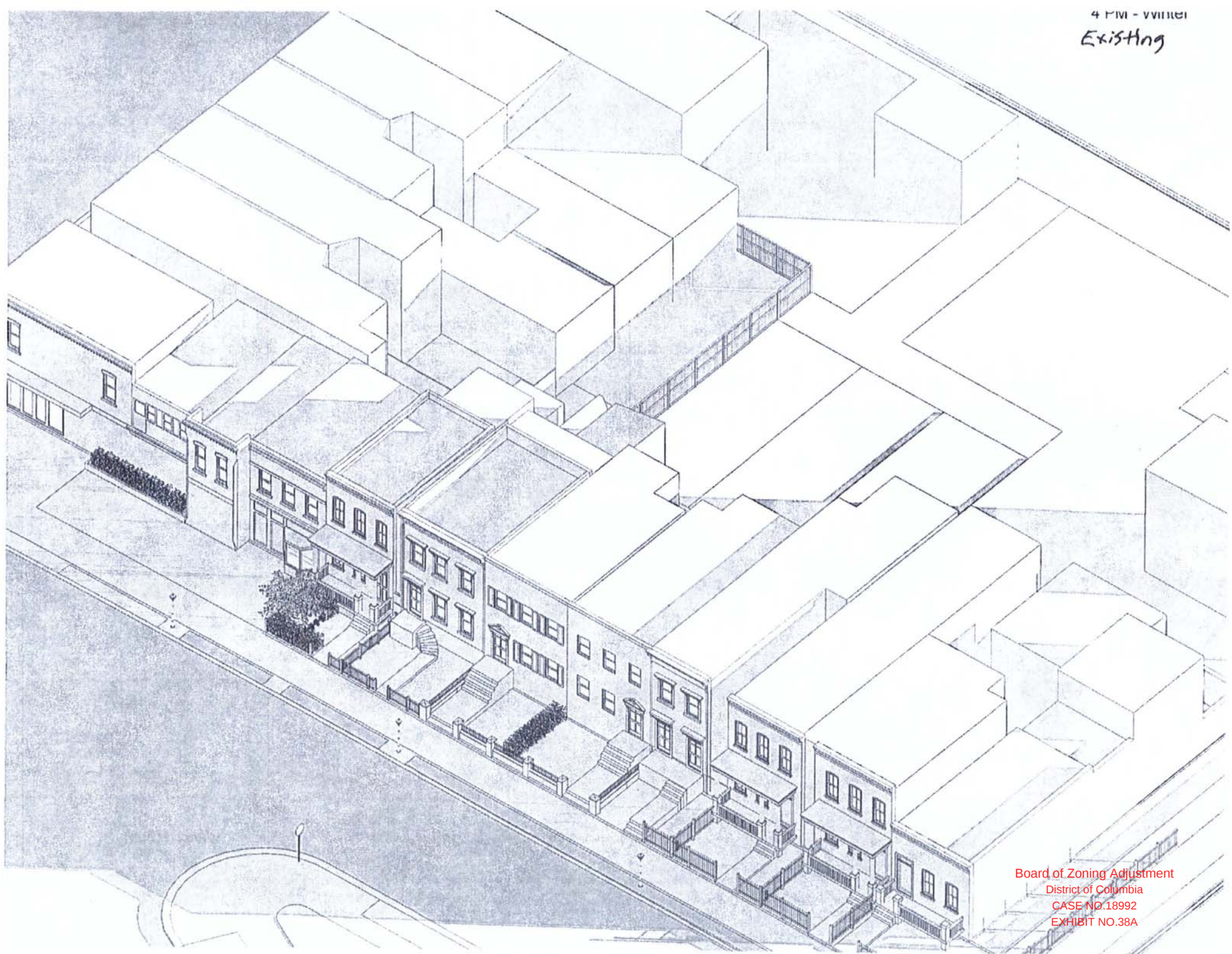


4 PM - VVIREI
Existing



Board of Zoning Adjustment
District of Columbia
CASE NO.18992
EXHIBIT NO.38A

Effect on light and air of the wall construction proposed for 1015 E St, SE

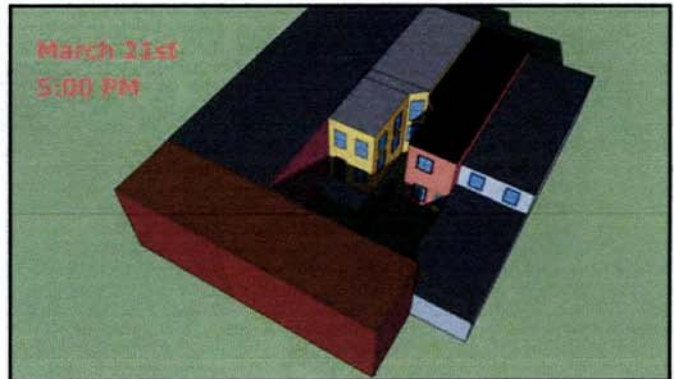
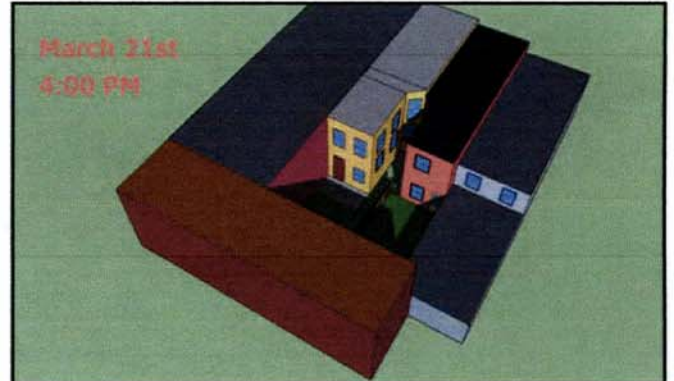
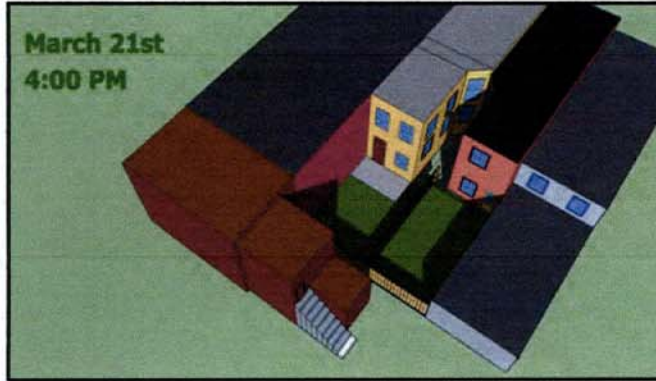


1015 E St, SE Shadow Study

Shadow effect on 503, 505, 507 11th St, SE Square 0973

EXISTING

PROPOSED



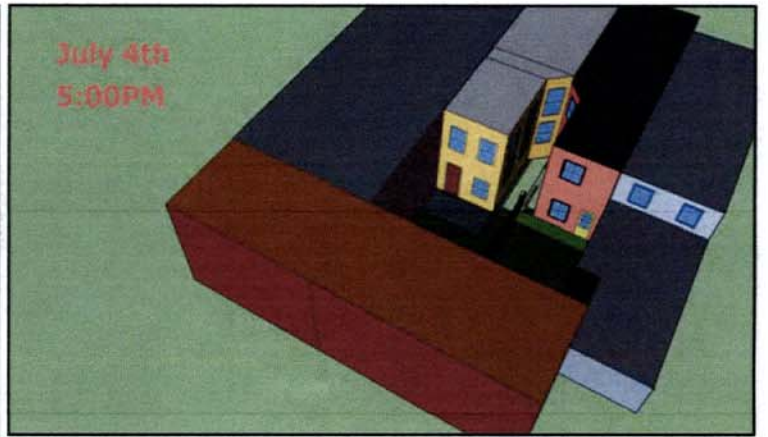
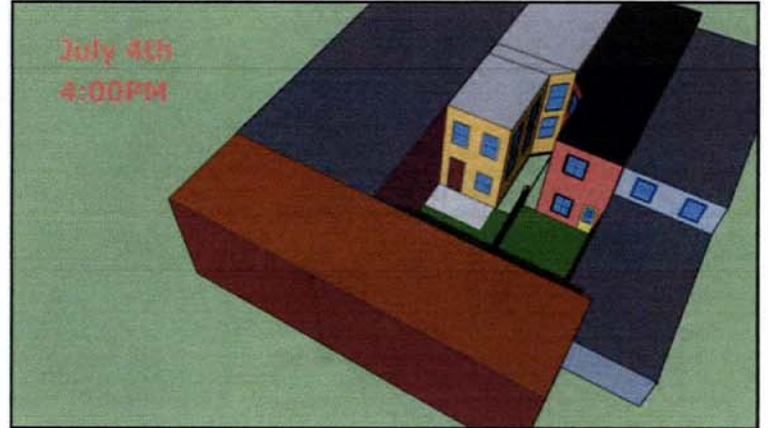
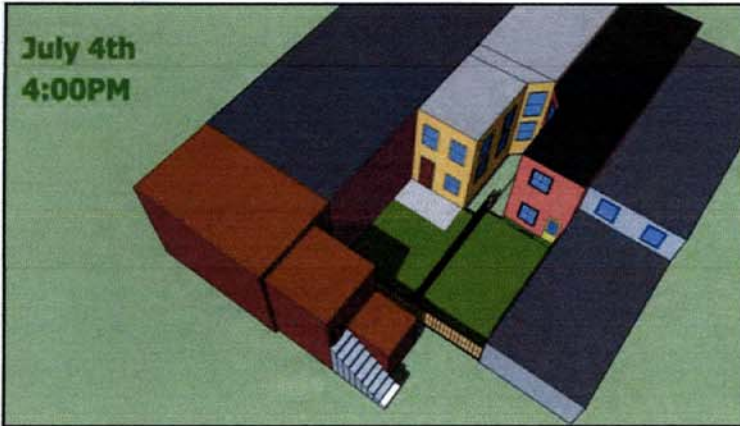
For more information please contact Michael Ford, Michael@yellowcat.com.

1015 E St, SE Shadow Study

Shadow effect on 503, 505, 507 11th St, SE Square 0973

EXISTING

PROPOSED



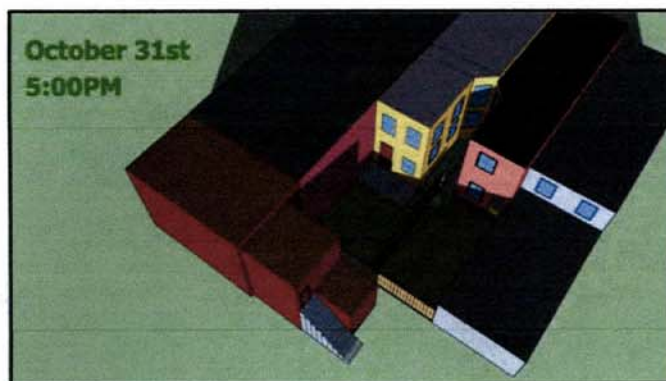
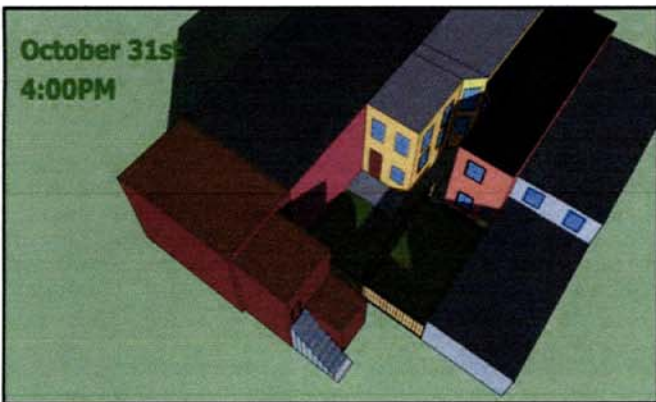
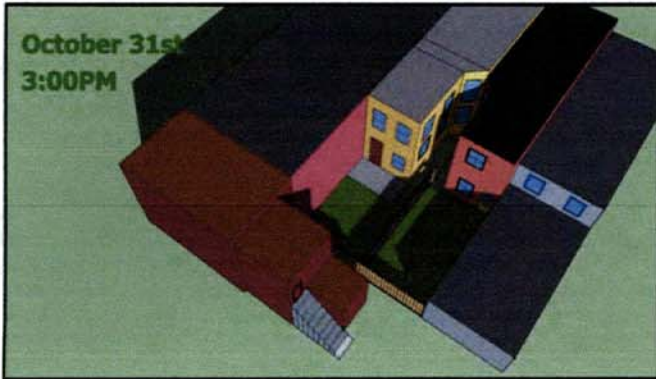
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1015 E St, SE Shadow Study

Shadow effect on 503, 505, 507 11th St, SE Square 0973

EXISTING

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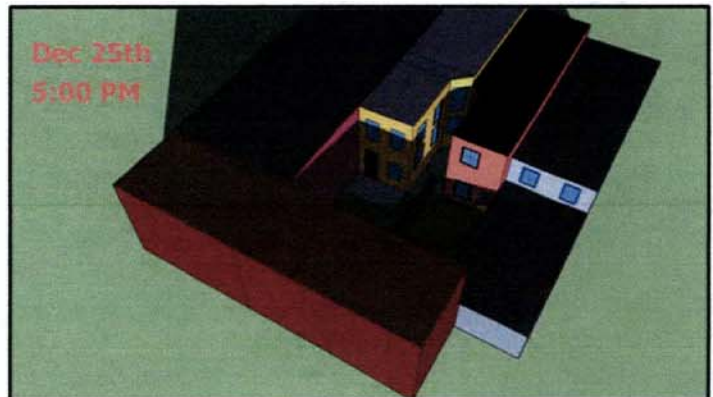
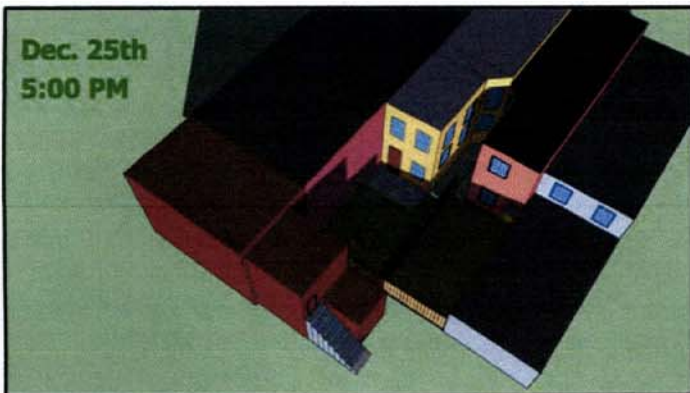
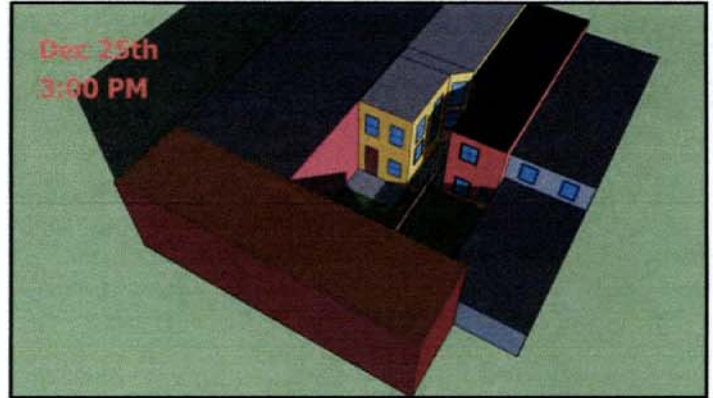
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1015 E St, SE Shadow Study

Shadow effect on 503, 505, 507 11th St, SE Square 0973

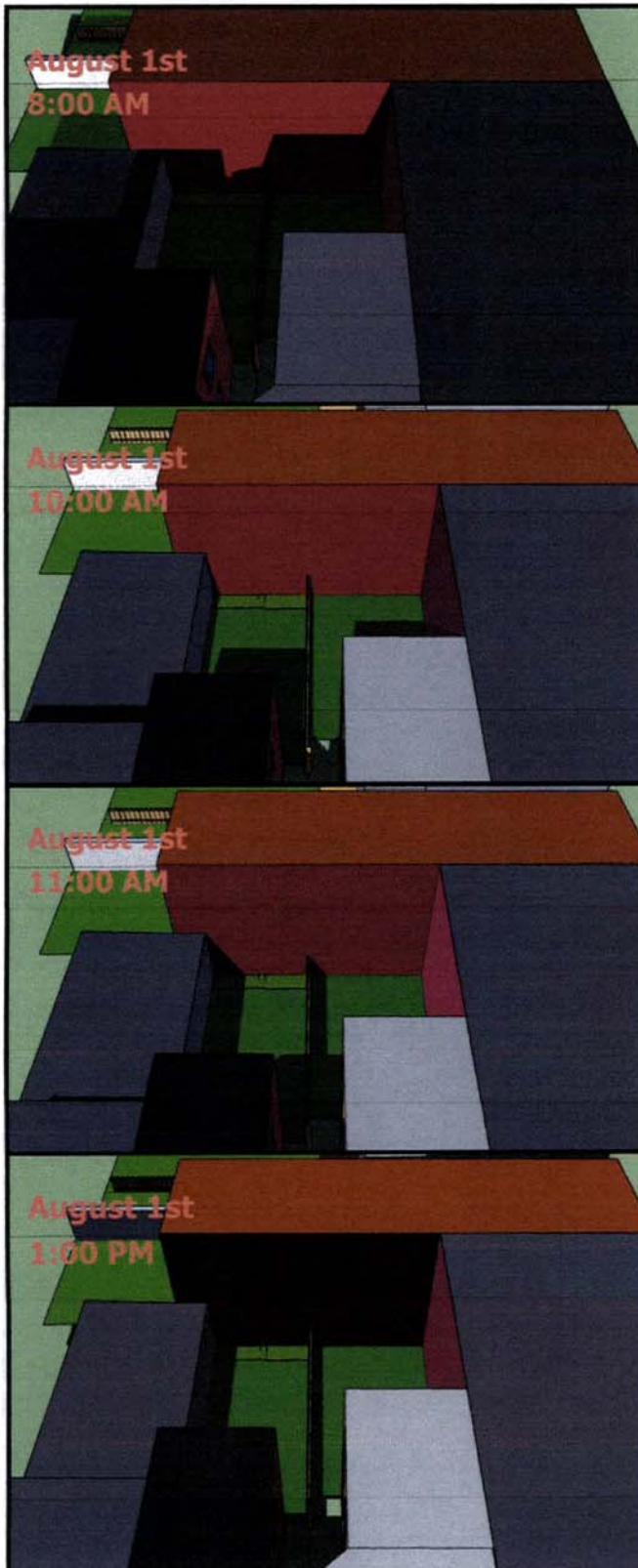
EXISTING

PROPOSED



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Heat and Light Effects from a 1000' Sq foot Wall. 1013 E St, SE



The wall blocks air. It creates a 2 story high box. We're looking West.

This sun study is on a typical summer day. There are only a few degrees decreased azimuth from mid June to August 1st. Summer days are basically all the same Sun path.

After the sun has cleared the horizon at about 7AM sunlight would start hitting the 1000 sq foot brick wall. By 8AM, or so, about ½ the wall would be receiving the direct rays of the Sun. By 9AM the wall would be totally exposed to the direct rays of the Sun for the next several hours.

The wall reflects lots of heat. And at the same time it also absorbs it.

There is ample information available on the heat sink characteristics of various surfaces in direct Sun at various temperatures. By 2 PM on a 95° day grass in the sun might be 105° while cement could be 120-125°. Brick surfaces could produce 130° to 140° surface temperatures.

Between 11 AM and Noon the Sun would leave the Eastern face of the wall. At this point it would no longer reflect light and would start to radiate it's heat back into the airless backyard.

It could take over 2 hours for the wall to cool to ambient temperature.