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MADISON
MILWAUKEE
MINNEAPOLIS
CHICAGO

May 25, 2011

Kim O'Leary
Church Administrator
Luther Memorial Church
1021 University Ave.
Madison, WI 53715

RE: Shading Impact Analysis on current and proposed buildings

Dear Ms. O'Leary:

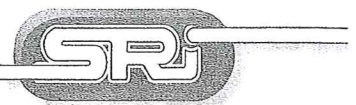
After visiting Luther Memorial Church to review the proximity and position of the existing adjacent building to the south and proposed building to the east we offer the following comments for inclusion at today's Urban Design Commission meeting.

The concerns of the church are indeed valid. The reported increase in ice accumulation and problems associated with it since the completion of the high rise apartment building to the south may very well be compounded by the erection of a similar building to the east.

The effects of shading by adjacent buildings have been studied around the world and have been found to have positive or negative effects depending on the site specific circumstances of the structures involved. The effects can be significant; as a result, many municipalities have deemed it necessary to require shading impact analysis as part of an overall evaluation when facing zero lot line construction or circumstances similar to this.

The negative effects of the shadows cast by adjacent buildings include the loss of natural light for occupancy concerns and the loss of solar heat gain warming effects during cold weather conditions. The shadows cast by the building to the south of Luther Memorial may very well be the cause of the escalated icing and problems associated with it that the church now experiences during winter months.

The shadows cast by adjacent structures will vary between seasons and will shorten and lengthen through the day as well. The shadow lengths will be the shortest on the summer solstice in June and will be the longest on the winter solstice in December; as such it is prudent to study the shadow pattern in December as it will be the worst case scenario for possible shading.



It is prudent to study the shadow pattern of the existing building to the south and the proposed building to the east to determine the net loss of solar gain at specific areas of the church. In that regard we can compare the condition of building components in more shaded areas and non shaded areas to help determine the effects to date and to also understand possible ramifications of an additional structure to the east. Currently, we are working to complete this analysis. If you have any other questions please contact our office.

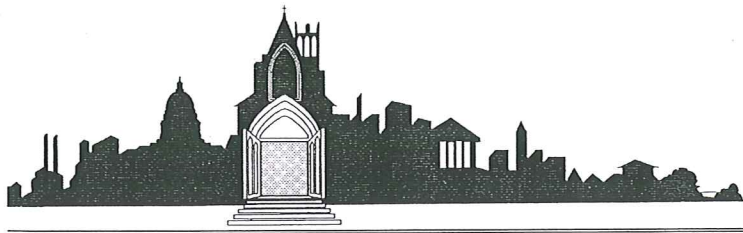
Sincerely,

SRI CONSULTANTS, INC.



Todd R Culliton
Vice President





LUTHER MEMORIAL CHURCH

May 25, 2011

Urban Design Commission
Re: Proposed Development at 1001 University Ave
File ID: 21945

Dear Urban Design Commission Members:

In preparation for today's UDC meeting, I have enclosed a number of important documents for your review.

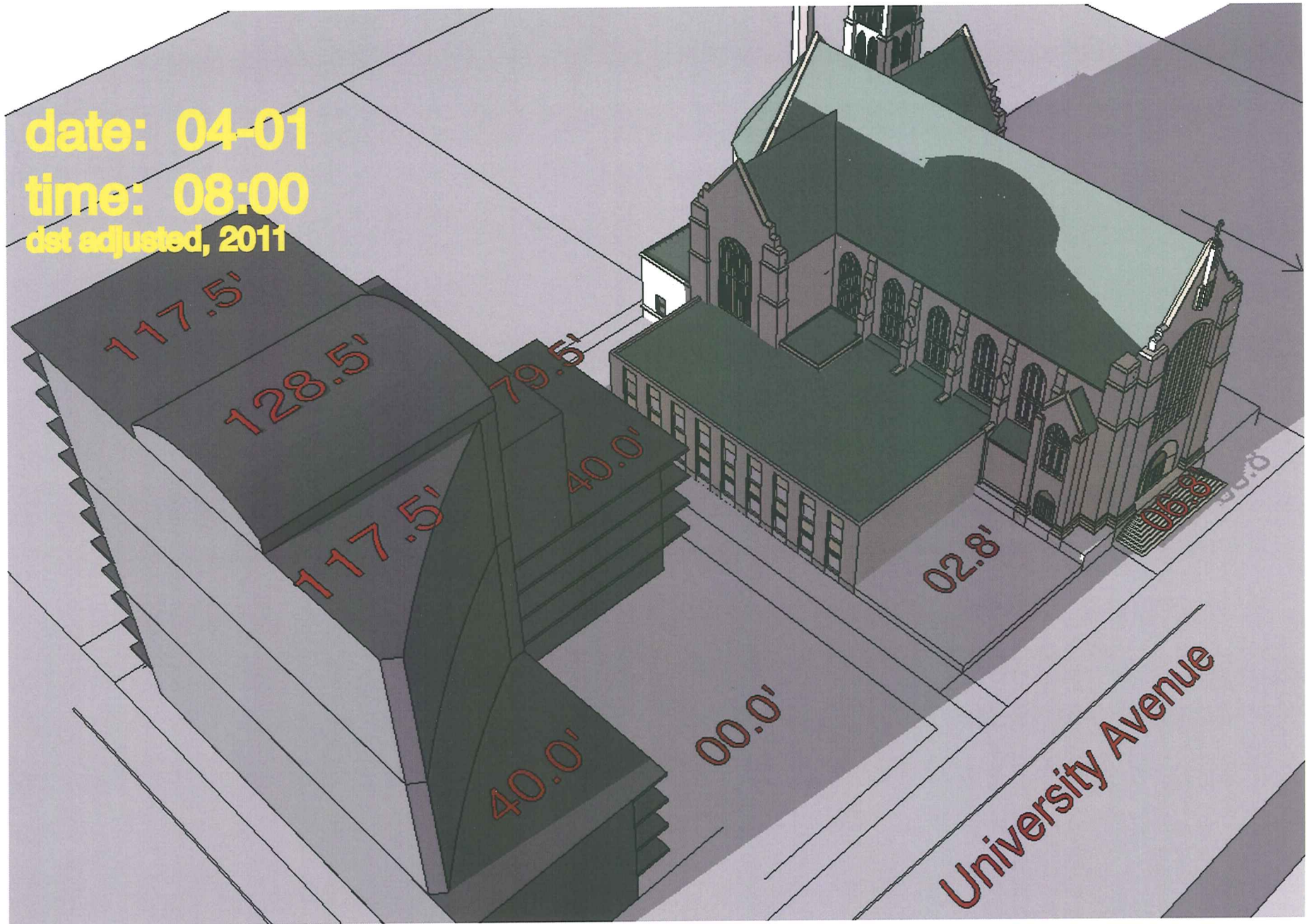
Enclosed you will find several items.

1. Pictures of the interior of the 1923 Nave of Luther Memorial in the morning hours that were taken last week. This gives you some idea of the movement of morning light across the nave.
2. A few slides from the completed shadow study done for Luther Memorial by Kubala Washatko Architects. More details of the shadow study will be available at the UDC meeting.
3. A letter from Todd Culliton from Structural Research Inc. Luther Memorial has asked SRI to provide an engineering assessment of the effects of shadowing on the building envelope of Luther Memorial both from the existing high rise to our south and also the effects of the proposed high rise to our east. As we mentioned at the last UDC meeting two weeks ago, this work was in process and would be completed in 3-4 weeks, thus not done at this time. We agree with SRI that moving forward with the proposed development without a full understanding of the long-term building degradation and associated costs to Luther Memorial, an immediate neighbor, seems rash in the least.

Thank you for your ongoing work on this important issue.

Sincerely,

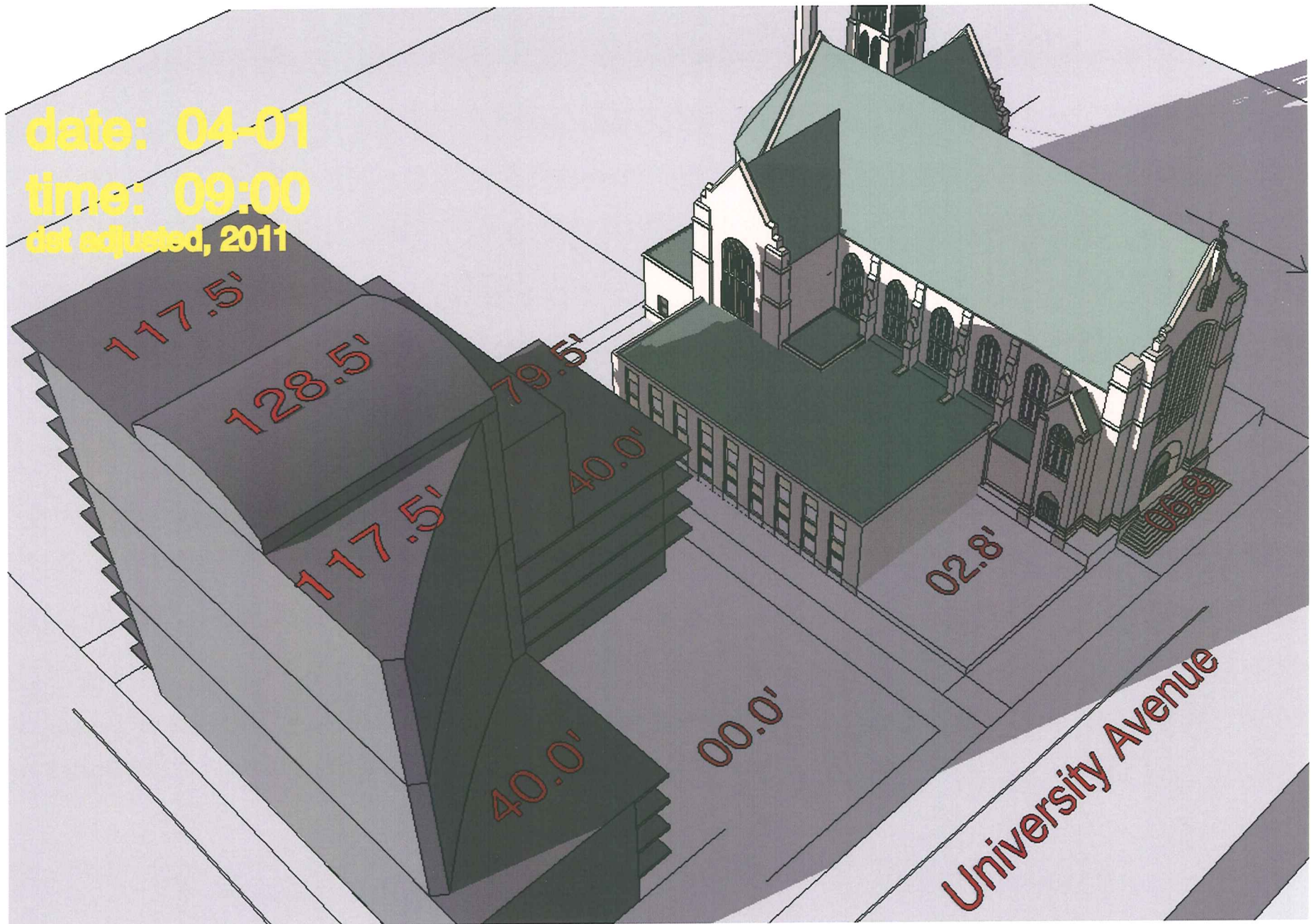
Rev. Brad Pohlman
pohlman@luthermem.org



date: 04-01
time: 08:00
dst adjusted, 2011

Luther Memorial Church Shading Study - Madison, WI

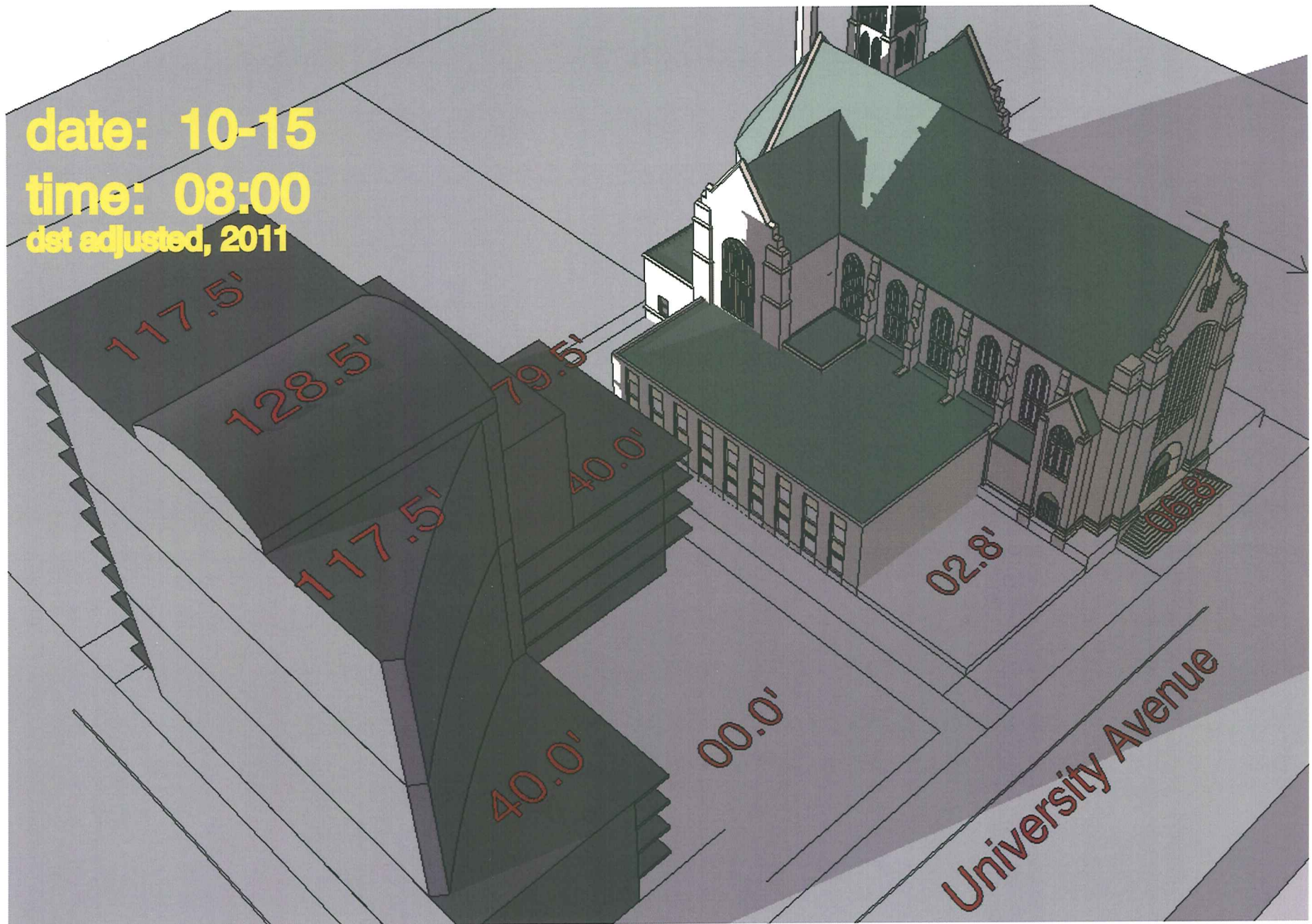
The Kubala Washatko Architects
05-25-2011



Luther Memorial Church Shading Study - Madison, WI

The Kubala Washatko Architects
05-25-2011

date: 10-15
time: 08:00
dst adjusted, 2011



Luther Memorial Church Shading Study - Madison, WI

The Kubala Washatko Architects
05-25-2011



Luther Memorial Church Shading Study - Madison, WI

The Kubala Washatko Architects
05-25-2011



