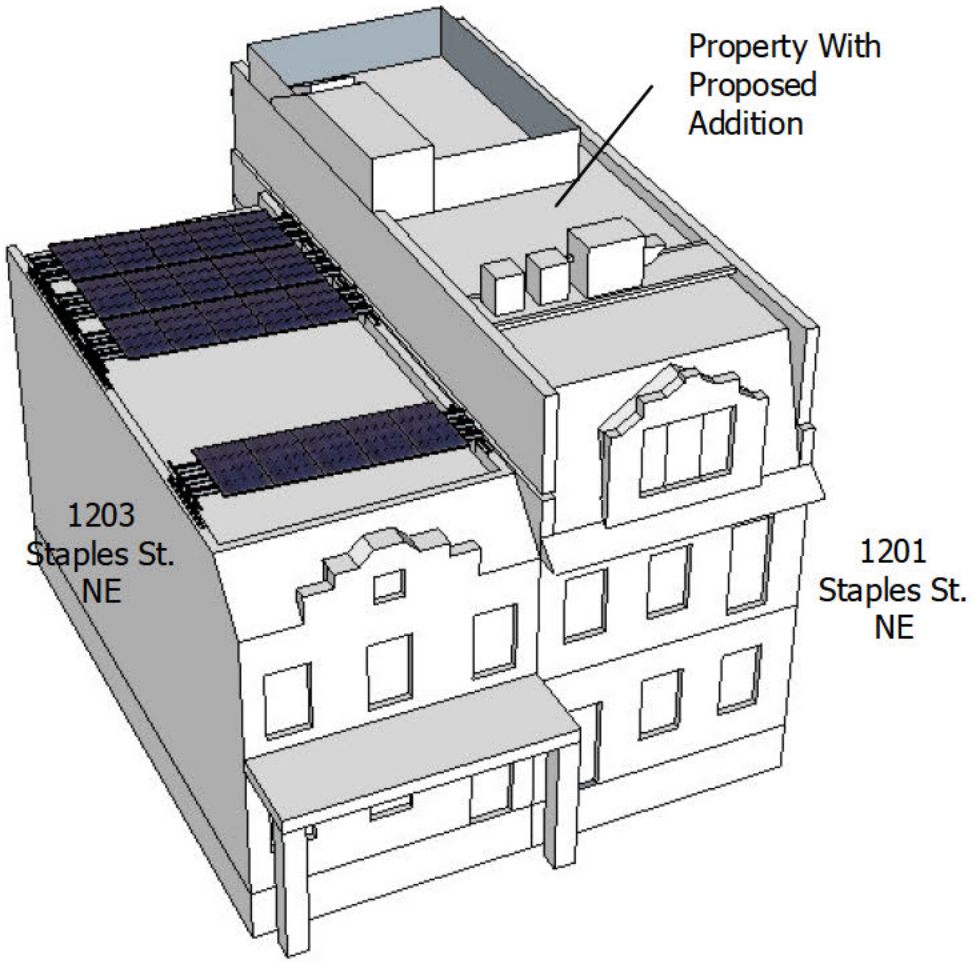
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 **Mark Stilp solar permit letter - signed.pdf**  
449K



# SHADE ANALYSIS

**Scope of Work:**  
Solar Solution has been consulted to conduct a shading analysis for the property located at 1203 Staples St. NE, Washington, DC 20002 in relation to the addition on neighboring property 1201 Staples St.



1203 STAPLES ST. NE

  
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(202) 249-1112  
www.solarsolutiondc.com

# PROPOSED ADDITION PLANS FROM CLIENT



1203 STAPLES ST. NE



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# SHADING DATA

## SPRING 3/20

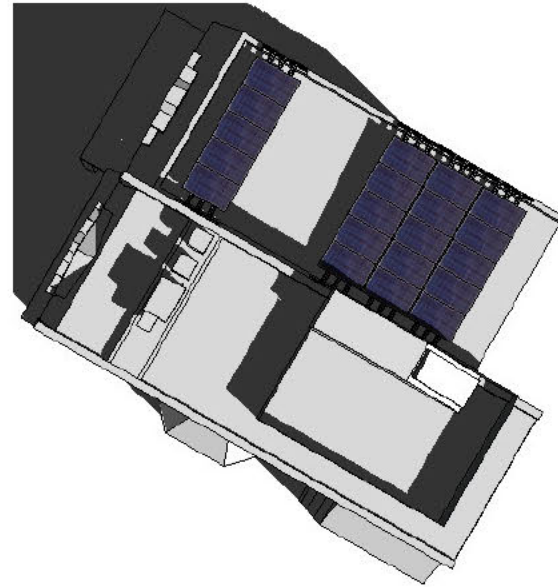
Sun irradiance and is examined with respect to four crucial dates:

1. Spring – 3/20
2. Summer – 6/21
3. Fall – 9/22
4. Winter – 12/21

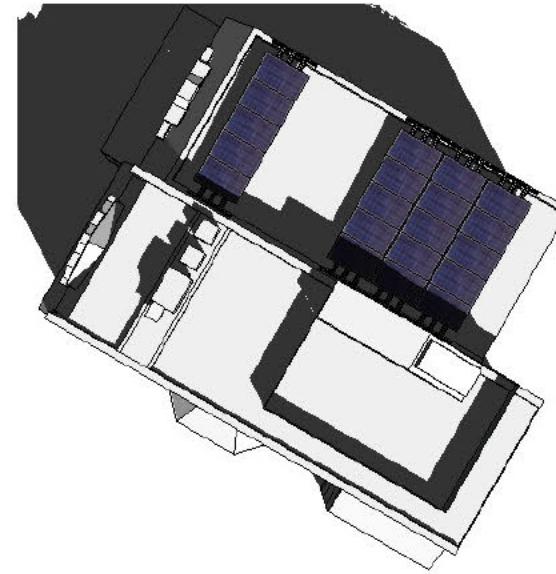
These dates represent the start of each season where the summer and winter solstices represent the longest and shortest days the sun shine in the northern hemisphere, respectively; and the spring and fall equinoxes representing the mid point of sunlight exposure. The latter two dates would generally provide the average sun exposure and shading throughout the year.

Since the property with the addition is west of the property in question, the shading time would be examined in the afternoon as the system would not be shaded in the morning.

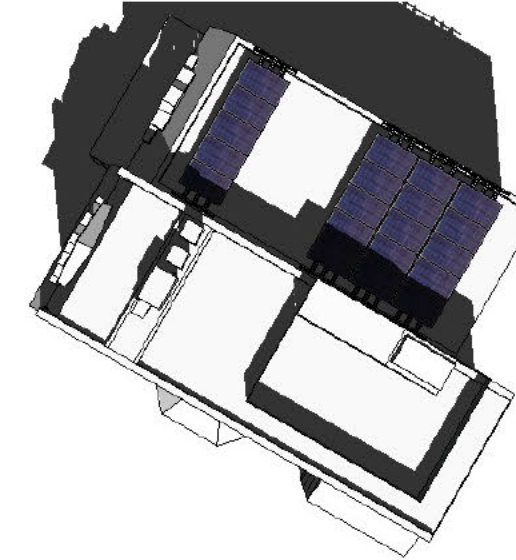
Note: the percentage shaded is solely based on sun irradiance.



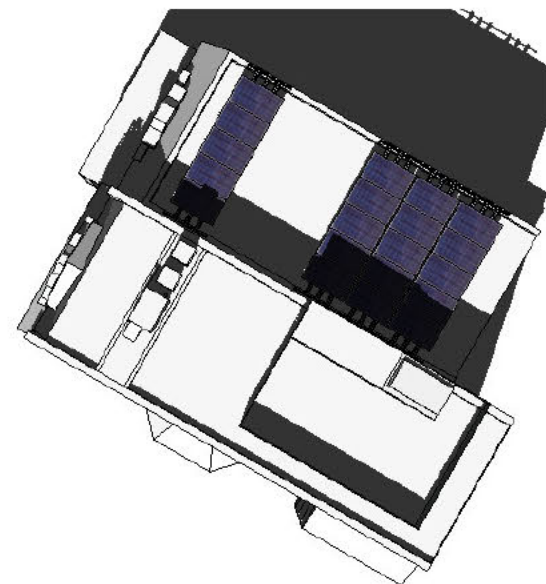
Spring – 10am: 0% Shaded (Last 30 minute interval with 0% Shaded)



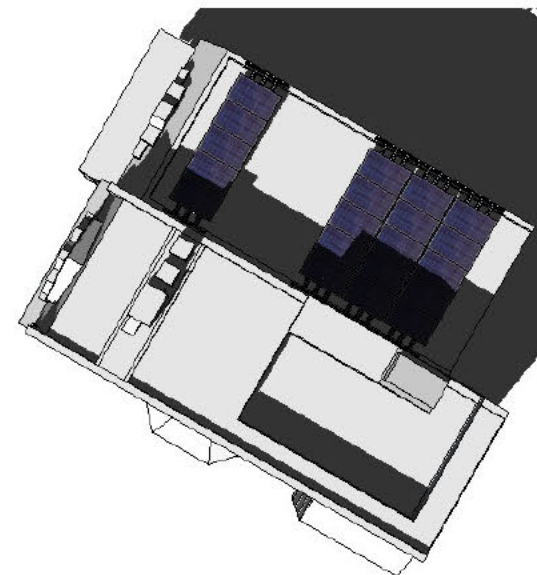
Spring – 11am: 13% Shaded



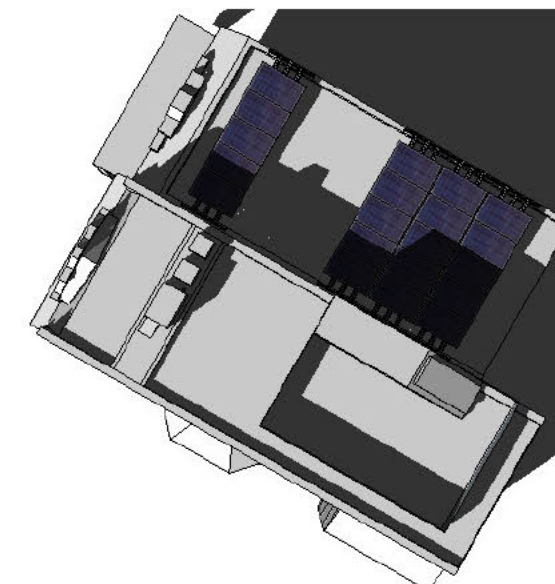
Spring – 12pm: 23% Shaded



Spring – 1pm: 33% Shaded



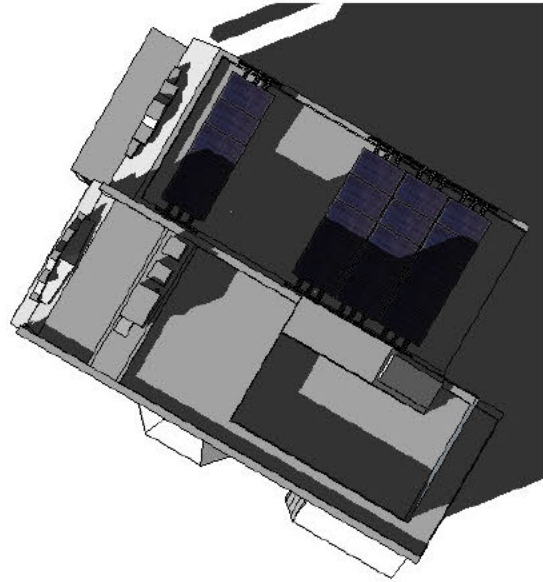
Spring – 2pm: 38% Shaded



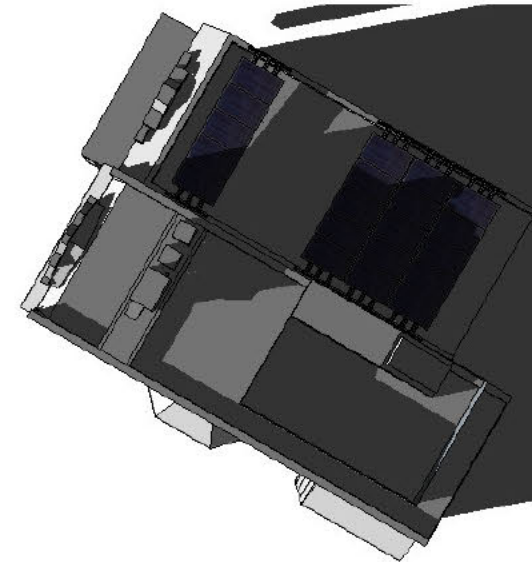
Spring – 3pm: 45% Shaded



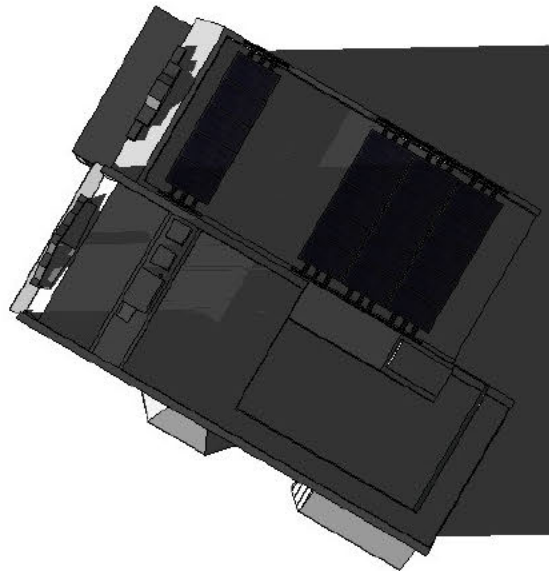
# SPRING 3/20 Con't



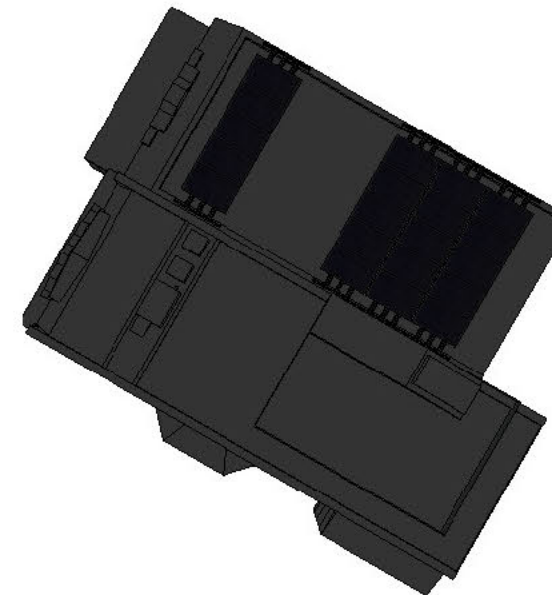
*Spring – 4pm: 53% Shaded*



*Spring – 5pm: 70% Shaded*



*Spring – 6pm: 75% Shaded*



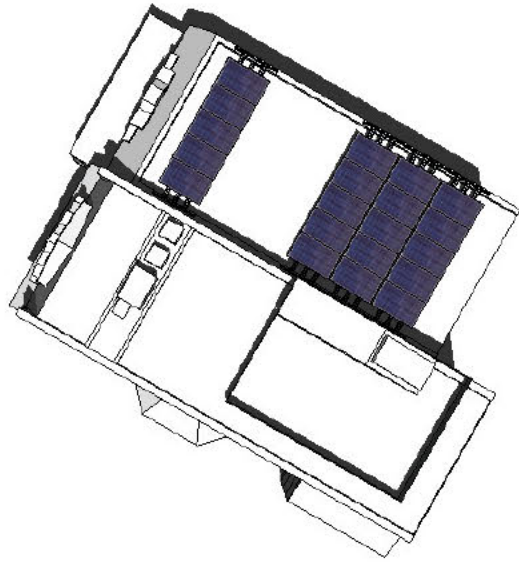
*Spring – 6:30pm: 100% Shaded (First 30 minute interval with 100% shading)*

1203 STAPLES ST. NE

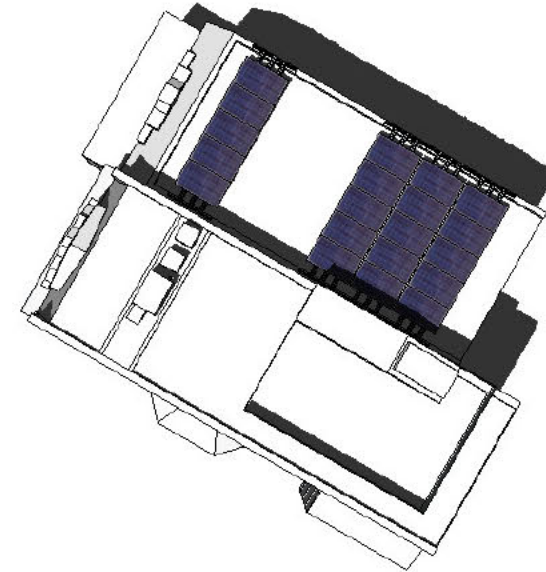


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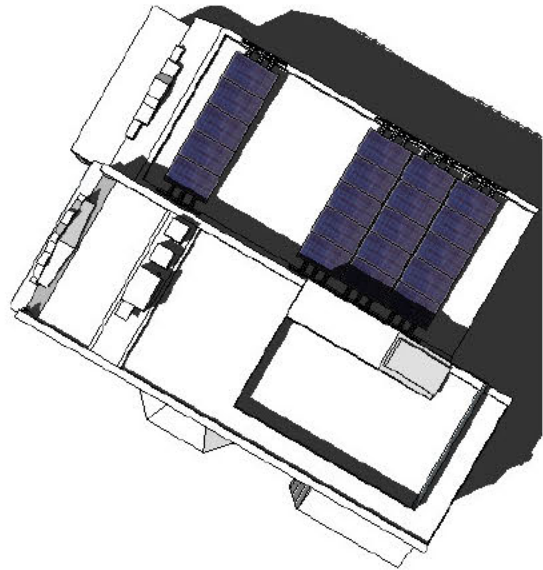
# SUMMER 6/21



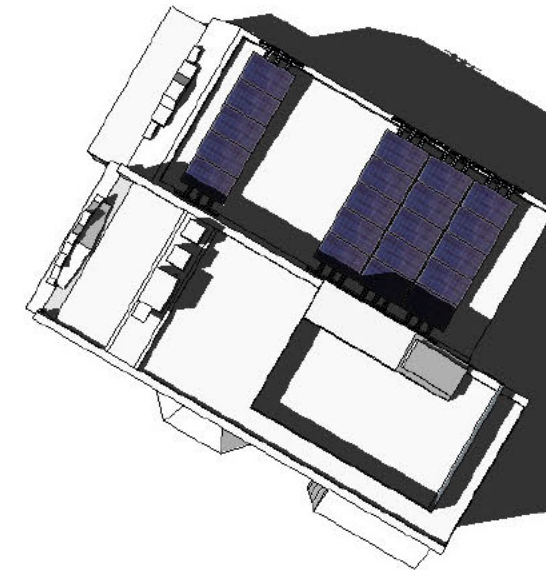
Summer – 12pm: 0% Shaded



Summer – 1pm: 5% Shaded



Summer – 2pm: 10% Shaded



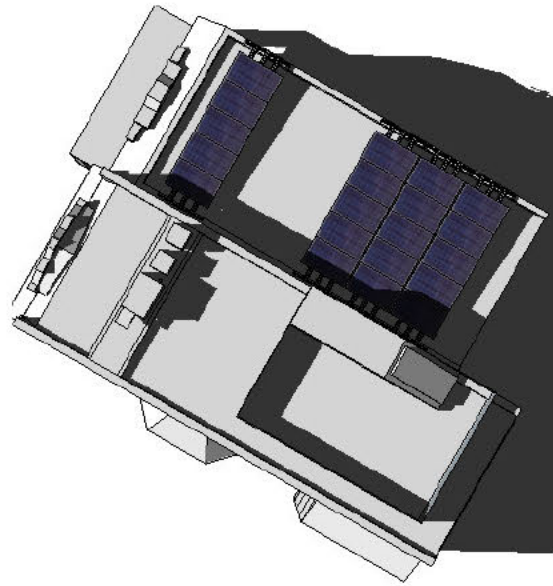
Summer – 3pm: 13% Shaded

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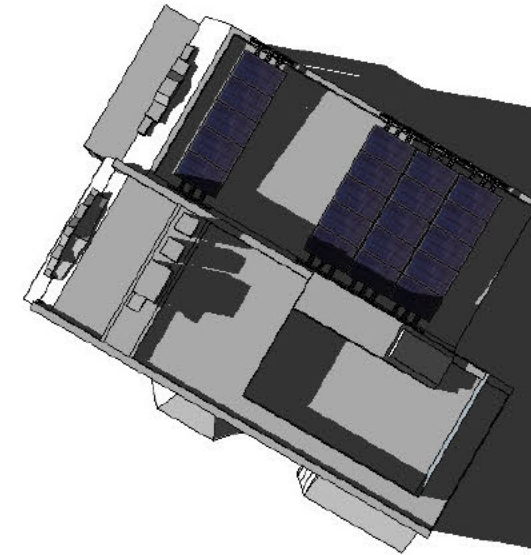


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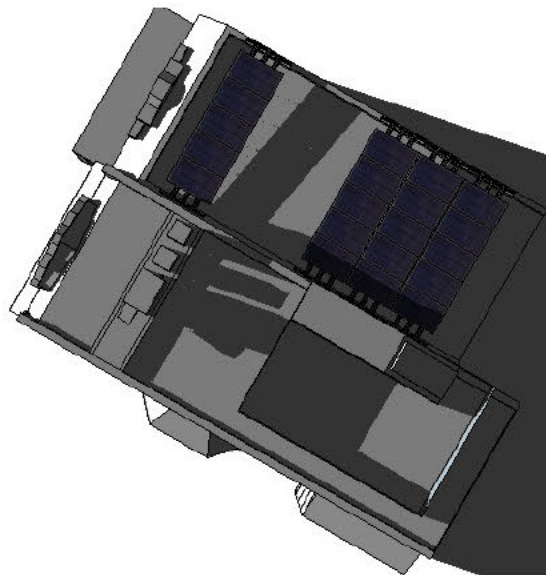
# SUMMER 6/21 Con't



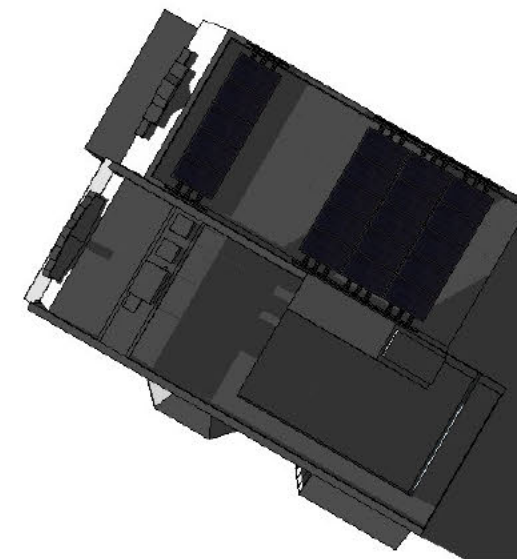
Summer – 4pm: 13% Shaded



Summer – 5pm: 10% Shaded



Summer – 6pm: 10% Shaded



Summer – 7pm: 0% Shaded (no more shade for the rest of sun set)

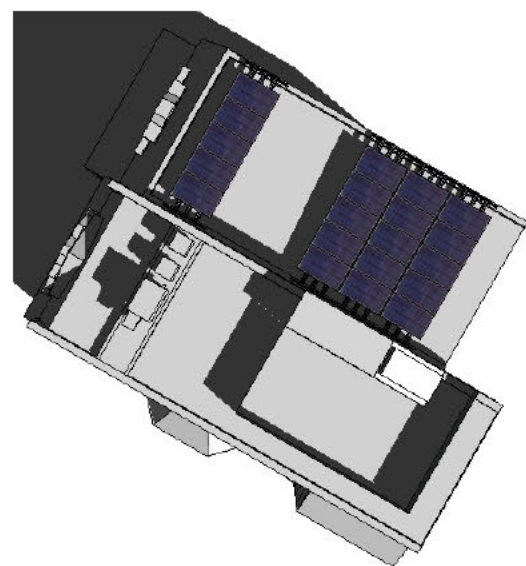
1203 STAPLES ST. NE



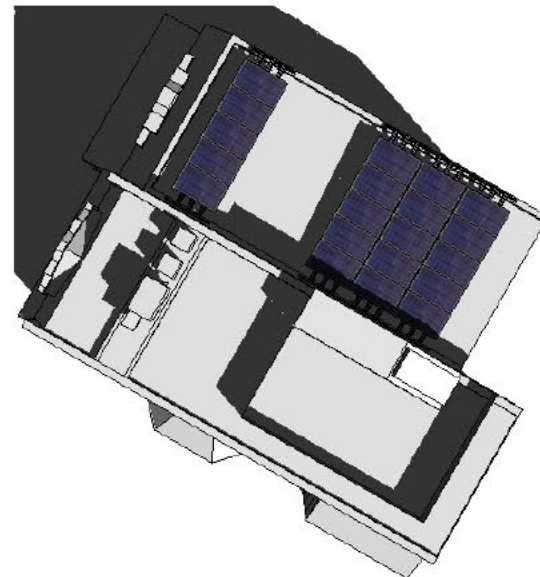
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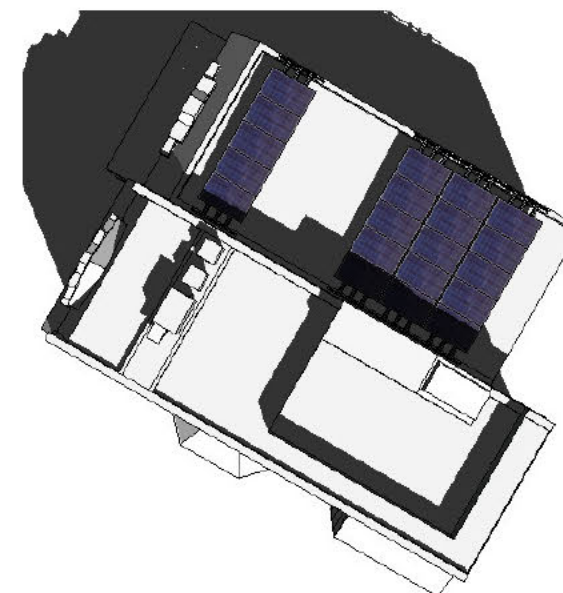
# FALL 9/22



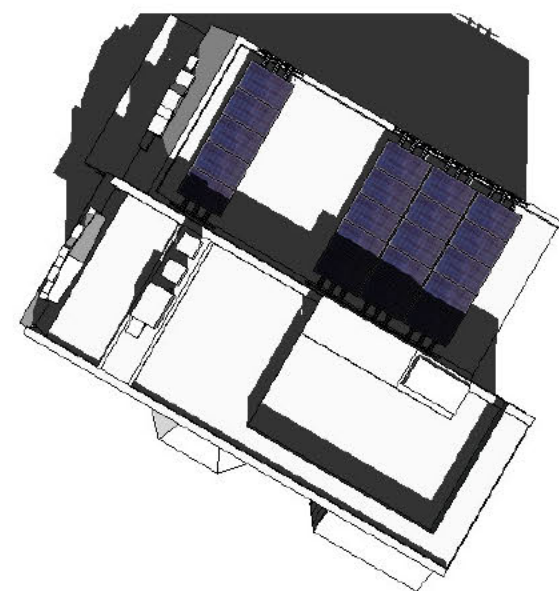
Fall – 9:30: 0% Shaded



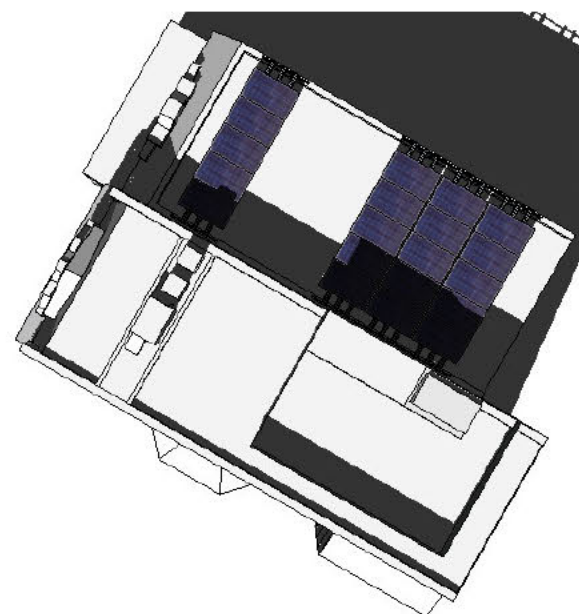
Fall – 10am: 5% Shaded



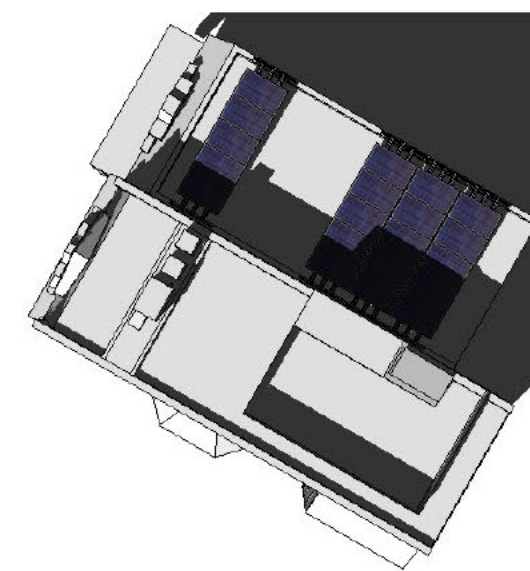
Fall – 11am: 15% Shaded



Fall – 12pm: 25% Shaded



Fall – 1pm: 33% Shaded



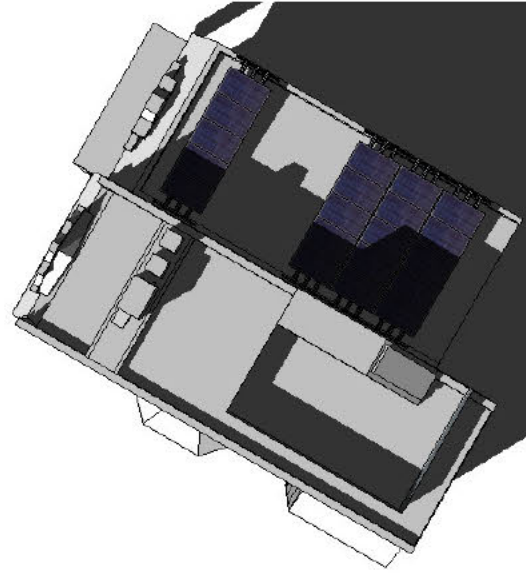
Fall – 2pm: 40% Shaded

1203 STAPLES ST. NE

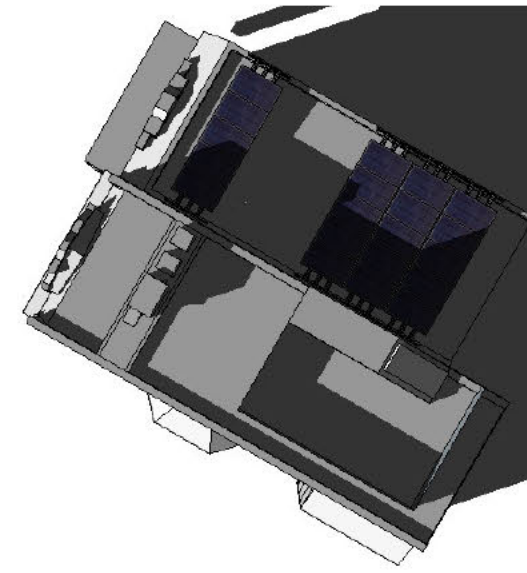


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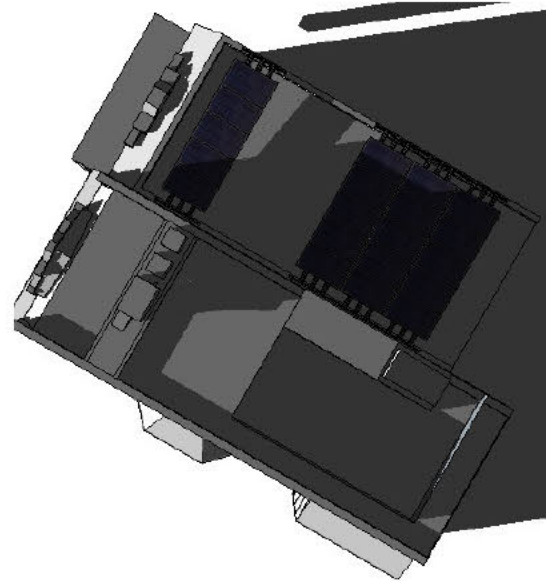
# FALL 9/22 Con't



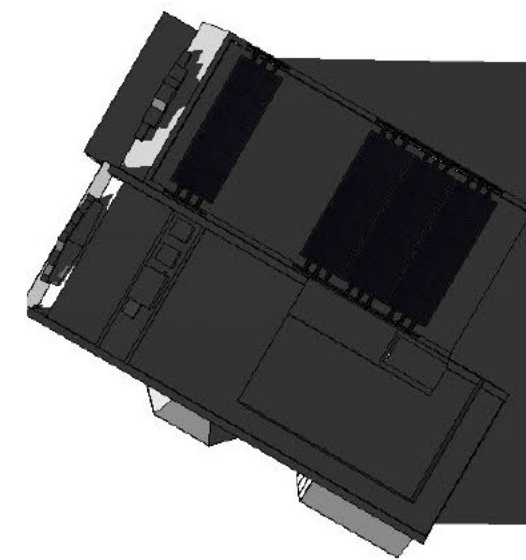
Fall – 3pm: 48% Shaded



Fall – 4pm: 55% Shaded



Fall – 5pm: 78% Shaded



Fall – 6pm: 100% Shaded

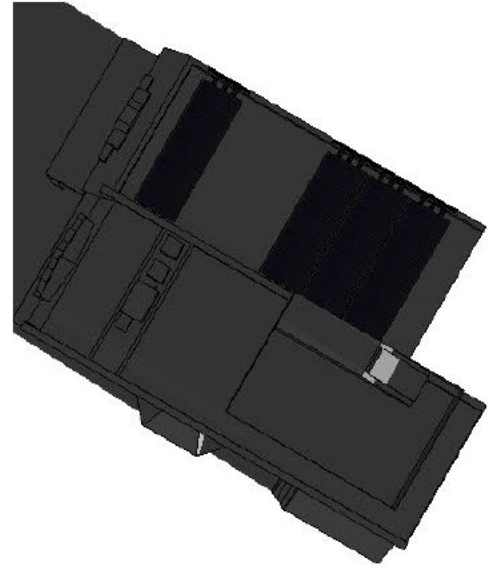
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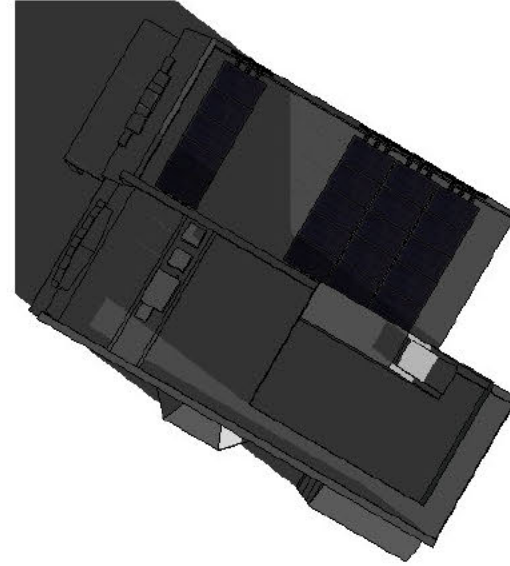
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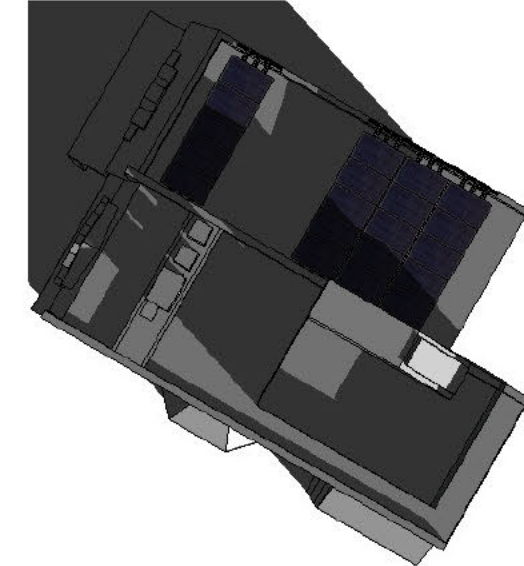
# WINTER 12/21



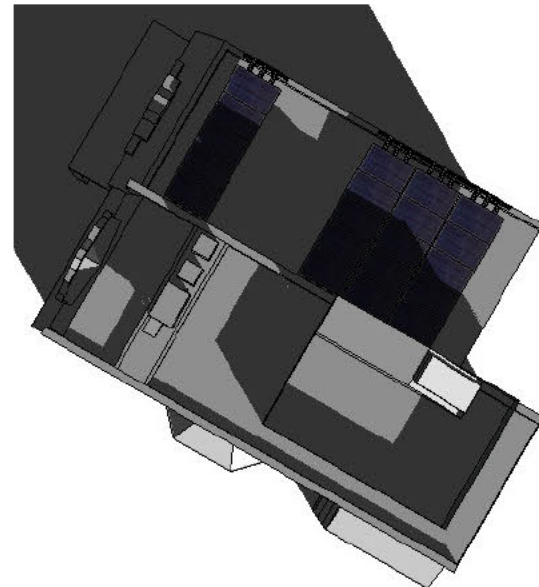
Winter – 7:30am: 0% Shaded



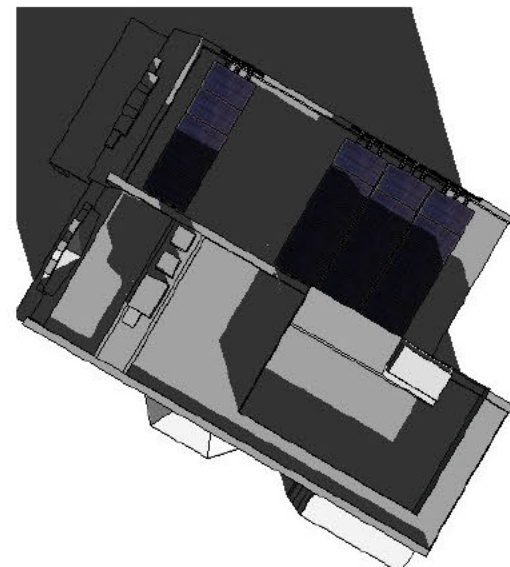
Winter – 8am: 18% Shaded



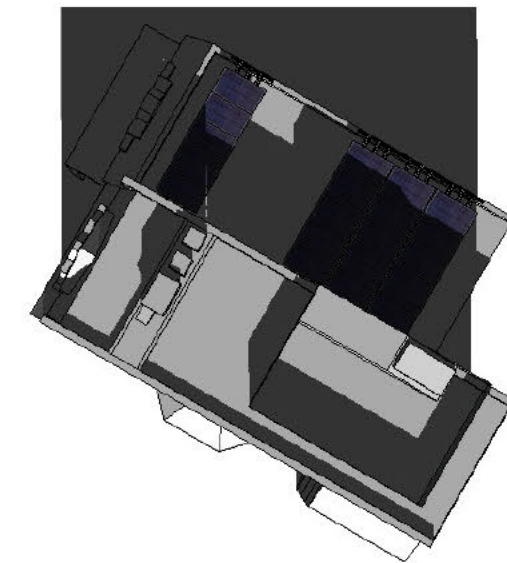
Winter – 9am: 43% Shaded



Winter – 10am: 63% Shaded



Winter – 11am: 68% Shaded



Winter – 12pm: 78% Shaded

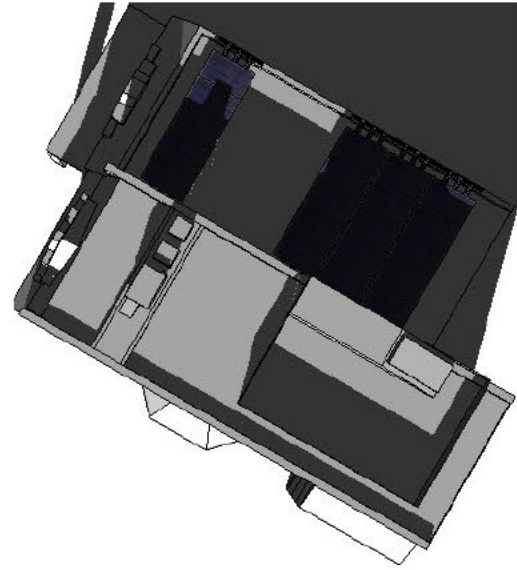
1203 STAPLES ST. NE



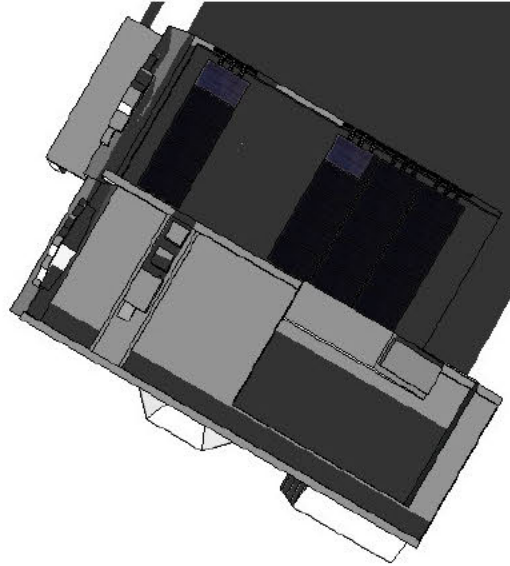
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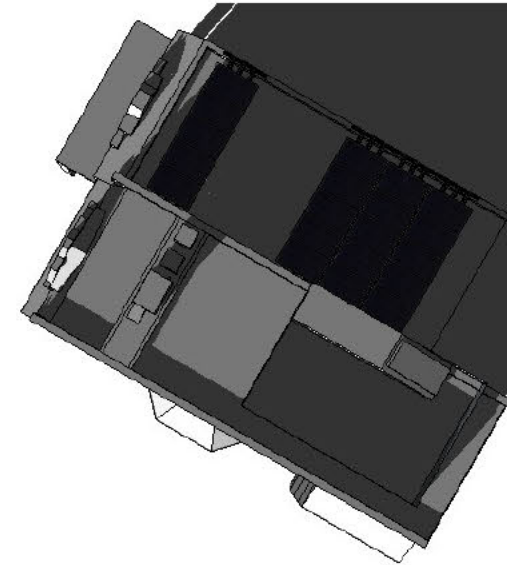
# WINTER 12/21 Con't



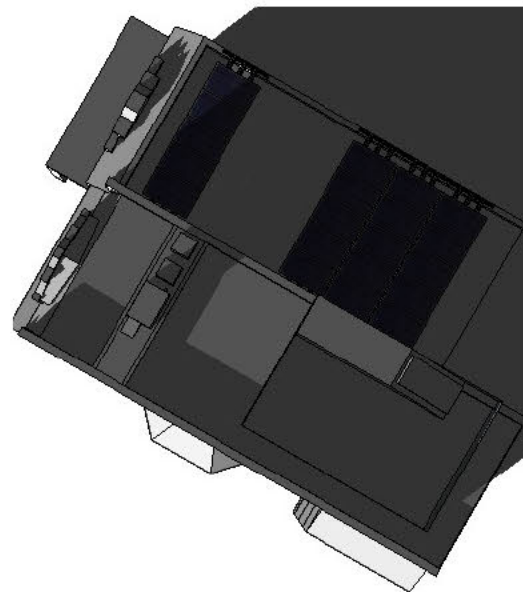
Winter – 1pm: 93% Shaded



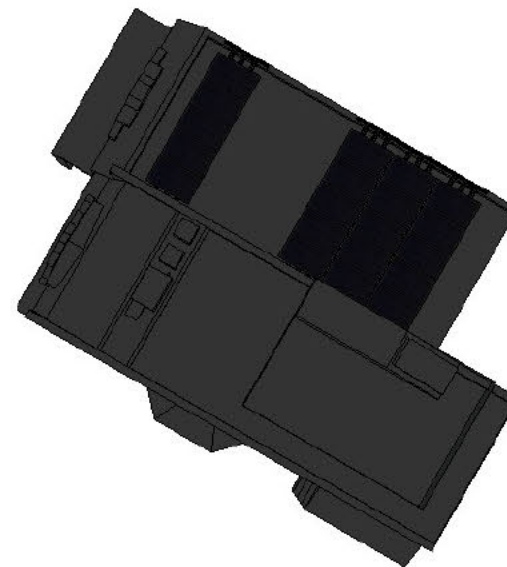
Winter – 2pm: 90% Shaded



Winter – 3pm: 100% Shaded



Winter – 4pm: 95% Shaded



Winter – 5pm: 100% Shaded

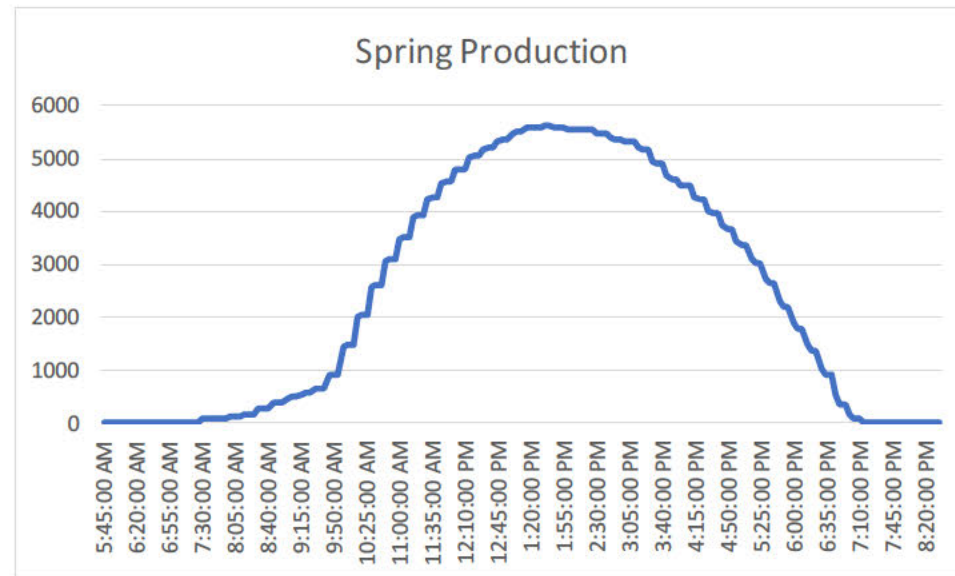
1203 STAPLES ST. NE



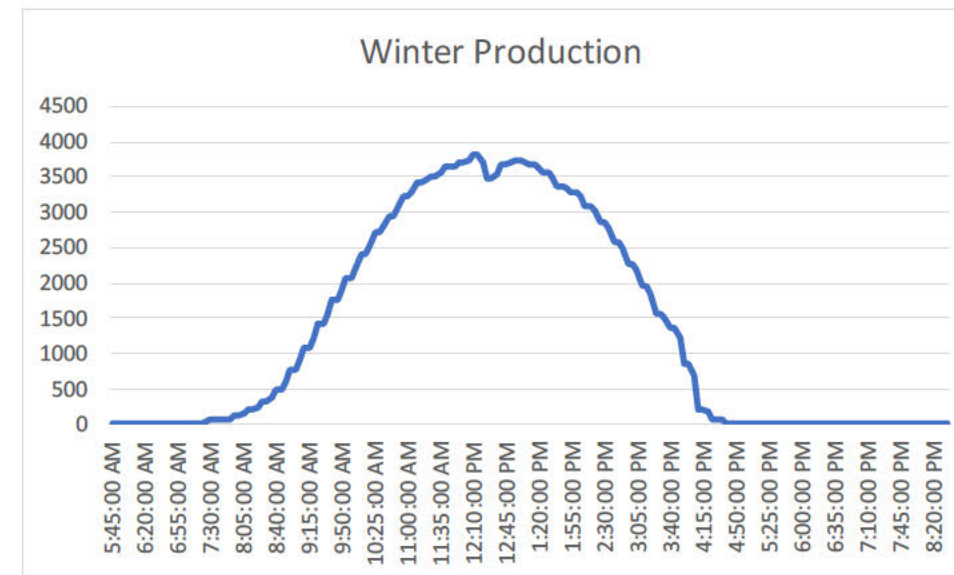
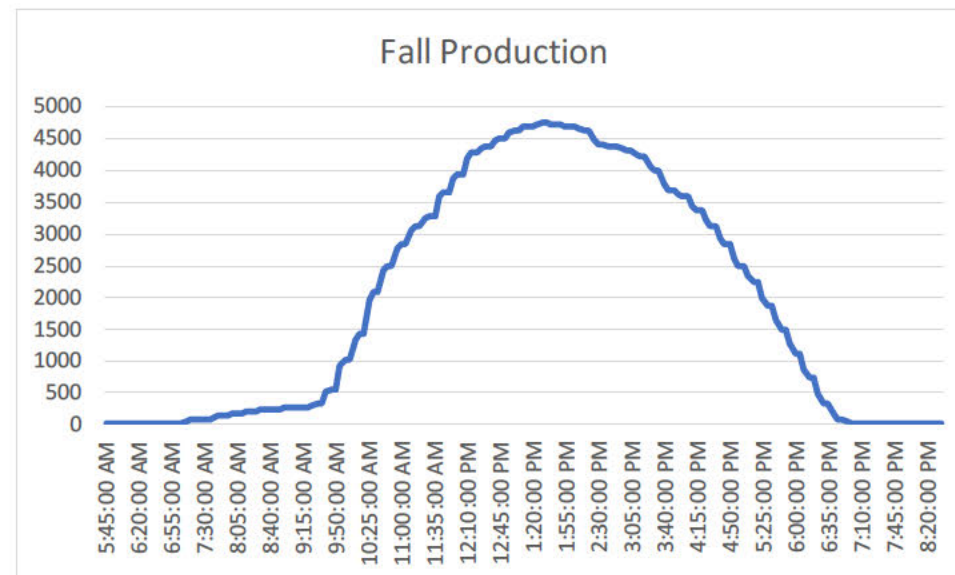
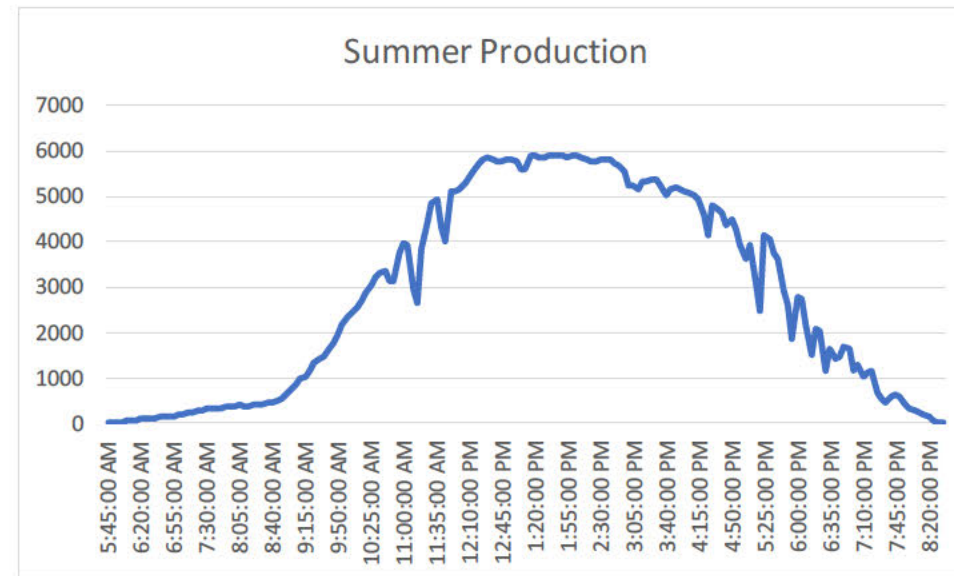
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# PRODUCTION DATA

Solar Solution has a client whose solar system is in the same vicinity as the property in question. That client's property production data has been pulled to determine the general production behavior year-round. Note the production numbers are of no interest as the system size is different from the property in question. These graphs are used solely to find the production percentages throughout the day near the four selected dates.



Spring production throughout the day

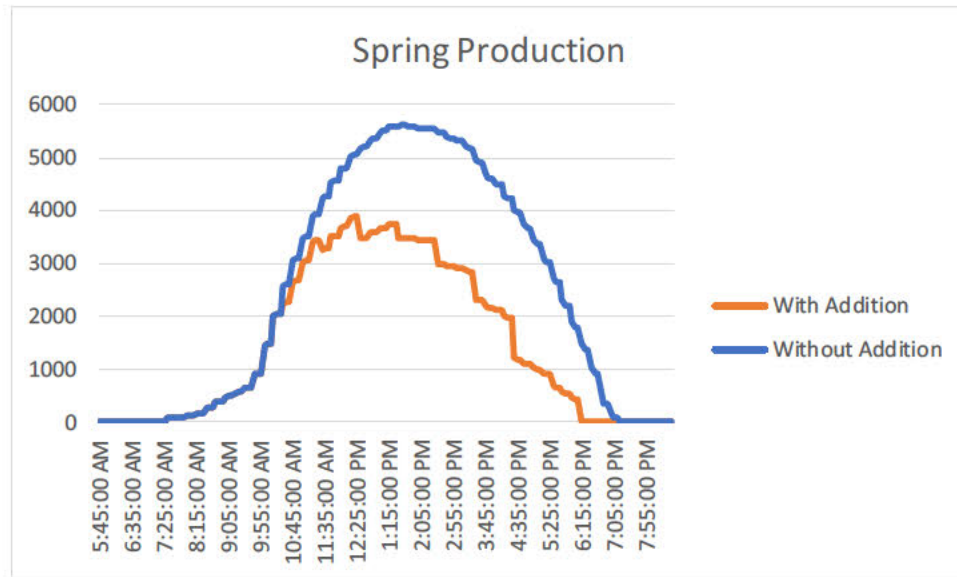


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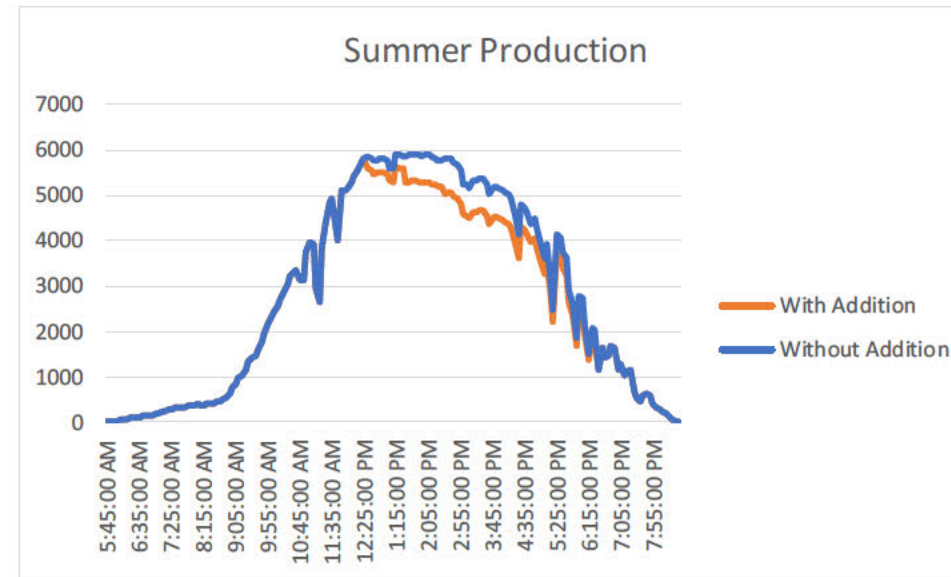


# ESTIMATED SCALED PRODUCTION DATA

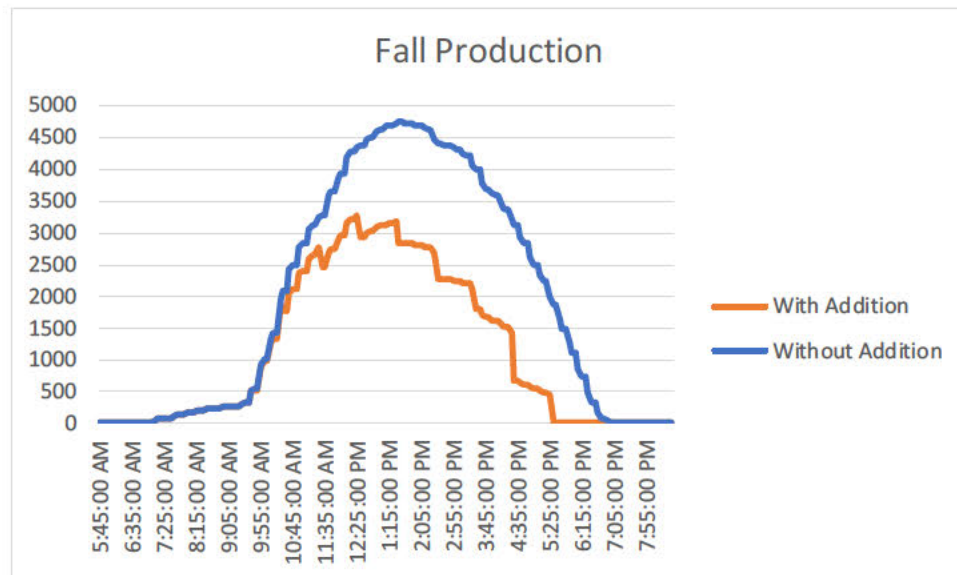
The production data obtained by the existing system are used to scale the production of the system under shade by the neighboring addition. The result is made with the assumption that the shaded portions of a panel produce no power and that if a panel is shaded 50% it would produce 50% of its original production. The times collected from the shade data and their respective shade percentage would be used to scale down the production. The results are as follow:



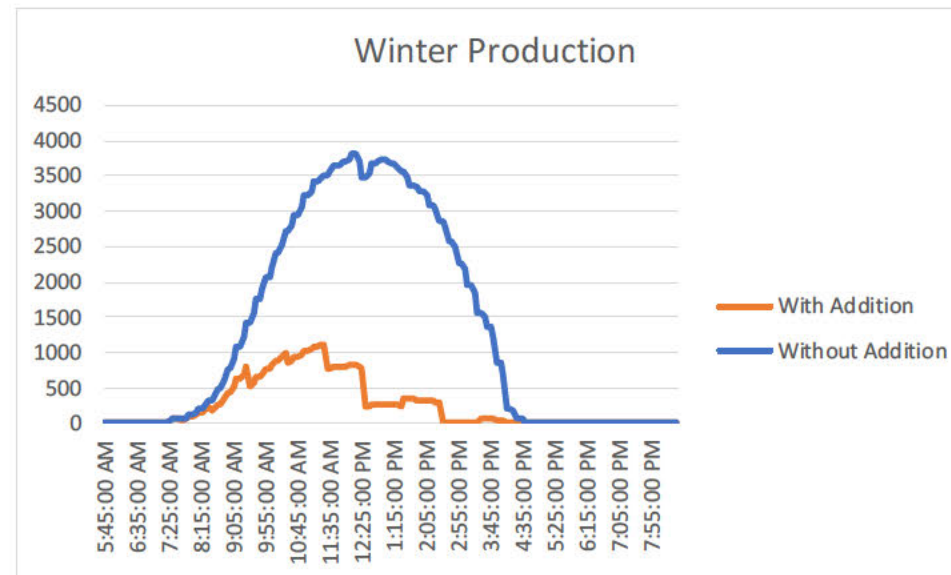
Spring ~40% production reduced with addition



Summer ~7% production reduced with addition



Fall ~42% production reduced with addition



Winter ~81% production reduced with addition



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# DATA ANALYSIS

Using the data pulled from the existing solar system, the production and shading findings were used to calculate how much of the current system, percentage wise, would be affected.

The total production is measured and ran against the shaded system to extrapolate the production lost due to the addition of the neighboring property.

Below are the extrapolated findings:

Spring – 40% reduced production

Summer – 7% reduced production

Fall – 42% reduced production

Winter – 81% reduced production

# CONCLUSION

The current solar system located on the roof of property at **1203 Staples St. NW** would see an **estimated reduction in production of 42%** on average, year-round should the neighboring property at 1201 Staples St. NW move forward with the construction of the addition.

1203 STAPLES ST. NE



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