



## Guide To Evaluating Visual Impact Assessments for Renewable Energy Projects

Natural Resource Report NPS/ARD/NRR—2014/836



applicable laws, ordinances, regulations and standards (LORS).

### Critical Elements of a VIA

Chapter 3,  
Sec. 3.2–  
3.11; Chapter  
4, Sec. 4.1–  
4.2

The two most important parts of the VIA are the Affected Environment and the Environmental Consequences.

#### *Affected Environment*

This section describes the existing conditions against which the potential effects of a project will be assessed. It includes the applicable visual resource-related LORS and agency management objectives and also provides information about the regional and project landscape.

#### *Environmental Consequences*

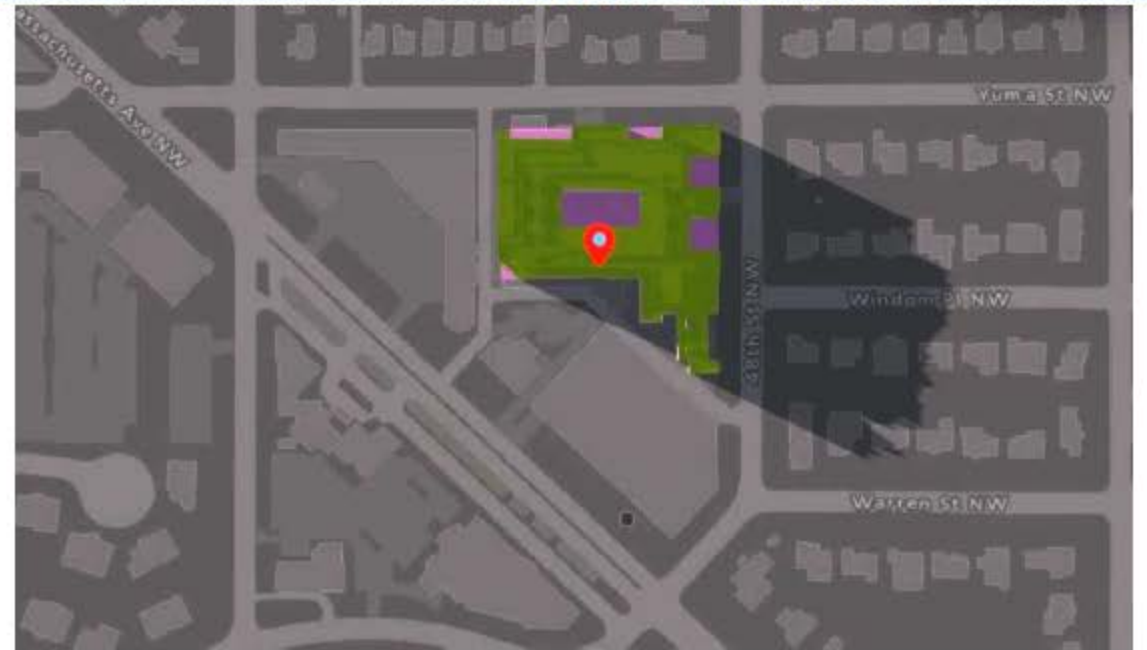
This section describes the visual impacts of a project. It also includes key components such as the scope and methodology used for the impact analysis and a detailed description of the visual characteristics of each alternative. Potential impacts are described in terms of the visual contrasts created by the project components and associated activities; these are typically determined from visual simulations. This section also typically includes a description of specific mitigation measures and a discussion of compliance with all LORS and agency visual management objectives. It should also include visual objectives for adjacent lands.

QR-2

CRD asserts that the Applicant has omitted data from its shadow study while at the same time has submitted a shadow study that omits all of the existing buildings around the PUD site. The images below from CRD's shadow study do not include any shadows that are already cast by existing buildings.



**June 21<sup>st</sup>, 2019 – 6:30AM**

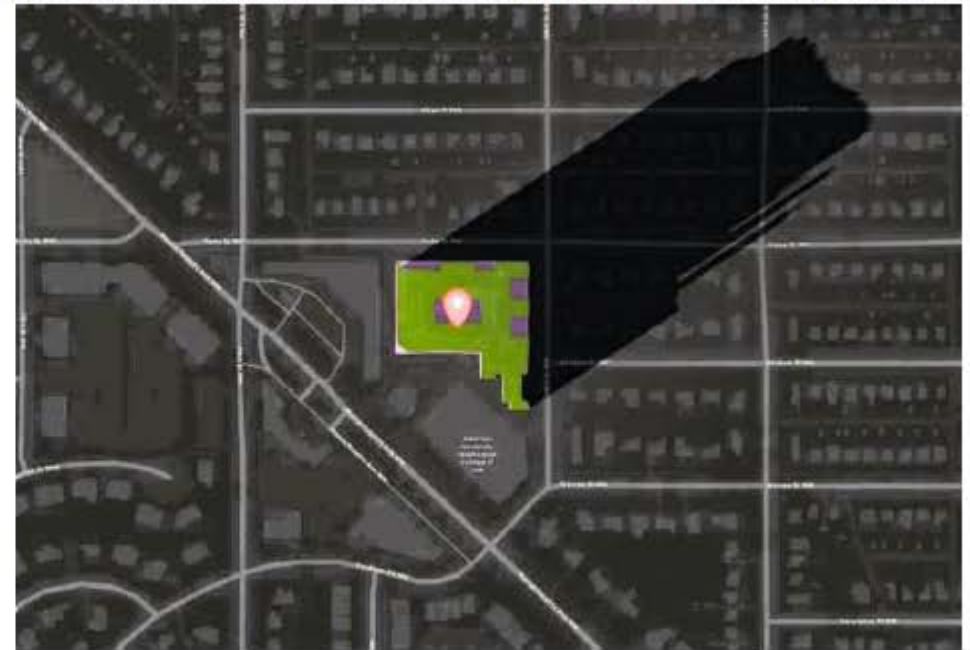


**June 21<sup>st</sup>, 2019 – 8:00PM**

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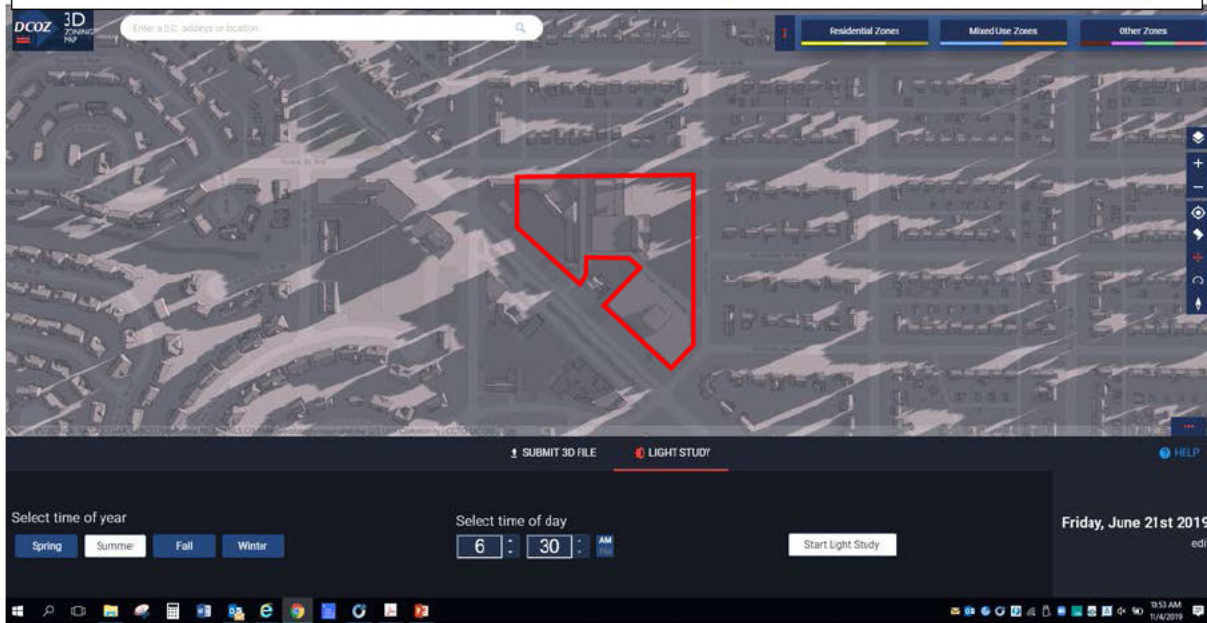


**Dec 21<sup>st</sup>, 2019 – 8:00AM**



**Dec 21<sup>st</sup>, 2019 – 4:30PM**

### EXISTING Shadows, June 21, 2019 – 6:30 am (prepared w/ DCOZ 3D map)

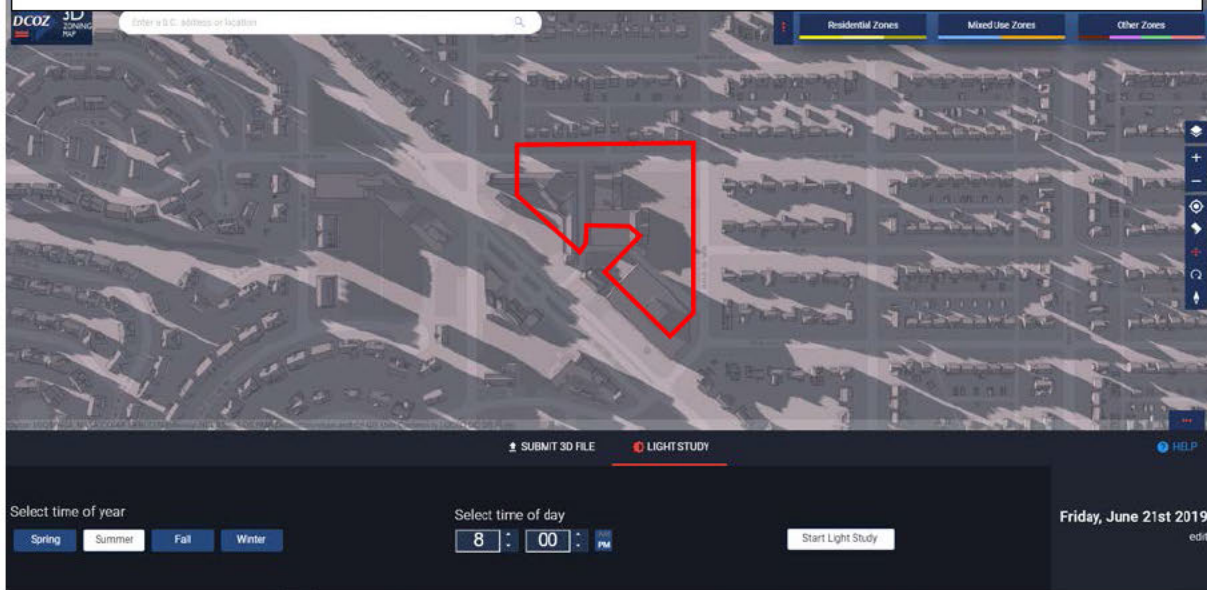


### CRD Shadow Study (prepared w/ DCOZ 3D map)



June 21<sup>st</sup>, 2019 – 6:30AM

### EXISTING Shadows, June 21, 2019 – 8:00 pm (prepared w/ DCOZ 3D map)



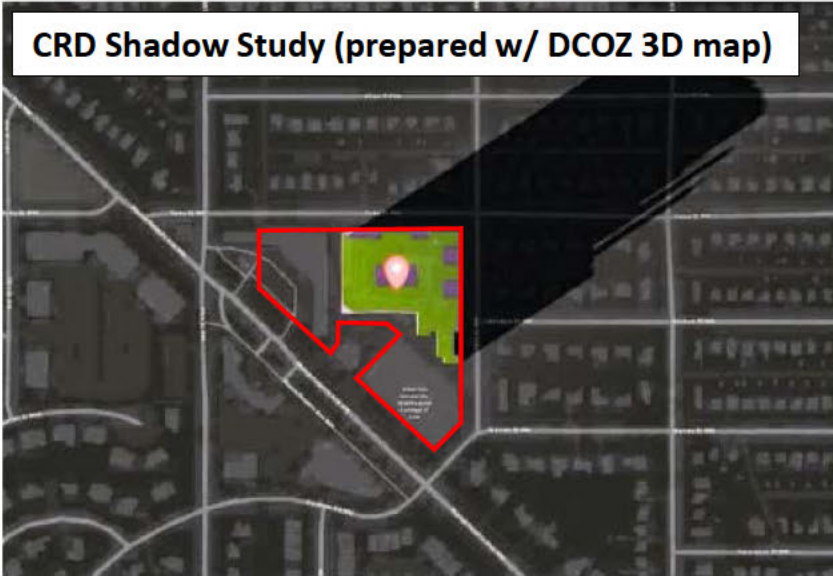
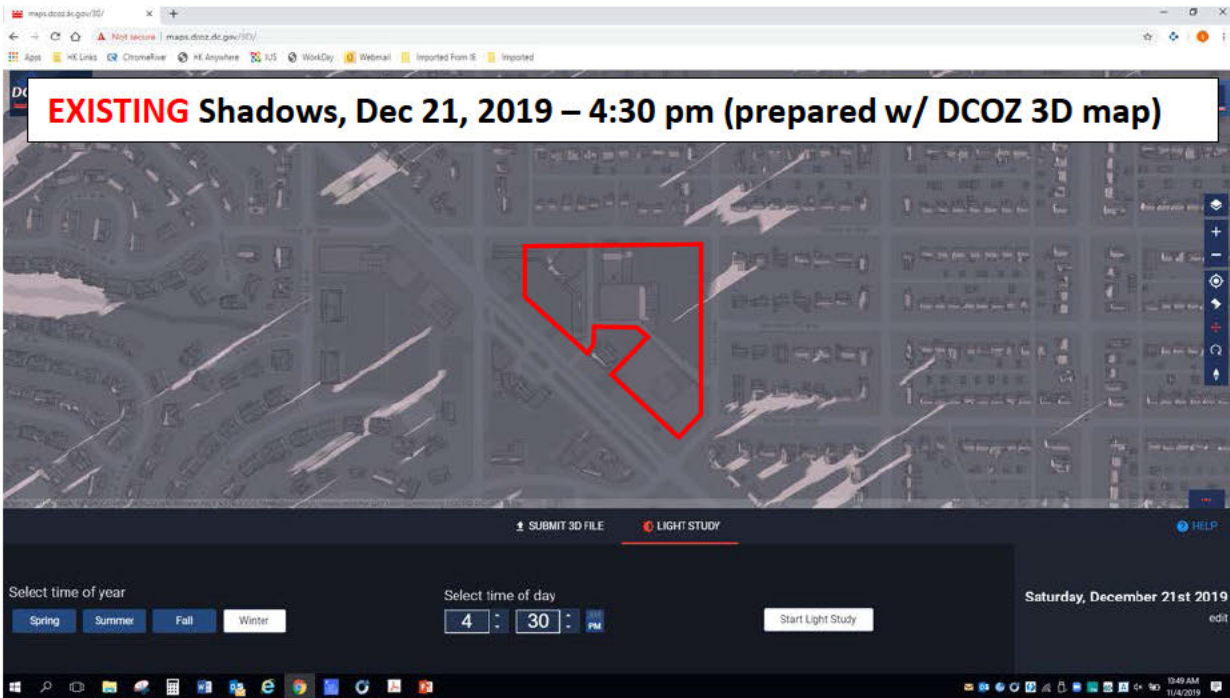
### CRD Shadow Study (prepared w/ DCOZ 3D map)



June 21<sup>st</sup>, 2019 – 8:00PM



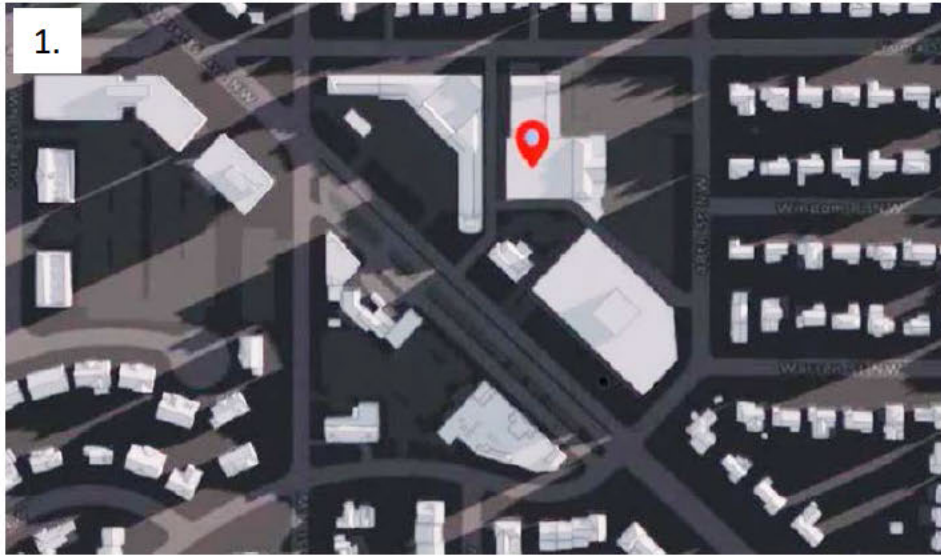
**Dec 21<sup>st</sup>, 2019 – 8:00AM**



**Dec 21<sup>st</sup>, 2019 – 4:30PM**

Image Description:

1. Shadows cast by existing buildings in and around the project site.
2. Existing shadow lines (red).
3. Proposed project with existing shadow lines (red)
4. New areas of shadow created by the proposed project (orange)



June 21<sup>st</sup>, 2019 – 6:30AM – Existing Conditions



June 21<sup>st</sup>, 2019 – 6:30AM – Proposed Conditions



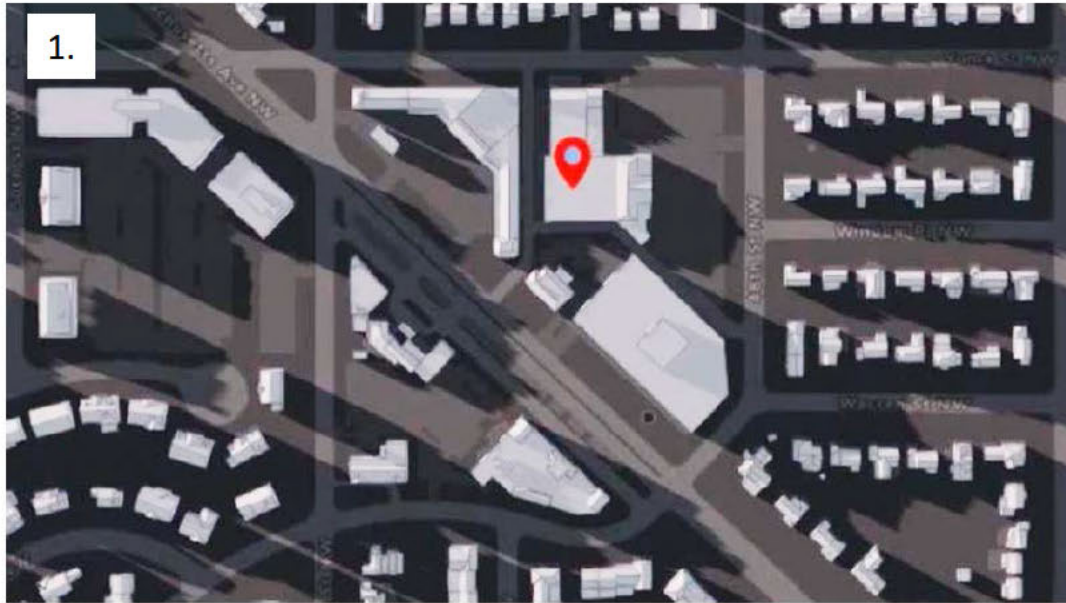
June 21<sup>st</sup>, 2019 – 6:30AM – Existing Conditions



June 21<sup>st</sup>, 2019 – 6:30AM – Proposed Conditions

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**COMPARISON OF TIMEFRAMES FOR APPLICANT'S SHADOW STUDY AND OTHER RECENTLY APPROVED OR PENDING PLANNED UNIT DEVELOPMENTS**

	<b>Wash, DC (Sunrise / Sunset)*</b>	<b>Additional Times in CRD Study</b>	<b>Z.C. 19-10</b>	<b>Z.C. 19-16</b>	<b>Z.C. 16-26</b>	<b>Z.C. 15-20</b>	<b>Z.C. 08-07C</b>
<b>March (Vernal Equinox)</b>	7:13 am / 7:20 pm		9 am 1 pm 4 pm 6 pm	9 am 1 pm 4 pm	Not analyzed	9 am 1 pm 4 pm	Not analyzed
<b>September (Autumnal Equinox)</b>	6:57 am / 7:06 pm						
<b>June (Summer Solstice)</b>	5:44 am / 8:38 pm	6:30 am 8 pm	9 am 1 pm 4 pm 6 pm	9 am 1 pm 4 pm	9 am 12 pm 3 pm	9 am 1 pm 4 pm	9 am 12 pm 3 pm
<b>December (Winter Solstice)</b>	7:24 am / 4:50 pm	8 am 4:30 pm	9 am 10 am 1 pm 4 pm	9 am 10 am 1 pm 3 pm 4 pm	9 am 12 pm 3 pm	9 am 1 pm 4 pm	9 am 12 pm 3 pm

Source: [www.suncalc.net](http://www.suncalc.net)