

Photometric Analysis

Revision [0]

Brightwood Farm

1422 County Rd 2, Wellington, ON

May 1, 2026

Jp2g Project # 1836383





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Executive Summary

PROJECT SCOPE

Jp2g Consultants Inc. (Jp2g) was retained by the developers of Brightwood Farm (1422 County Rd 2, Wellington, ON) to perform photometric analysis of the proposed lighting layout for purposes of adhering to municipal standards for light trespass. This project area is isolated from adjacent neighbours, so the approach taken was to analyze only the worst-case region of the property.

SUMMARY FINDINGS

Light trespass onto neighbouring properties is not a concern.

RECOMMENDATION

Full photometric analysis of this property is not required since the partial analysis provided reveals no light trespass issues.

1 Introduction

The aim of this study is to confirm that proposed lighting will not exceed accepted standard for light trespass onto neighbouring properties. Due to the remote nature of this location, and the fact that it is surrounded by a 30m wetlands setback, only a partial photometric analysis was performed. The region of the property with the highest lighting levels was modeled, with the rationale that all other regions would adhere due to their significantly lower light usage.

The typical municipal allowance for light trespass is 0.5 footcandles (maximum) at the property line.

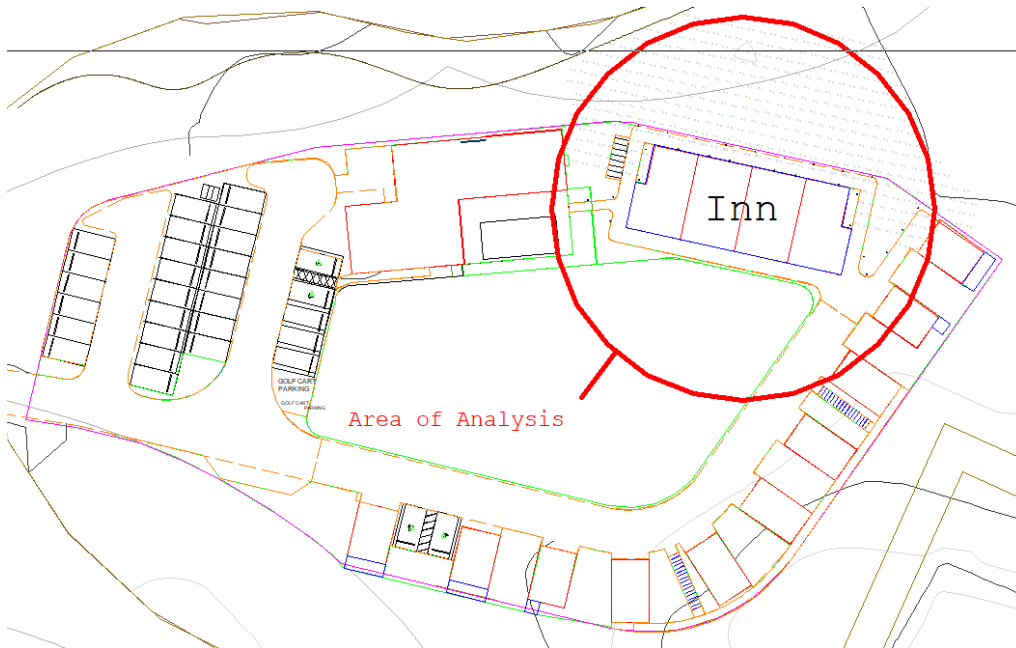
Lighting is provided by bollard pathway lighting and light wallpacks mounted at each doorway.

2 Analysis

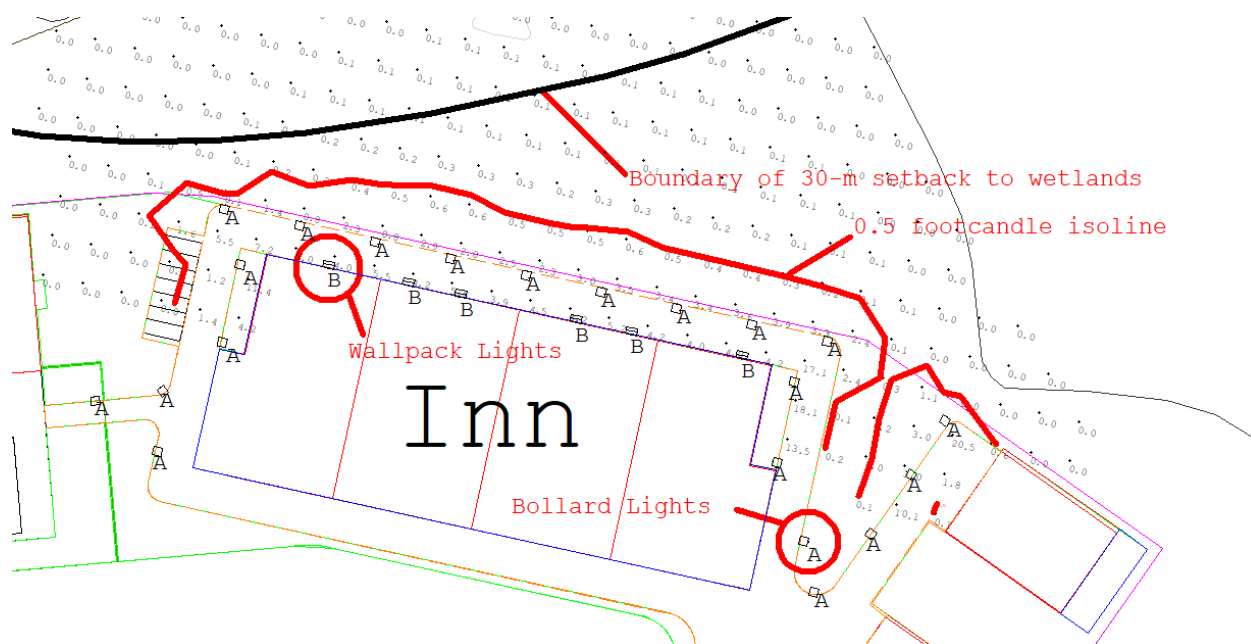
The following analysis shows that the light levels drop to 0.5 footcandles before reaching the 30m setback line between our development and the wetlands. This means that there are 30+ meters of distance from the 0.5 footcandle light-level and the start of the wetlands. The significance of this is that since construction cannot happen on wetlands, then we are guaranteed a large margin in adhering to light trespass levels to adjacent neighbours.

This property will have several buildings. Peak light levels are produced at the Inn. This Inn is at the edge of the development and has bollard pathway lights and building wallpack lights contributing to the light trespass.

This diagram shows the entire site and highlights the section that was modeled with photometric analysis:



The following enlarged detail shows the photometric analysis of the Inn area. Illumination values (in footcandles) are shown on the photometric grid. An isoline corresponding to the 0.5 footcandle light level is shown. Areas beyond that iseline have light levels under 0.5 footcandles. Note that levels drop off to zero not far beyond the 30-m setback boundary.



3 Light Details

For reference, the following light models were used in the analysis:

Type-A

Bollard Style Pathway Light
Evans EB45624-UNV
24W
1270 Lumens
3000K CCT
Height: 24"



Type-B

Wallpack Style
Bravo EW70714
21W
901 Lumens
3000K CCT
Height: 14"



4 Conclusion

Analysis of the entire site boundary should not be necessary since the worst-case region of the property has significant margin against light trespass.