

Solar Study

Object: Houtsma Noord
Appartment Number 242

Date: January untill December from Sunrise untill
Sunset

Location: 52° 22' 17.46" N, 4° 57' 15.33" E

Client: Victor van Reijn

Inquiry: Analysis of sunlight exposure on the terrace across different seasons and specific times of day. This study also evaluates the impact of shading caused by surrounding buildings.

Introduction & Disclaimer

Commissioned for the Houtsma Noord residential project in Amsterdam, 3-Dees has conducted a sunlight study to visualize the sun and shadow exposure for Apartment 242. The objective of this study is to provide an accurate representation of the light conditions for this specific unit.

The simulations are based on the following available data:

Original sales drawings provided by the developer, Amvest.

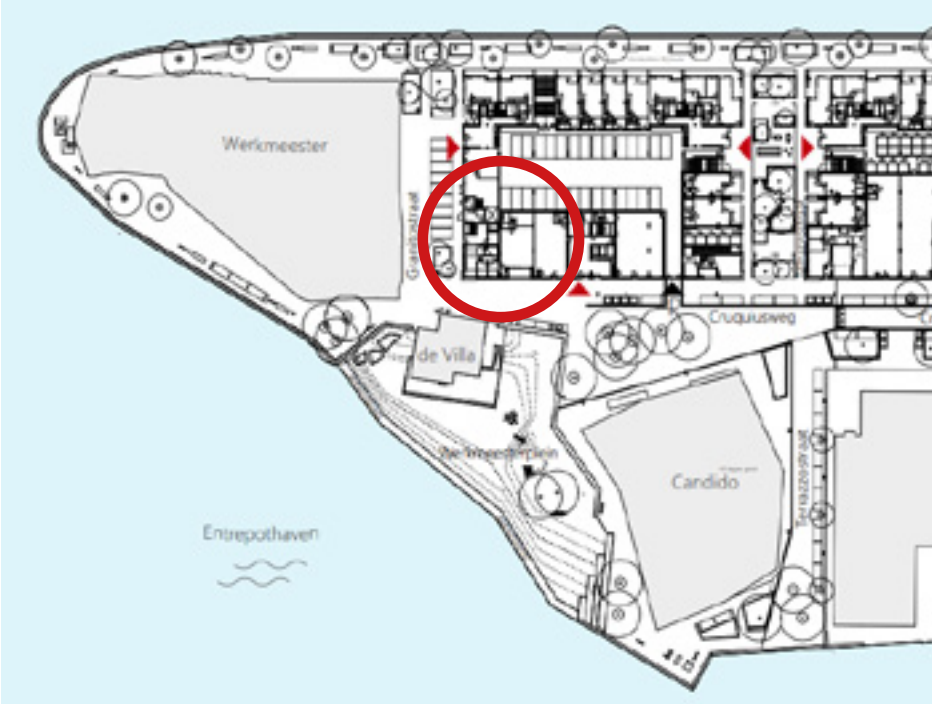
Satellite imagery obtained via Google Earth.

Artist impressions from the official sales brochure.

While these studies have been performed with the utmost care to reflect reality as accurately as possible, they are intended for illustrative purposes only. No legal rights may be derived from the results of this study. 3-Dees shall not be held liable for any damages, legal obligations, or decisions made based on the interpretation of these visualizations. All responsibility regarding the use of this study remains entirely with the client.



Situation on Google Earth and From the Architectural drawings



Situation according to sales brochure impressions



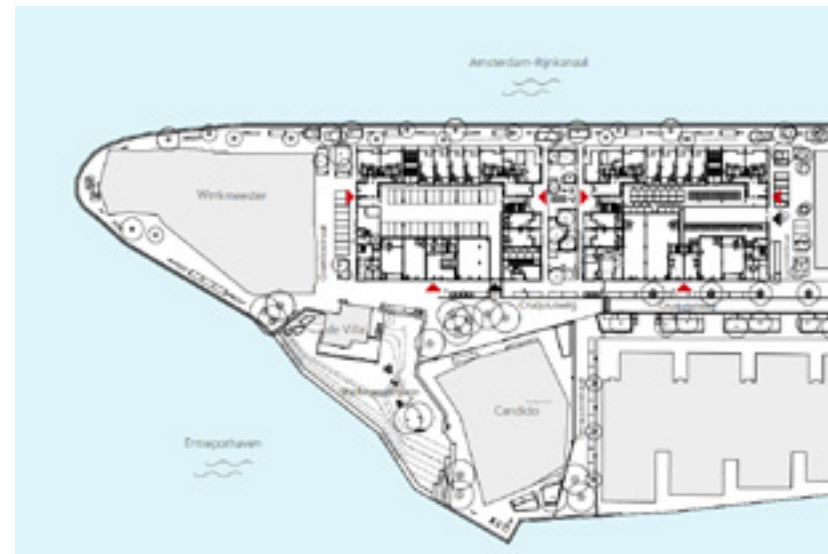
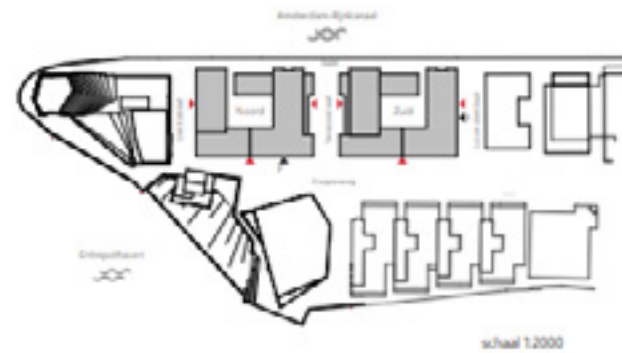
Floorplans from the Architect



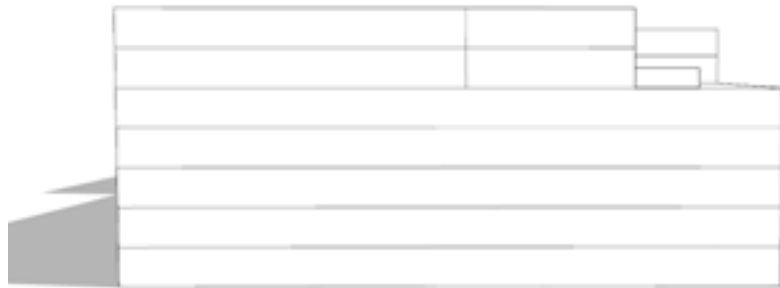
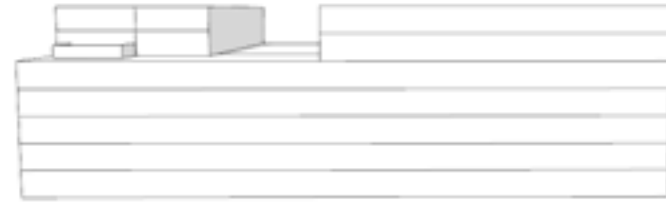
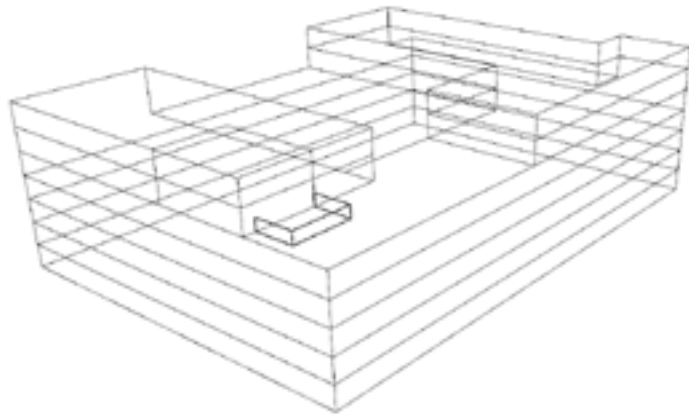
Houtsma Noord



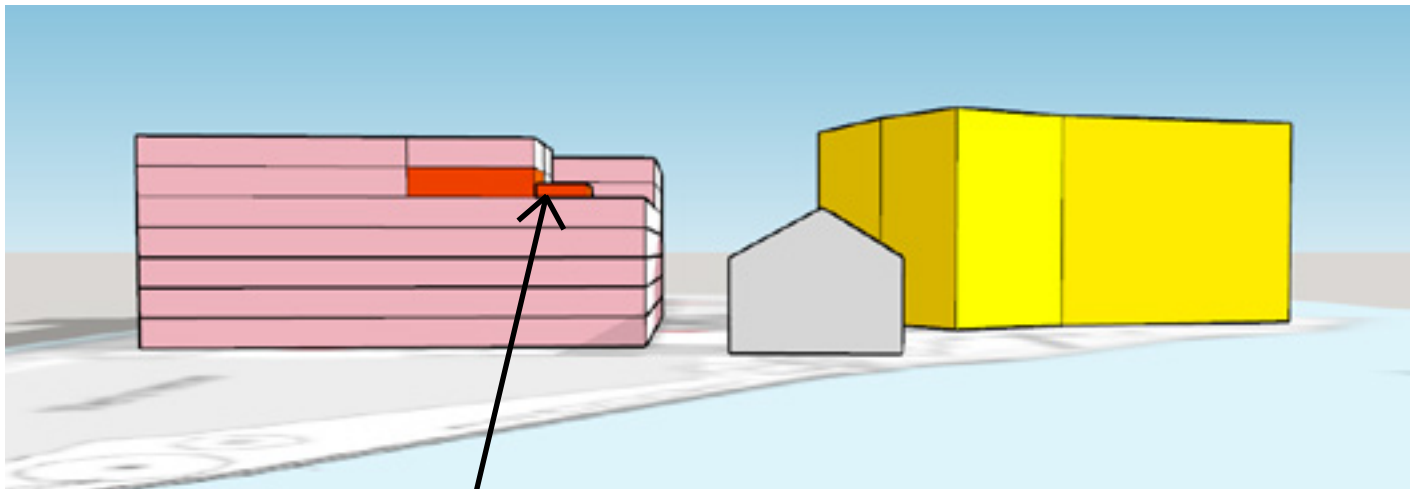
Houtsma Zuid



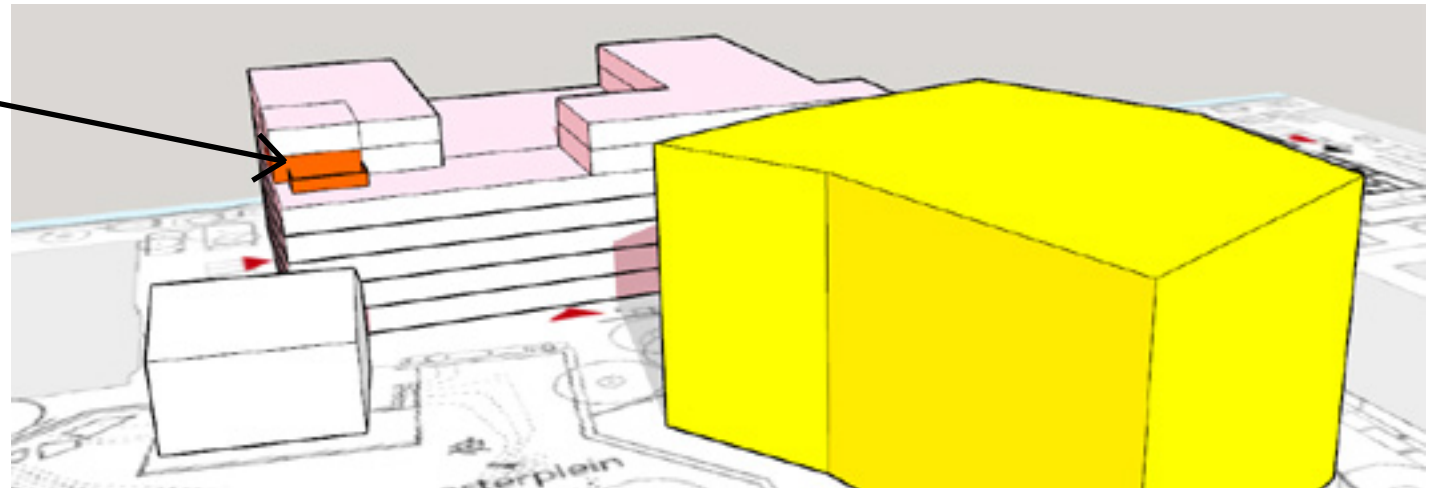
3D Model Solar Study



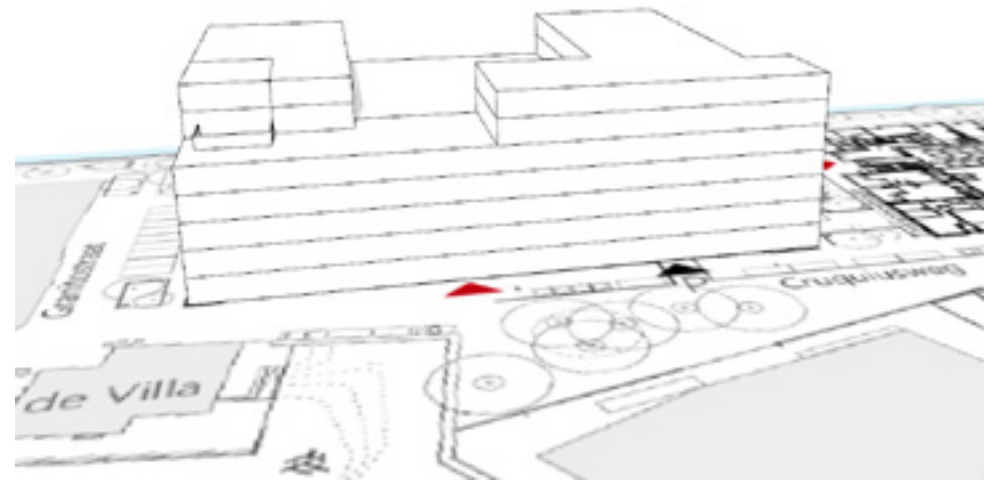
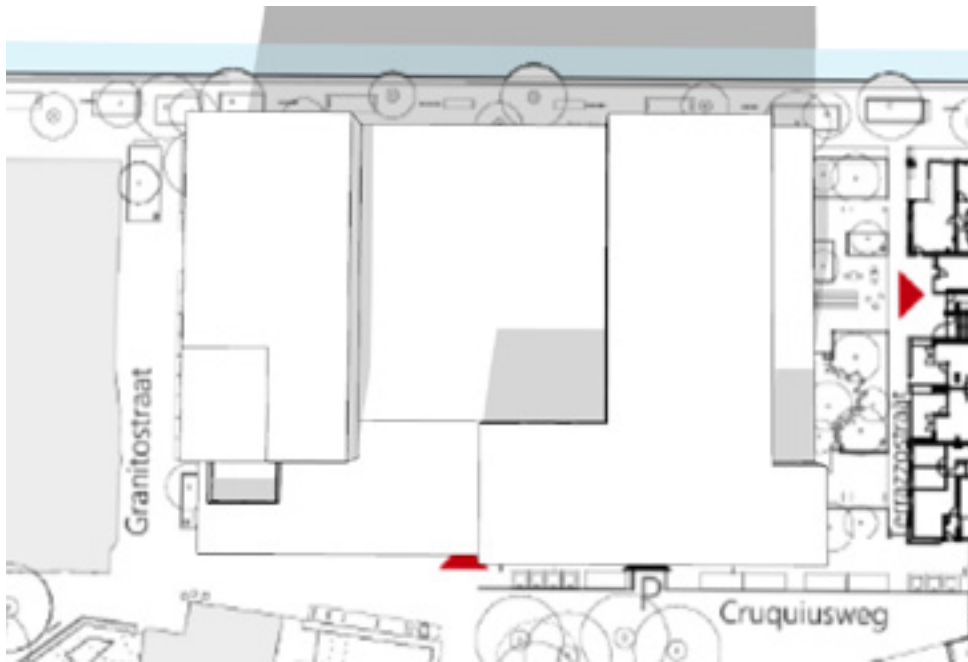
Situation with the surrounding buildings



Appartment 242



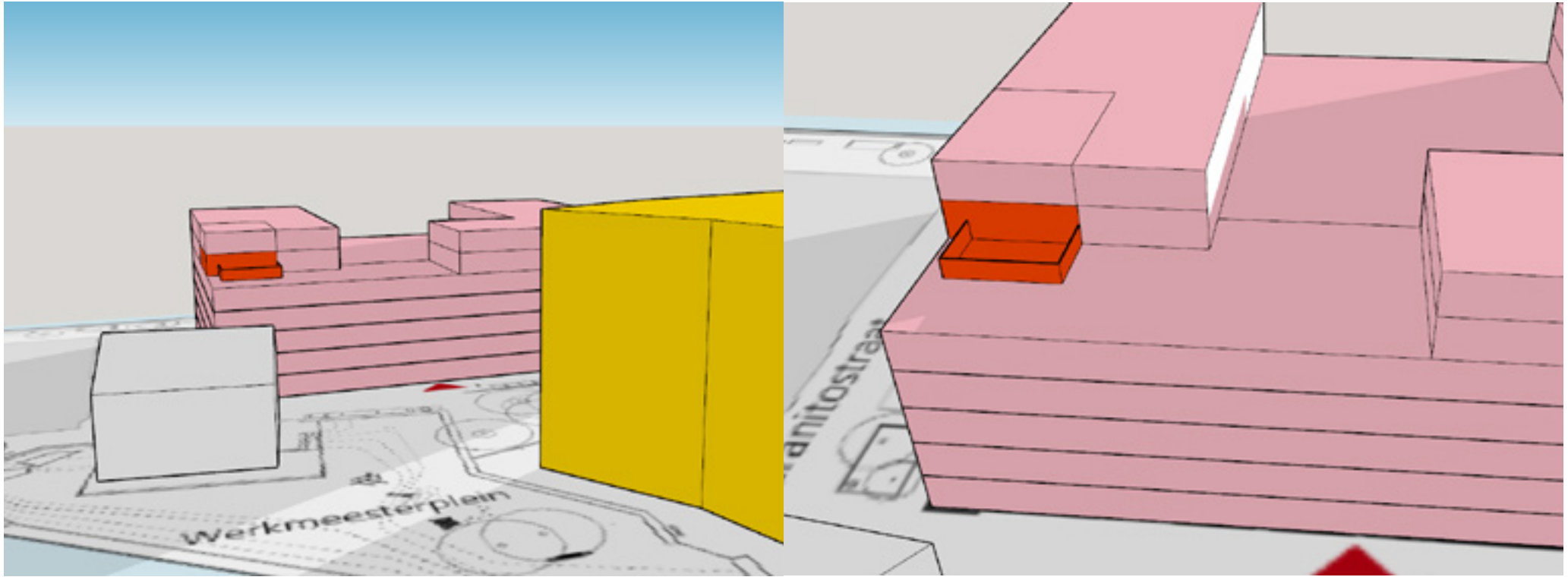
Alignment of the 3D model with cadastral maps and orientation



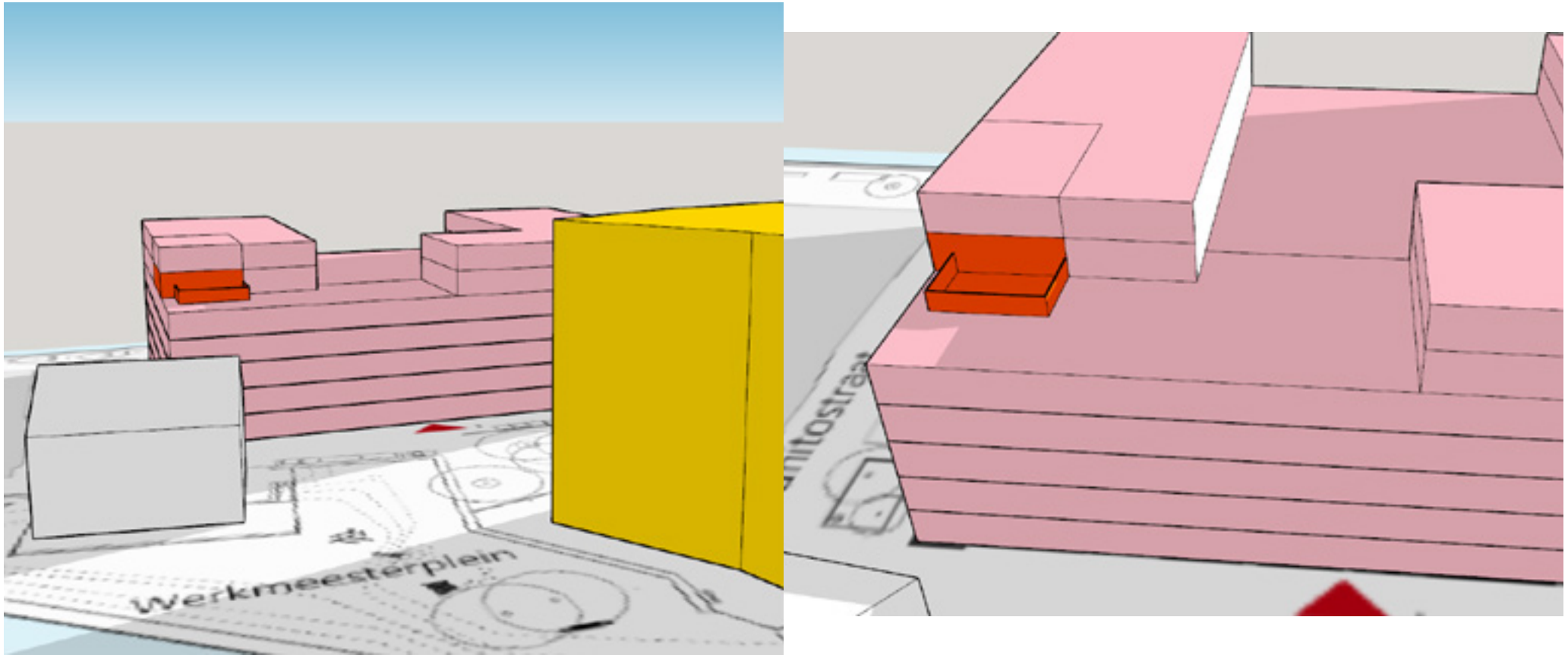
Solar Study 01 January



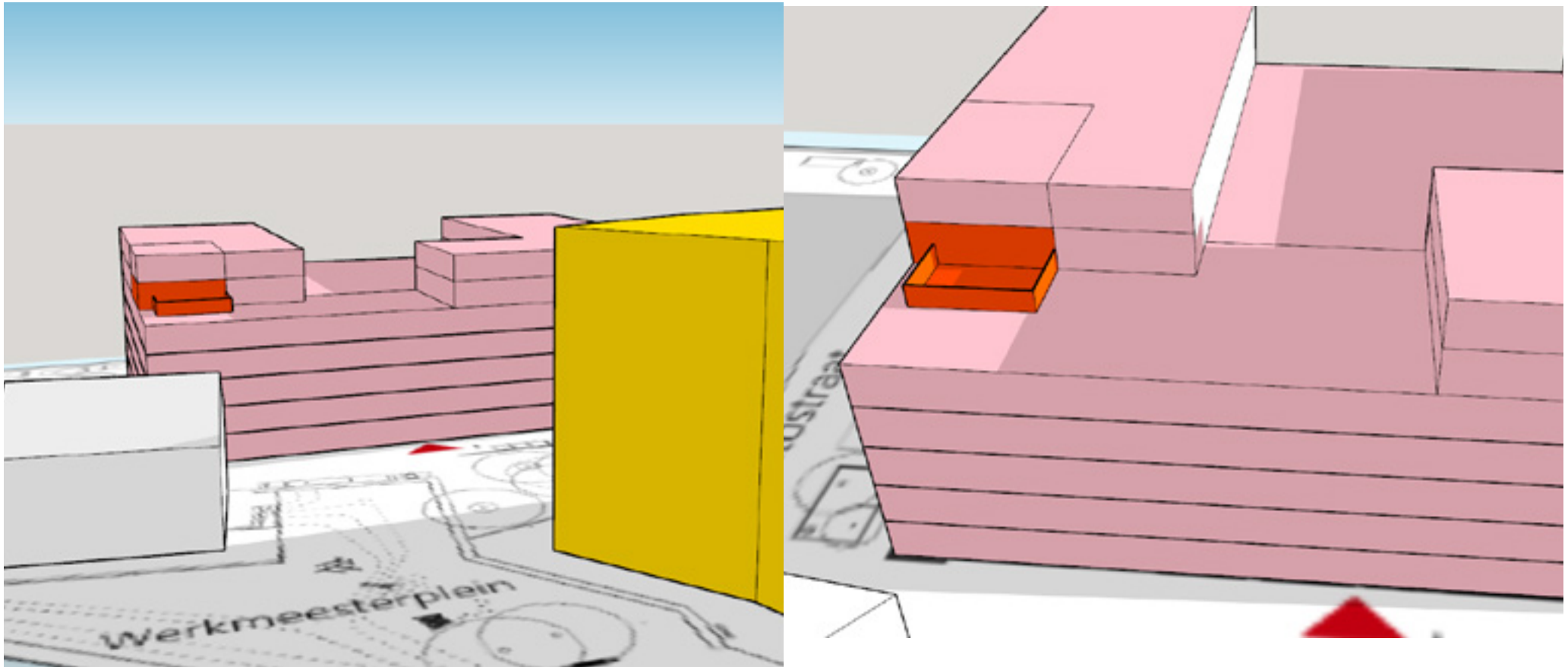
Solar Study 01 January 10:00 AM



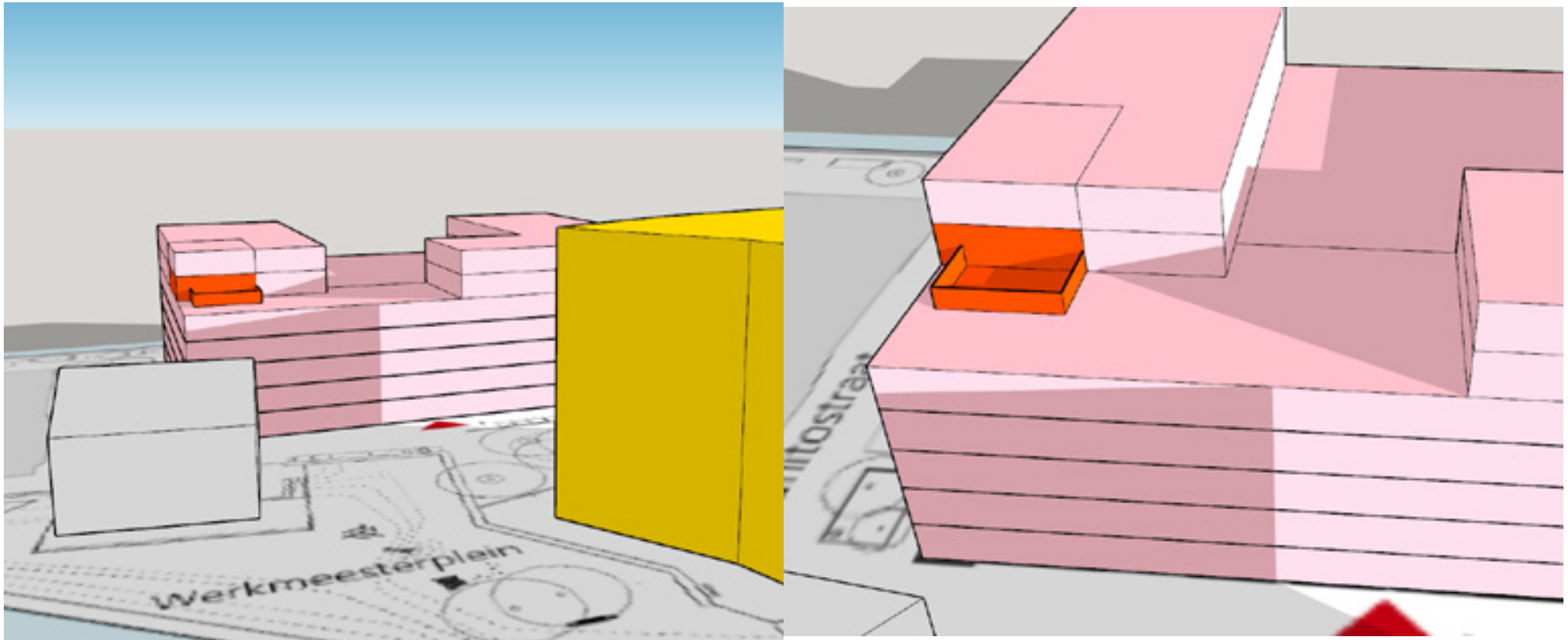
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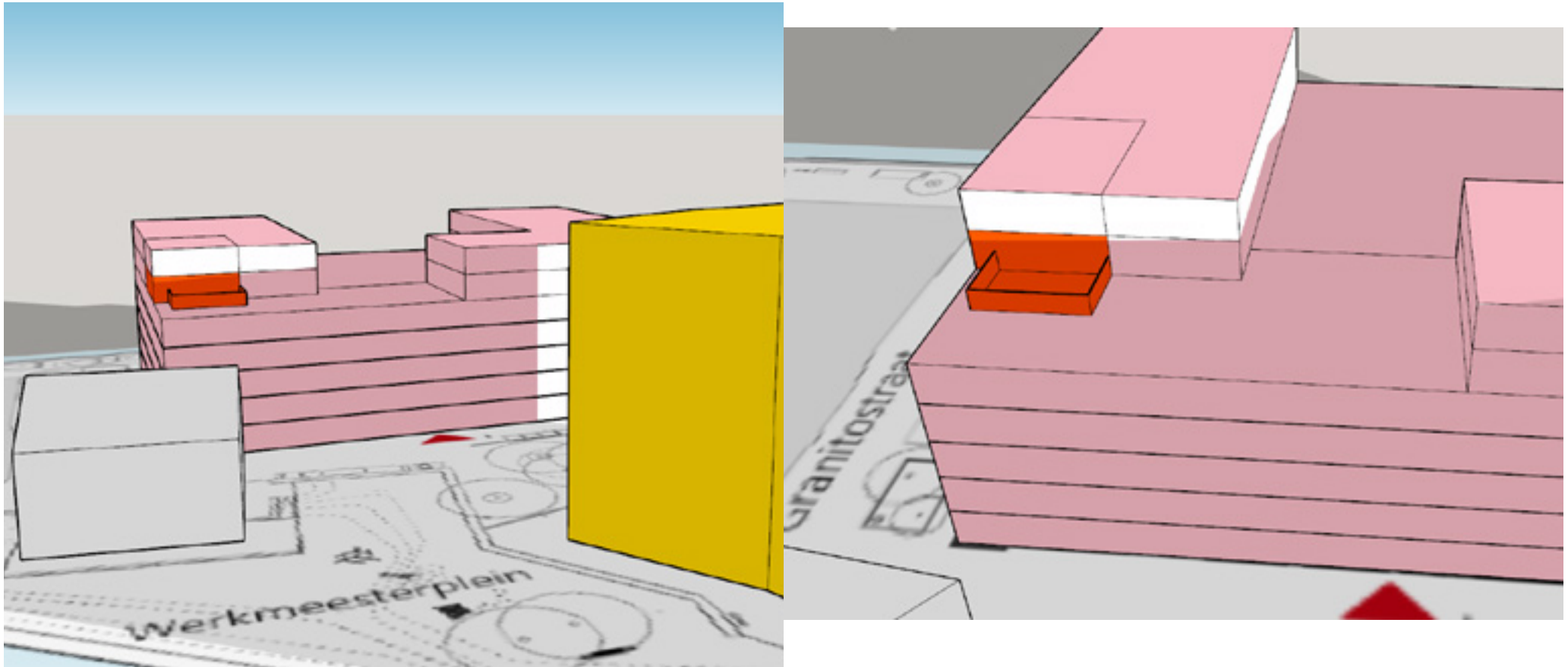
Solar Study 01 January 12:00 PM



Solar Study 01 January 02:00 PM



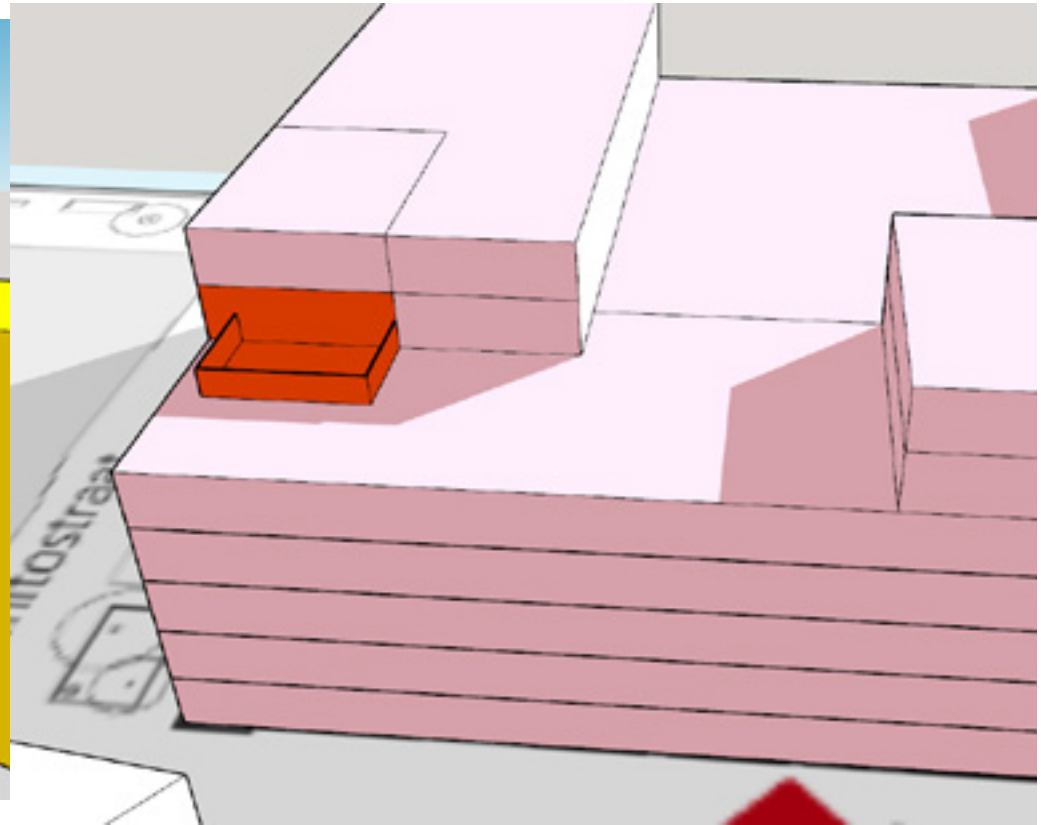
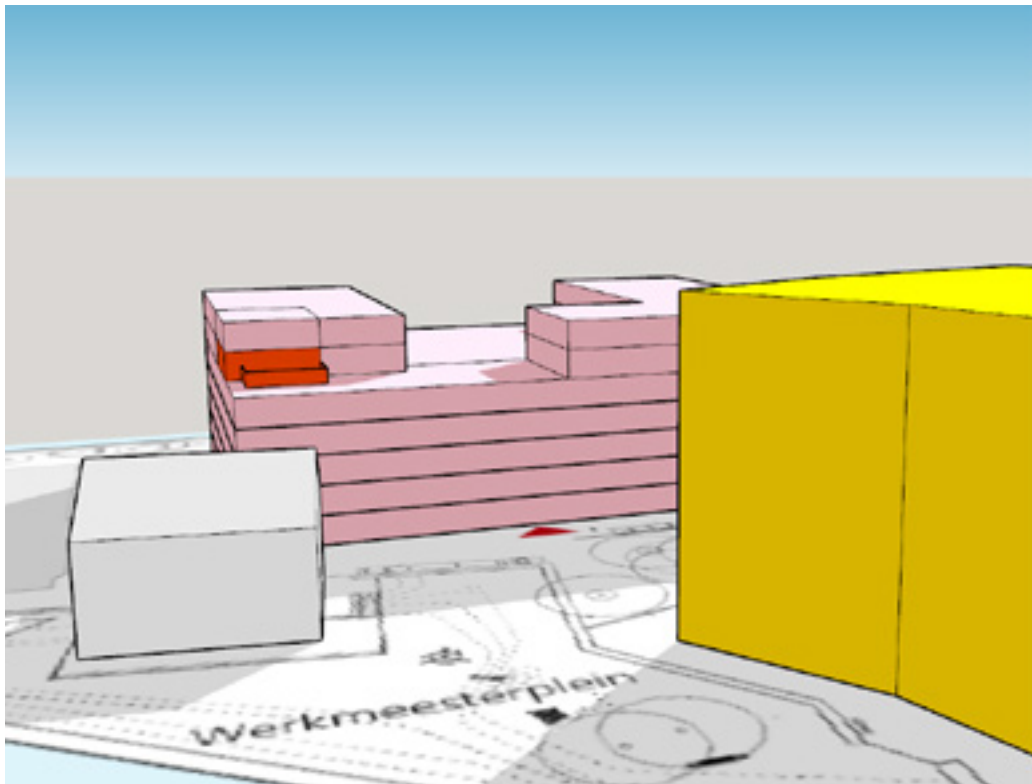
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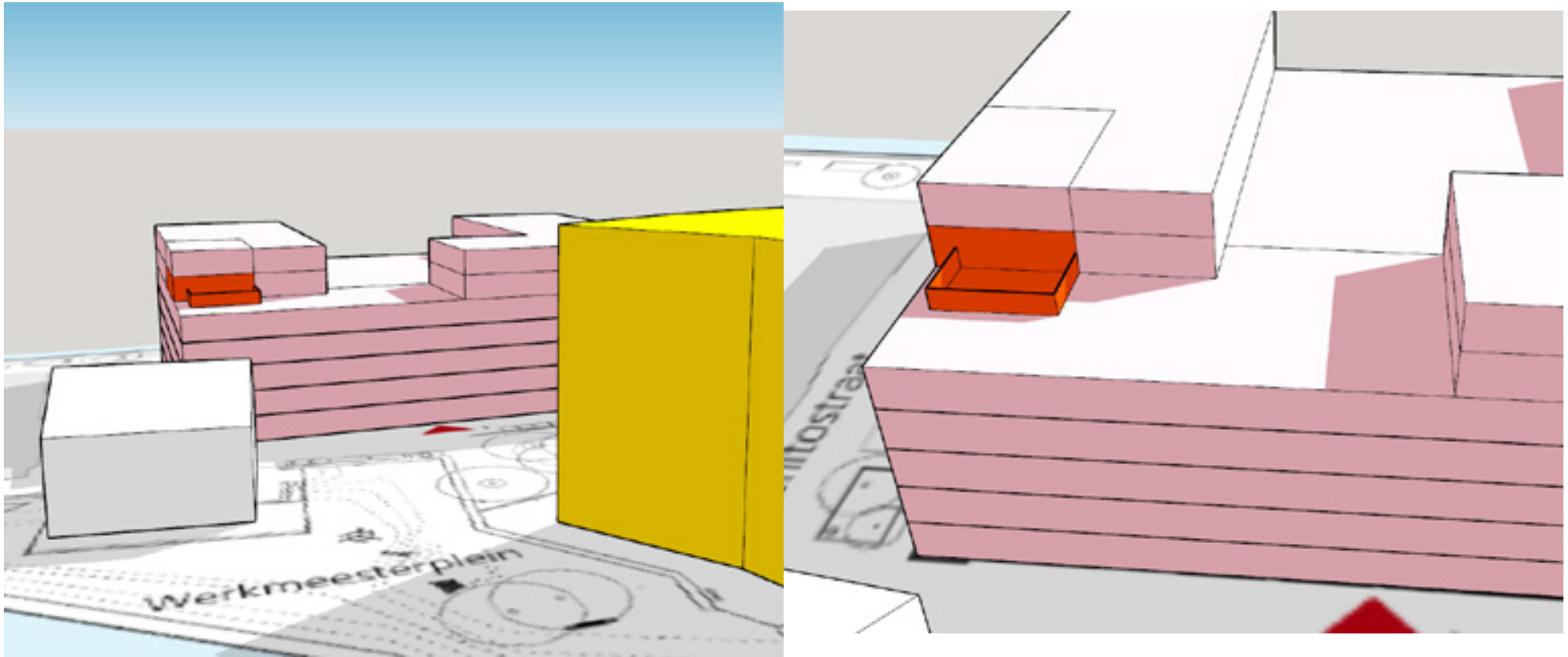
Solar Study 01 April



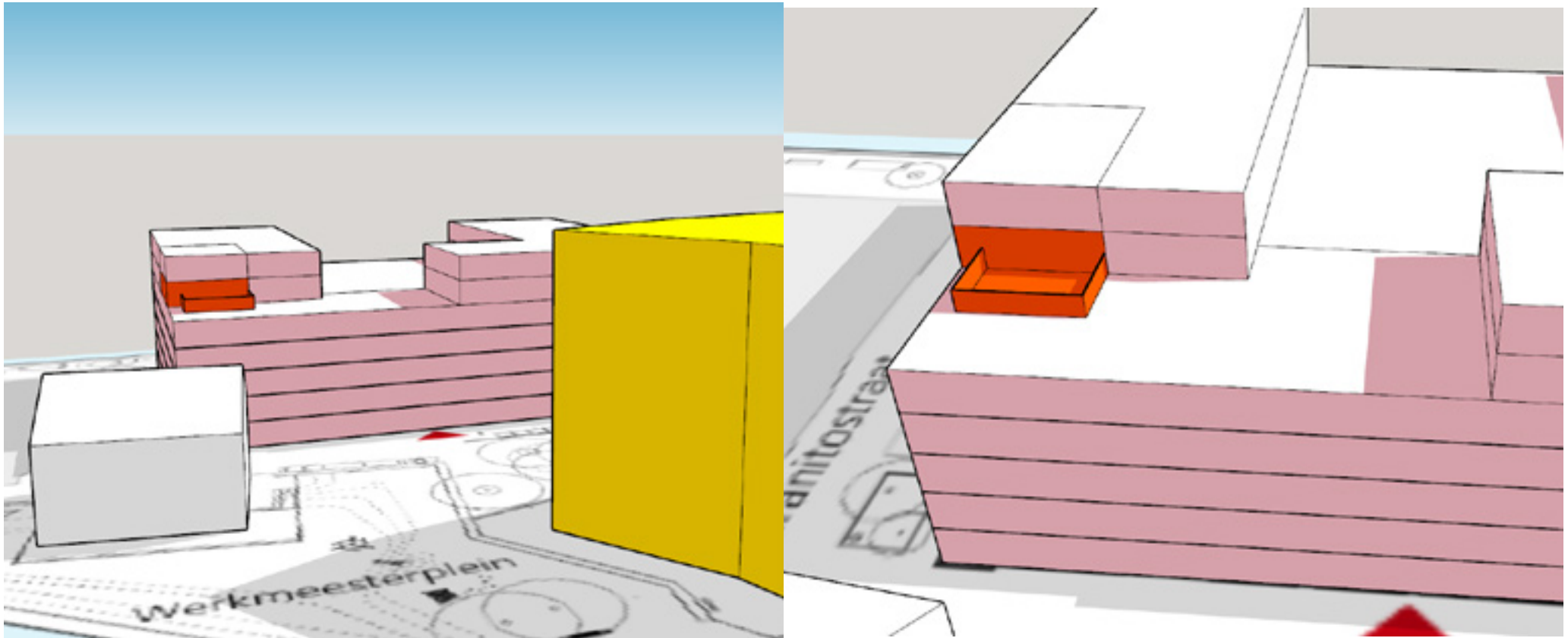
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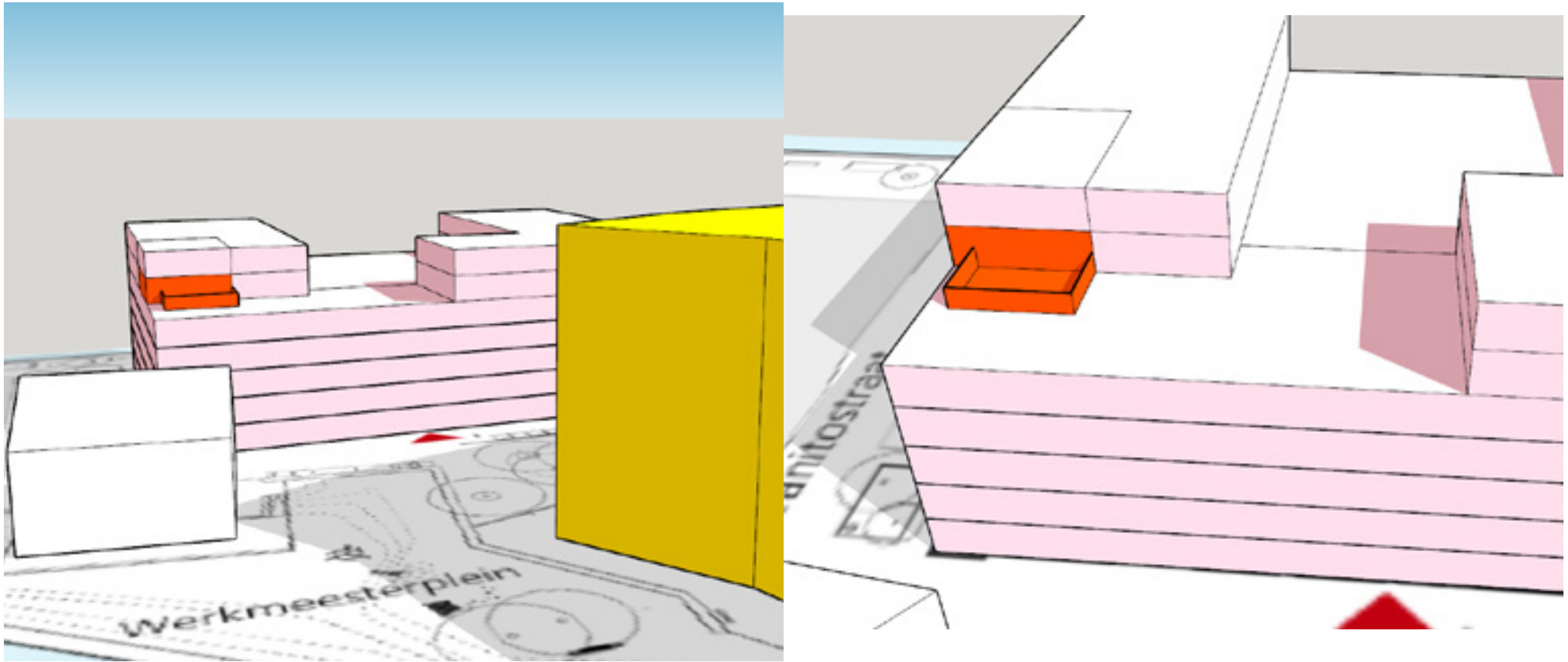
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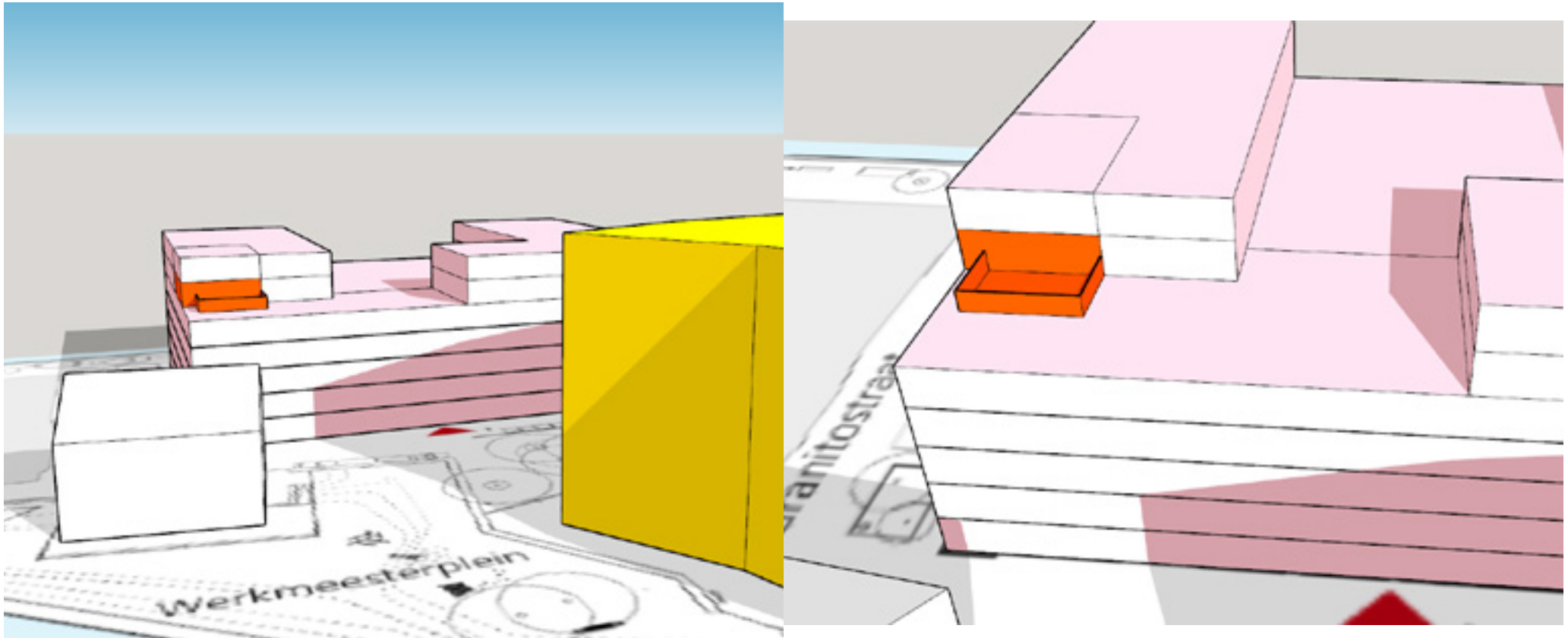
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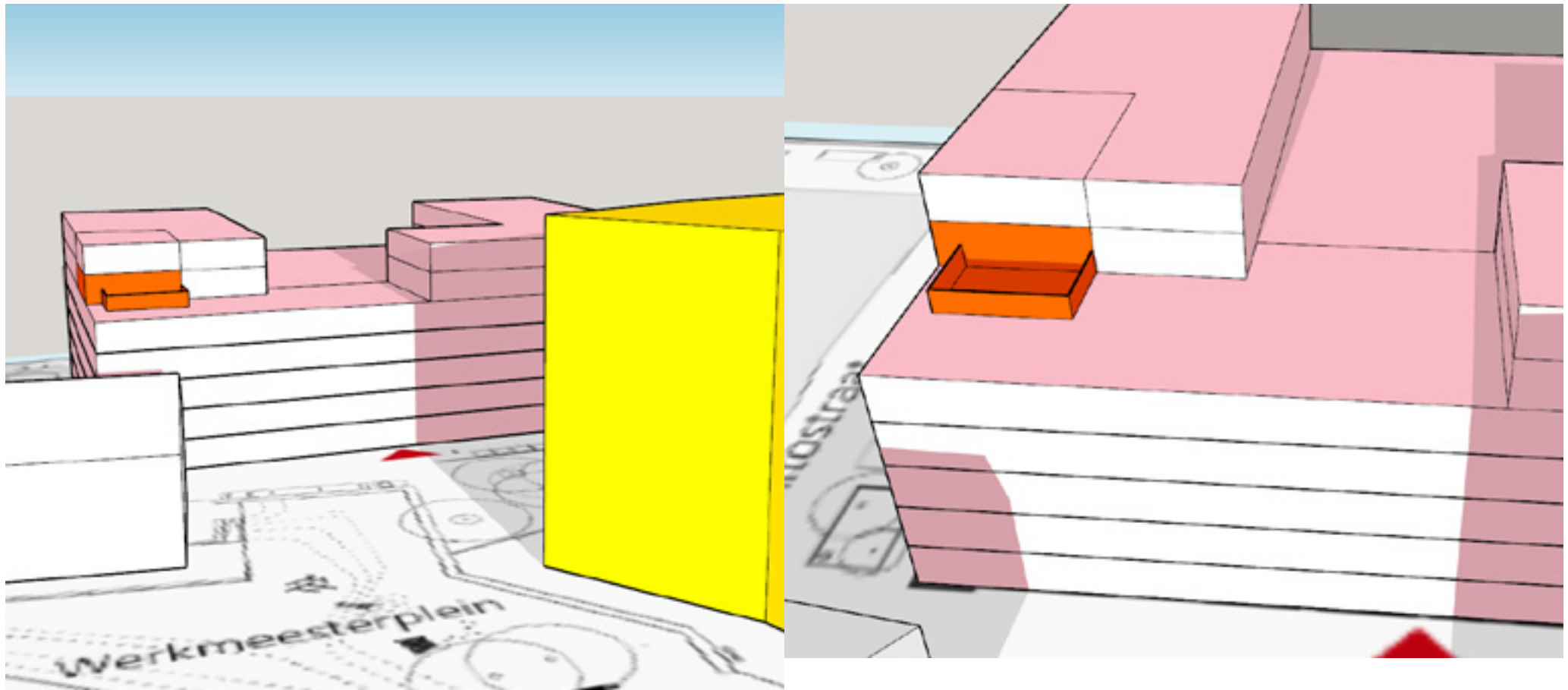
Solar Study 01 April 02:00 PM



Solar Study 01 April 04:00 PM



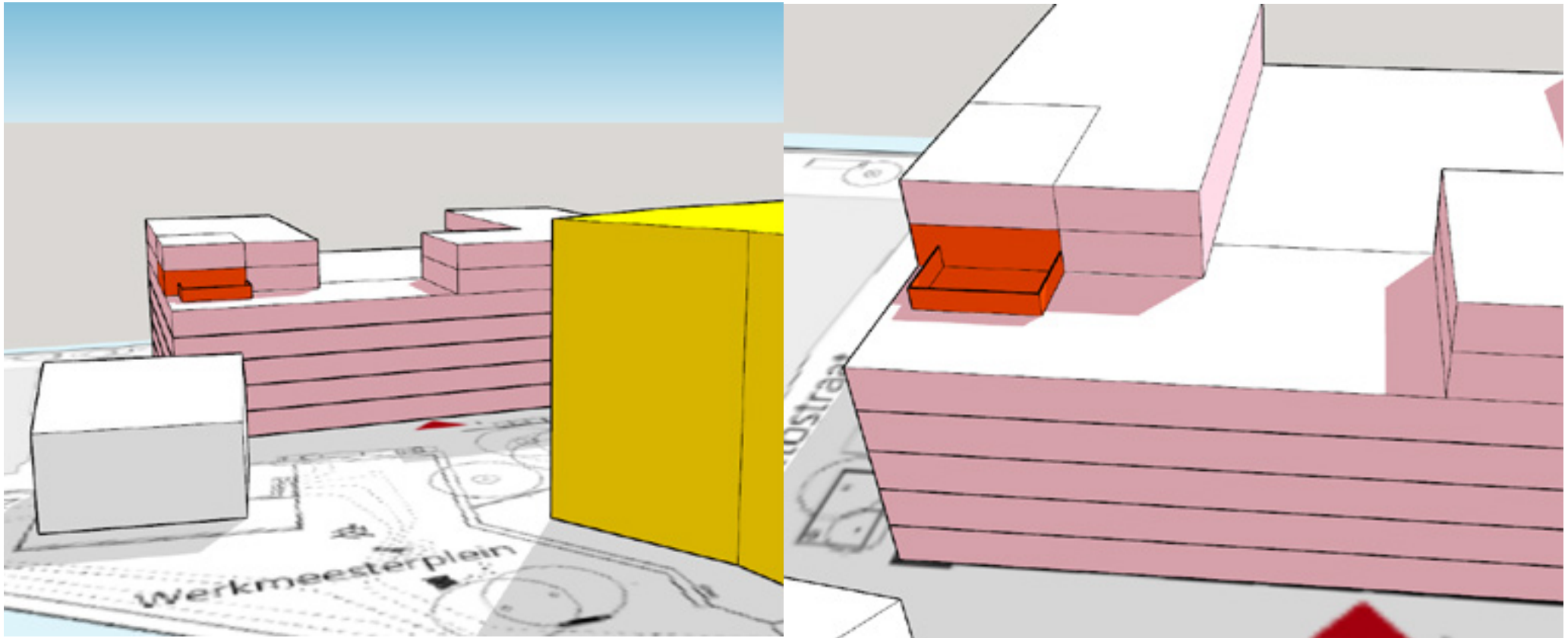
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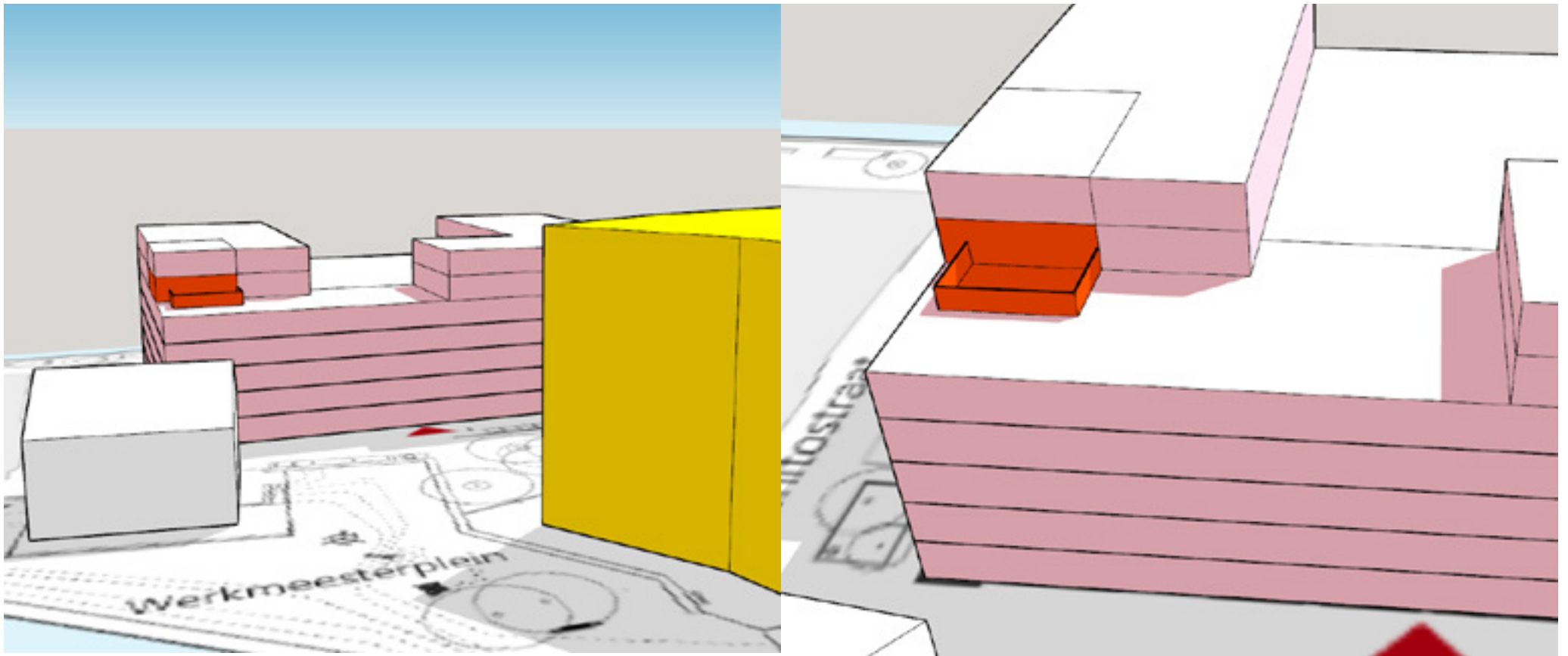
Solar Study 01 July



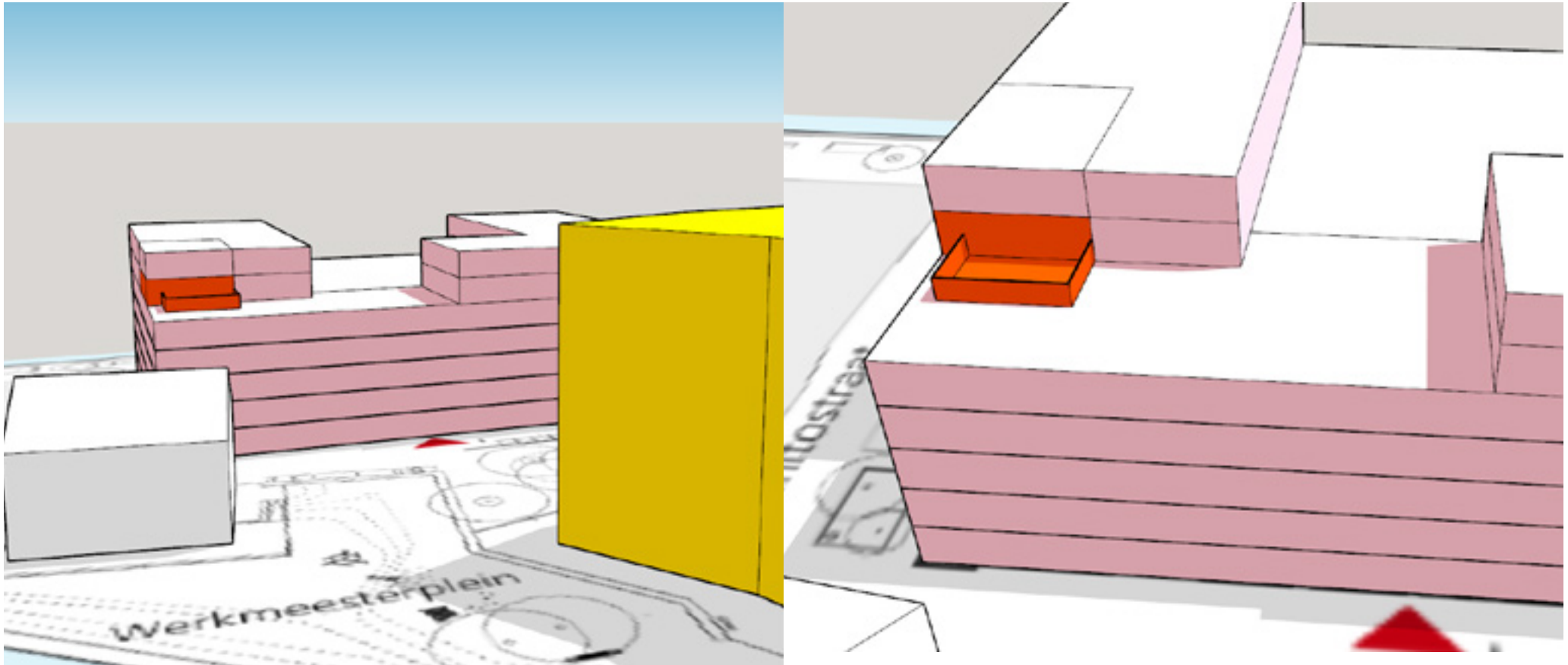
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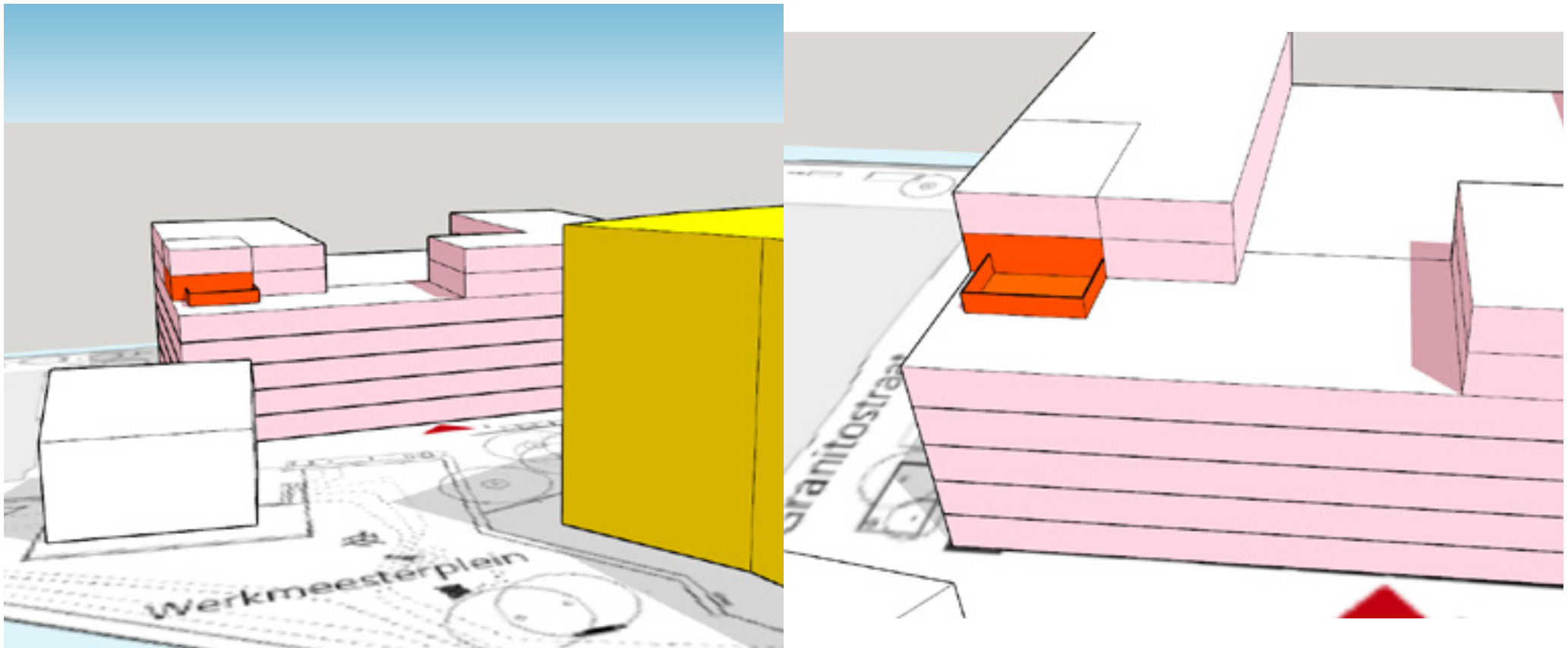
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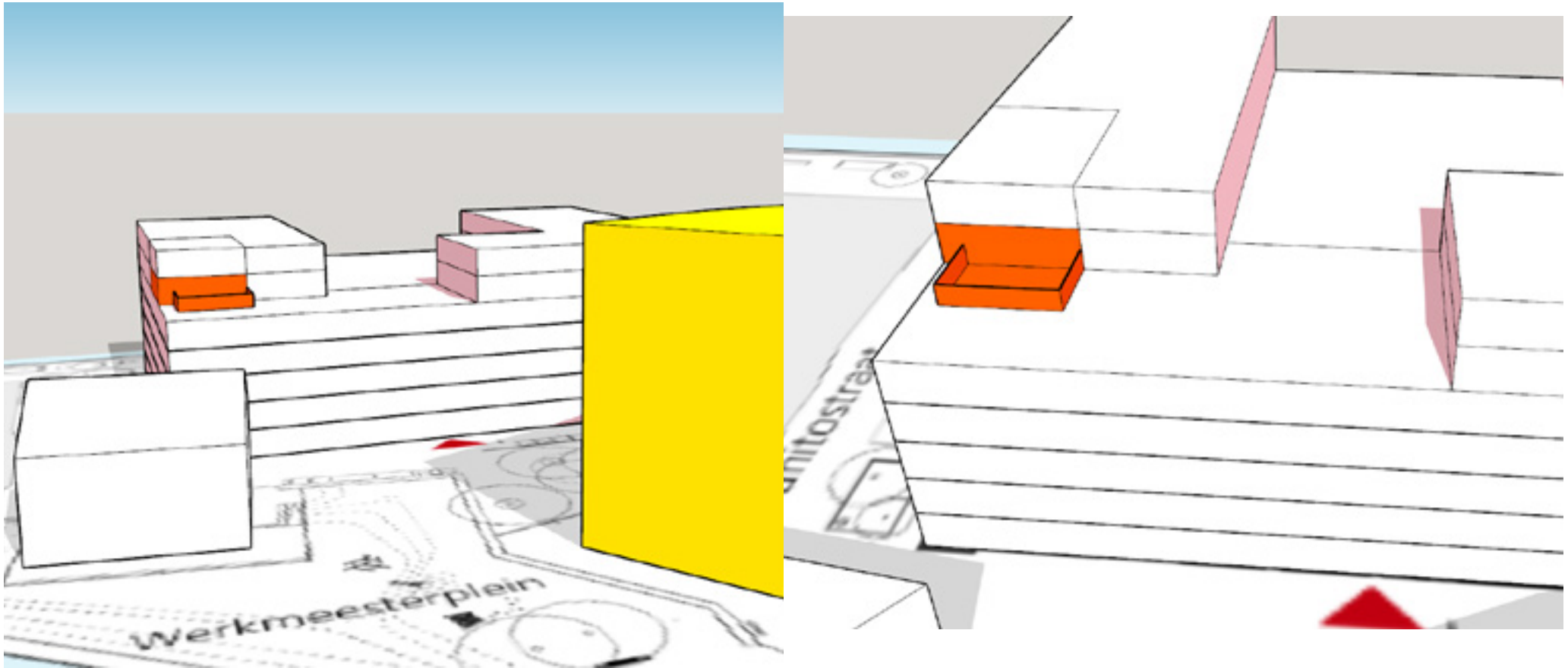
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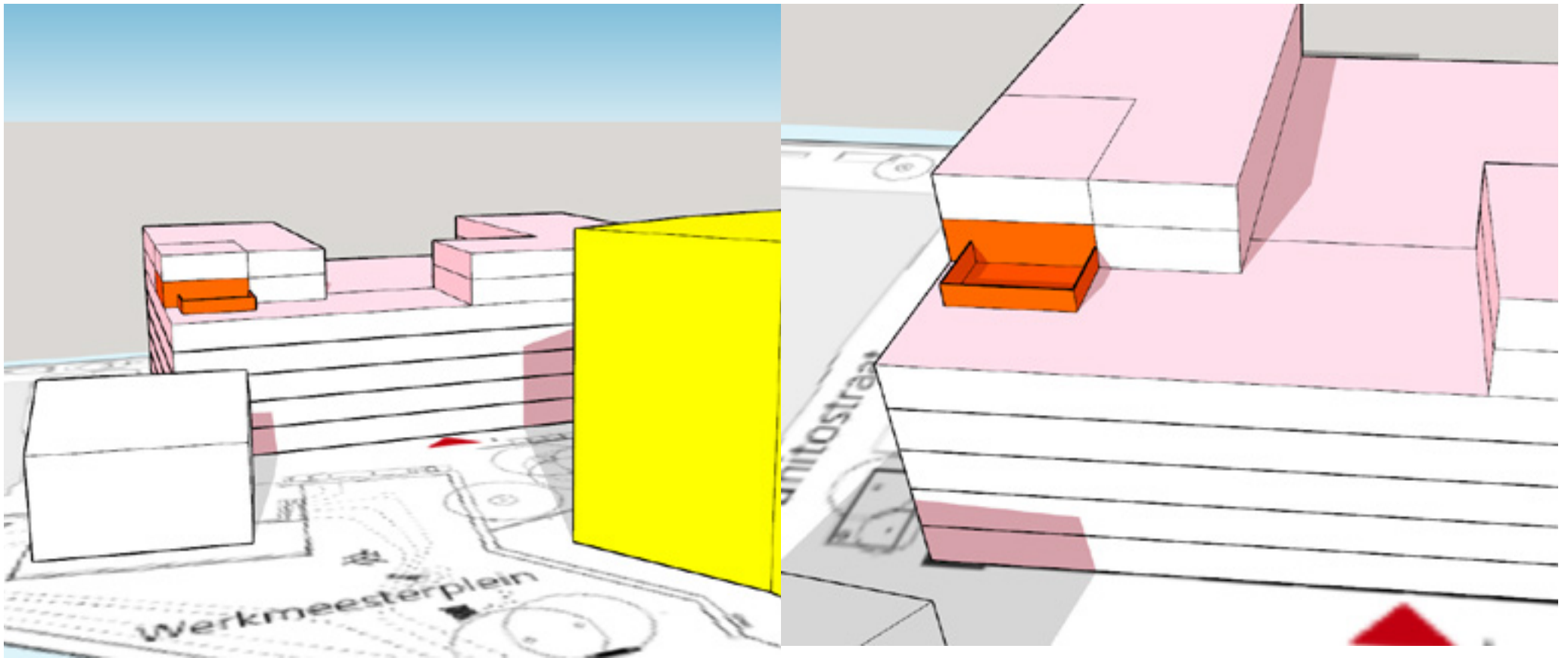
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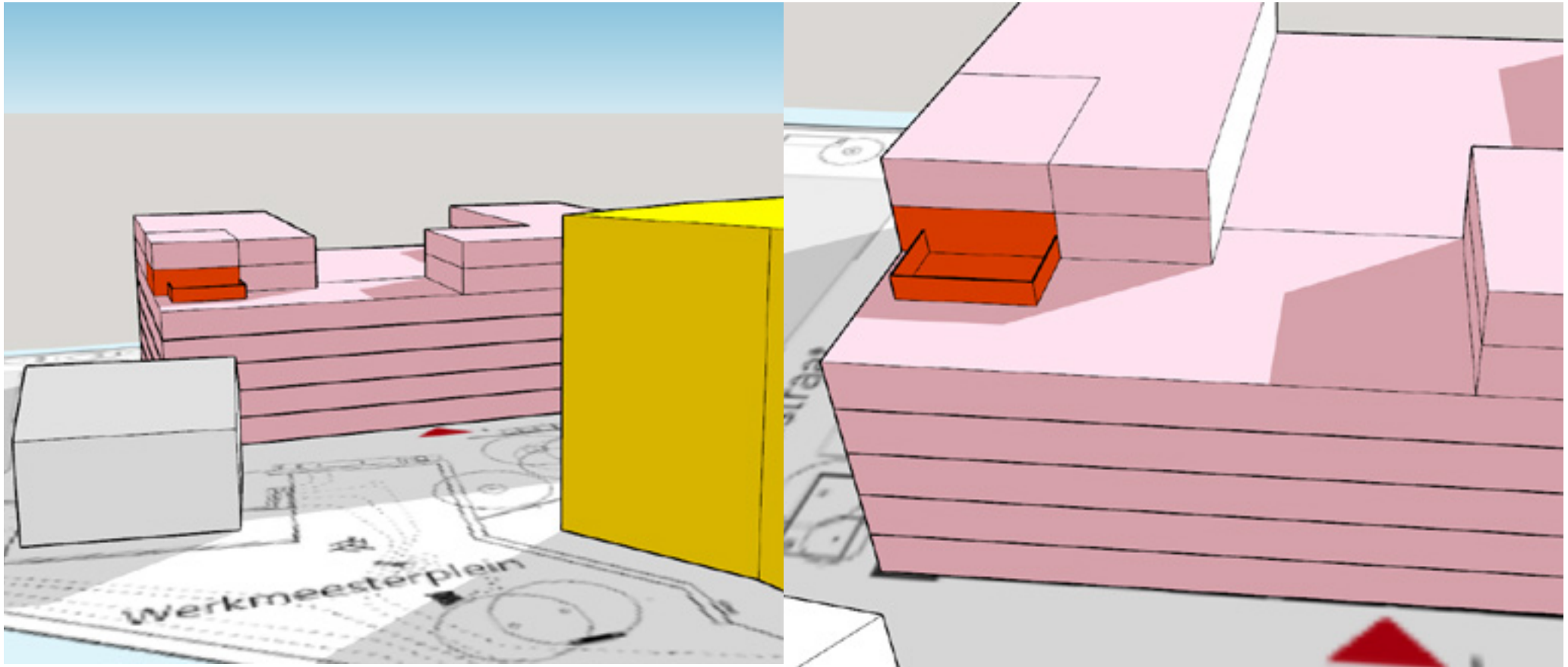
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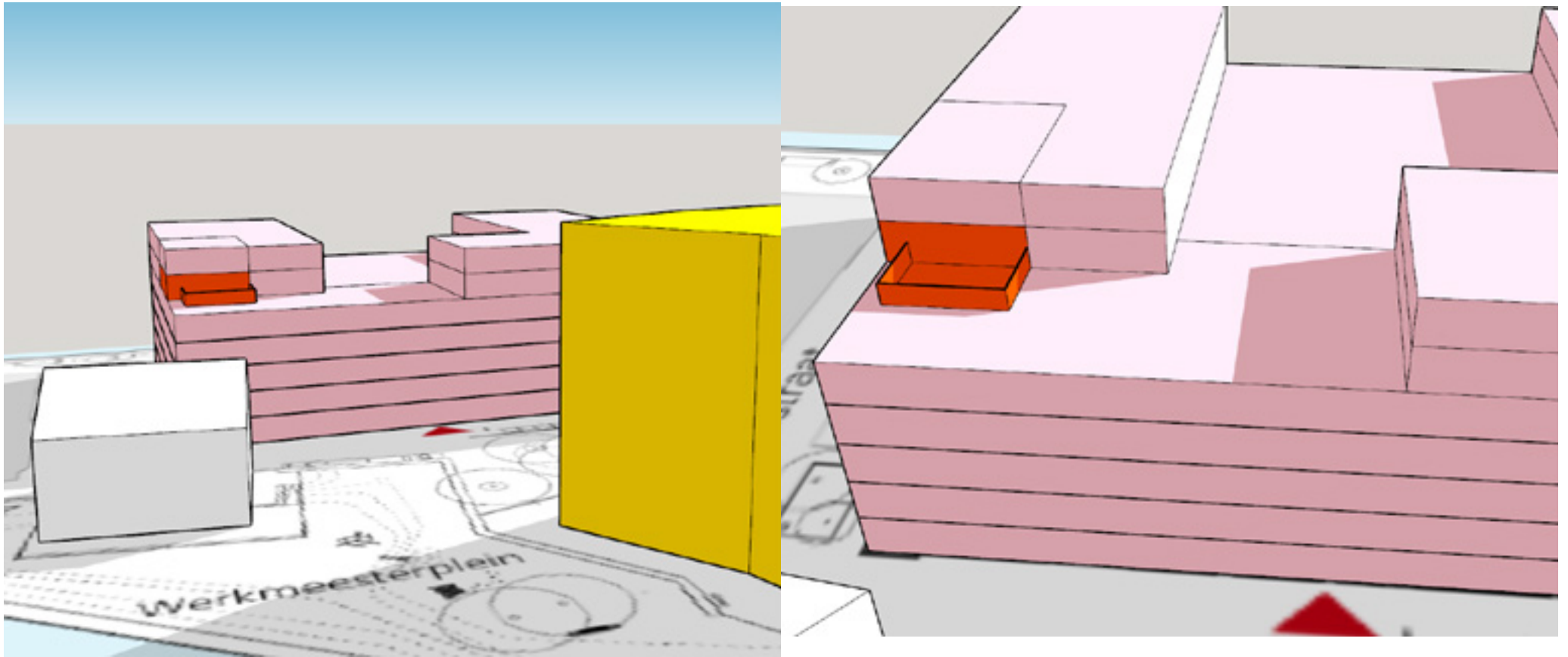
Solar Study 01 October



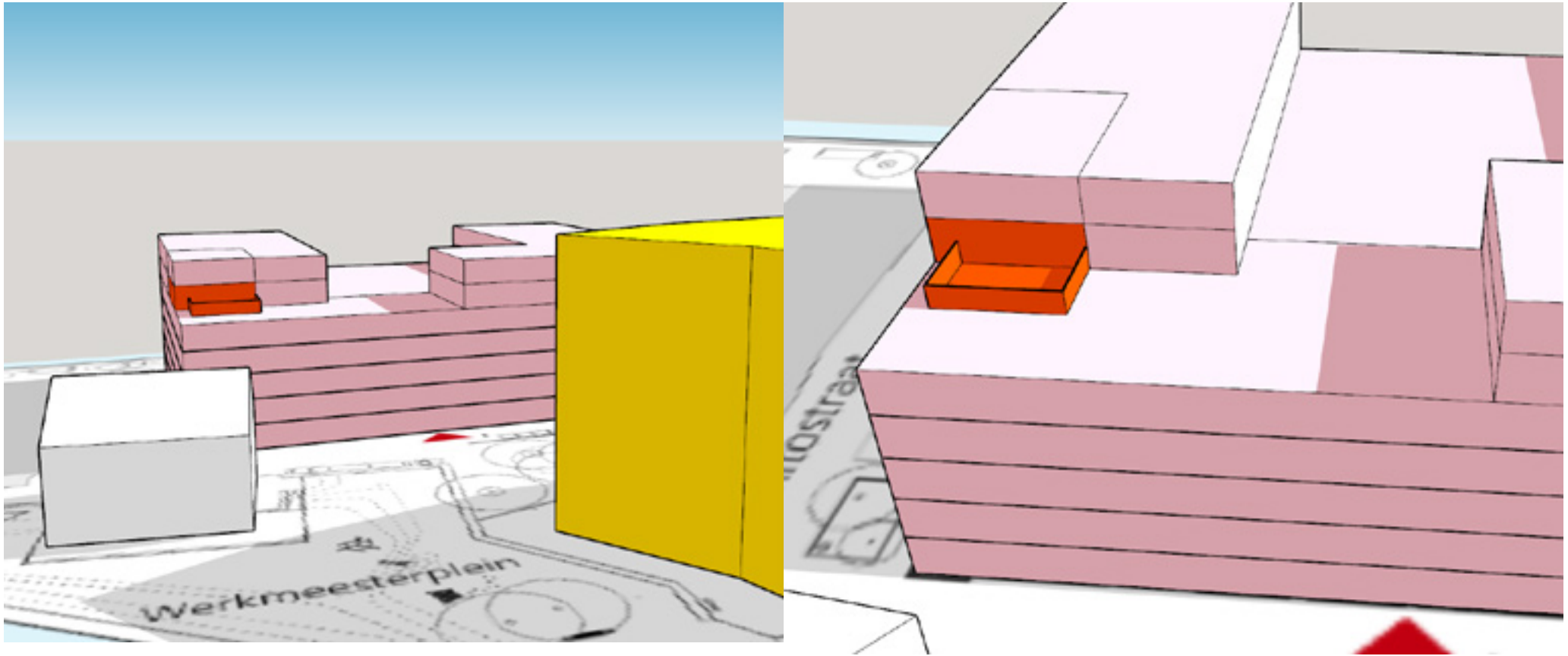
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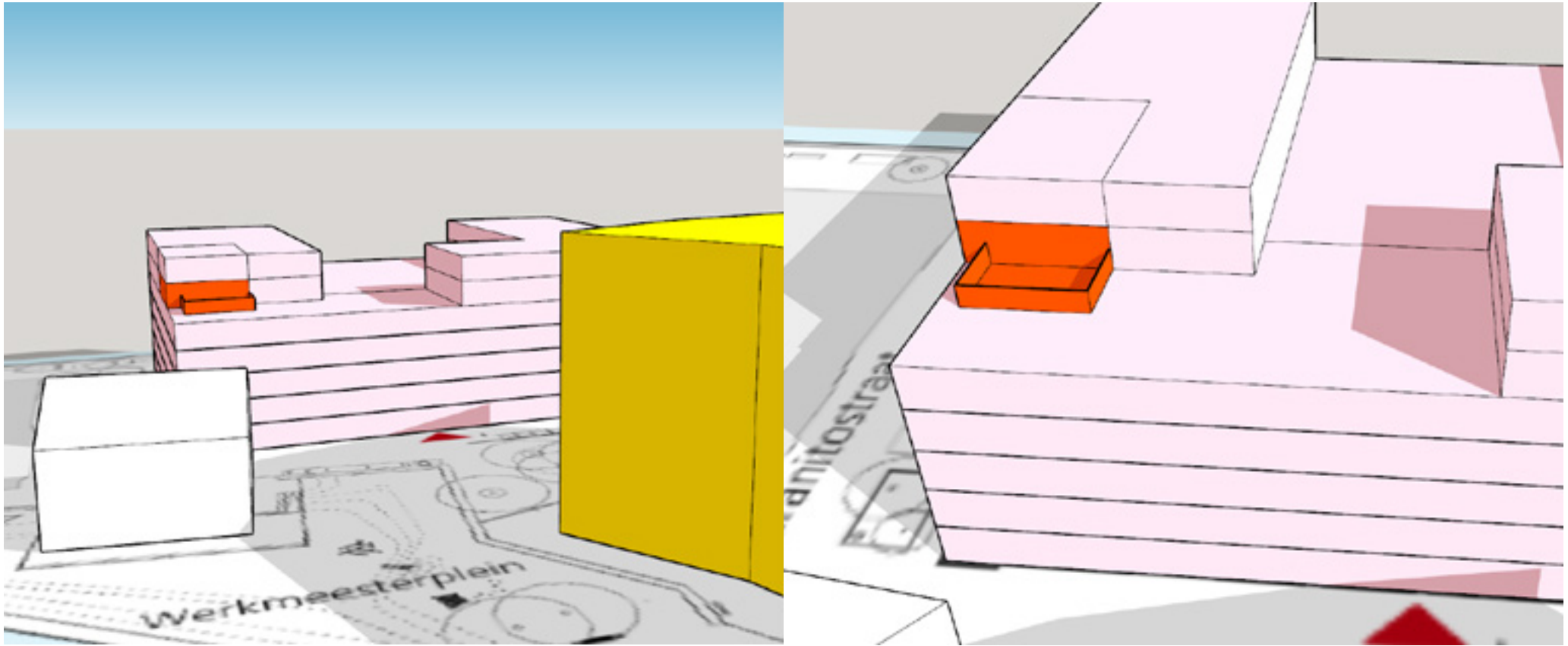
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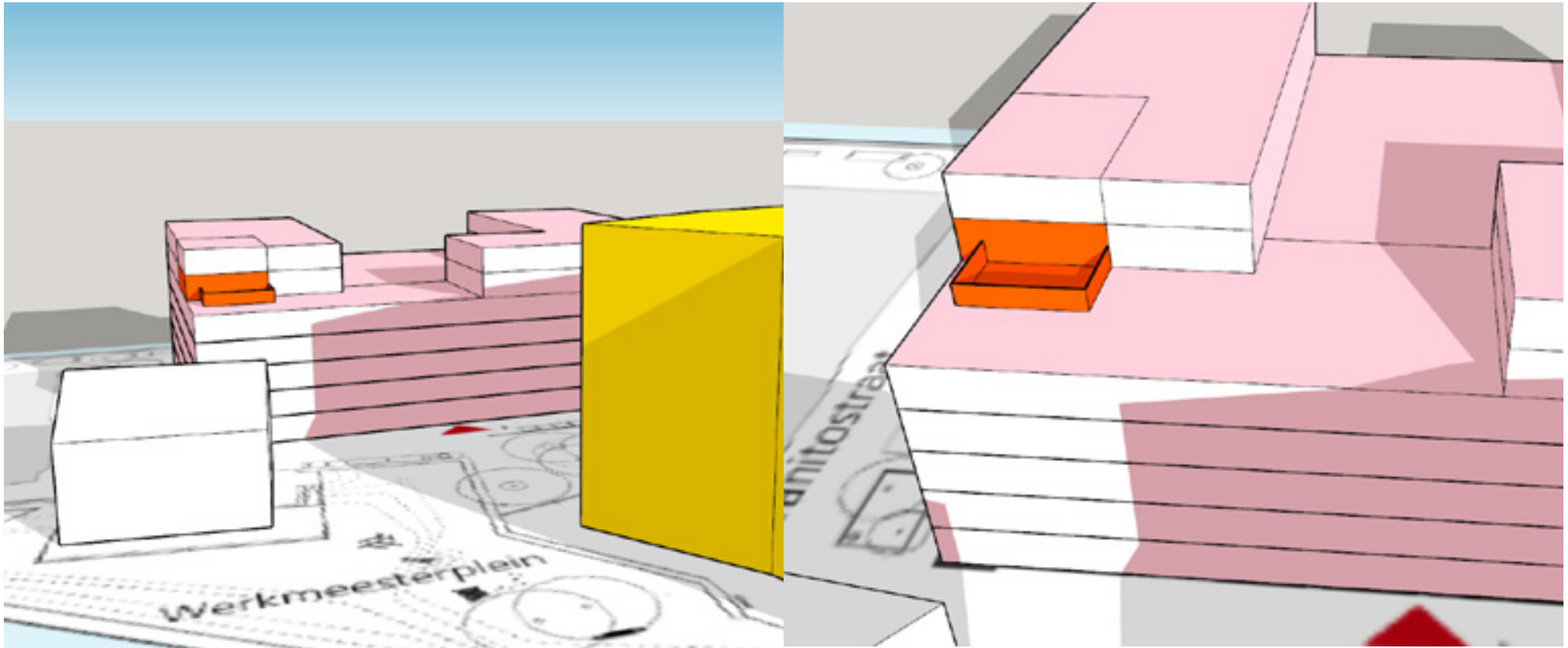
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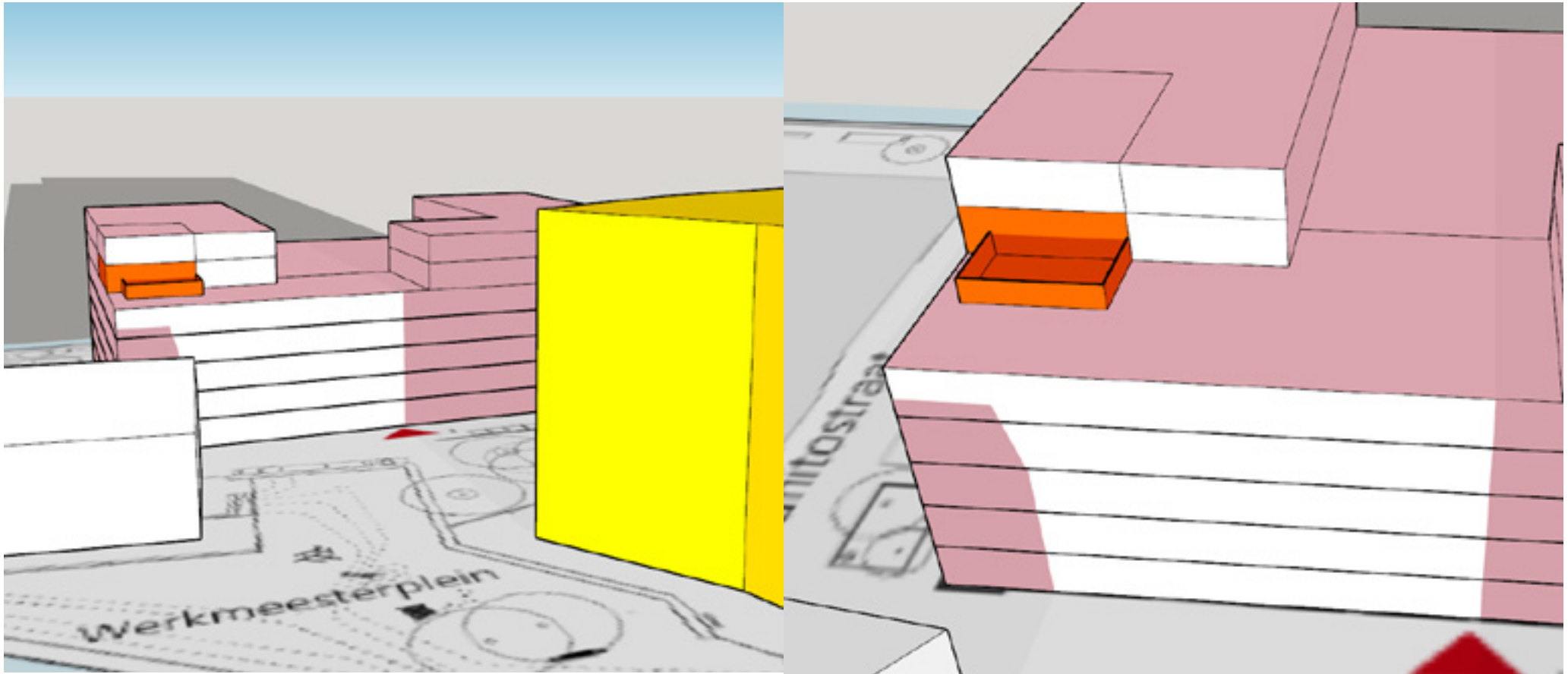
Solar Study 01 October 02:00 PM



Solar Study 01 October 04:00 PM



Solar Study 01 October 06:00 PM



Sunlight Exposure Analysis: Apartment 242

Winter Season (January 1st)

During the winter months, sunlight begins to reach the terrace starting at 12:00 PM. The terrace remains sunny for approximately two hours. From 2:00 PM onwards, the sun gradually starts to recede, and by 3:00 PM, the terrace is fully in the shade.

Spring Season (April 1st)

In the spring, the first sunlight appears on the terrace at 11:00 AM. By 12:00 PM, the entire terrace is bathed in full sunlight. The terrace remains in the sun for the remainder of the day until sunset.

Summer Season (July 1st)

On July 1st, the sun slowly begins to move onto the terrace at 11:00 AM. Similar to the spring observation, the terrace is fully exposed to the sun by 12:00 PM and remains sunny throughout all remaining daylight hours.

Autumn Season (October 1st)

The sunlight patterns for the autumn season are consistent with those of the spring and summer. The terrace receives direct sunlight from 11:00 AM onwards, reaching full exposure by noon.

Impact of surrounding buildings

The surrounding buildings have no impact on the sunlight exposure of the terrace during most months of the year. Shading only occurs during the winter season; specifically on January 1st, the surrounding structures will begin to block direct sunlight from 3:00 PM onwards.

Conclusion

In summary, the terrace enjoys significant sunlight exposure from 11:00 AM until sunset throughout the spring, summer, and autumn seasons.

During the winter months, the sunlight duration is naturally shorter, providing direct sun from approximately 12:00 PM until 2:30 PM. The surrounding buildings only impact sunlight exposure during the winter months. Throughout the remainder of the year, the terrace remains unaffected by shading from neighboring structures.

