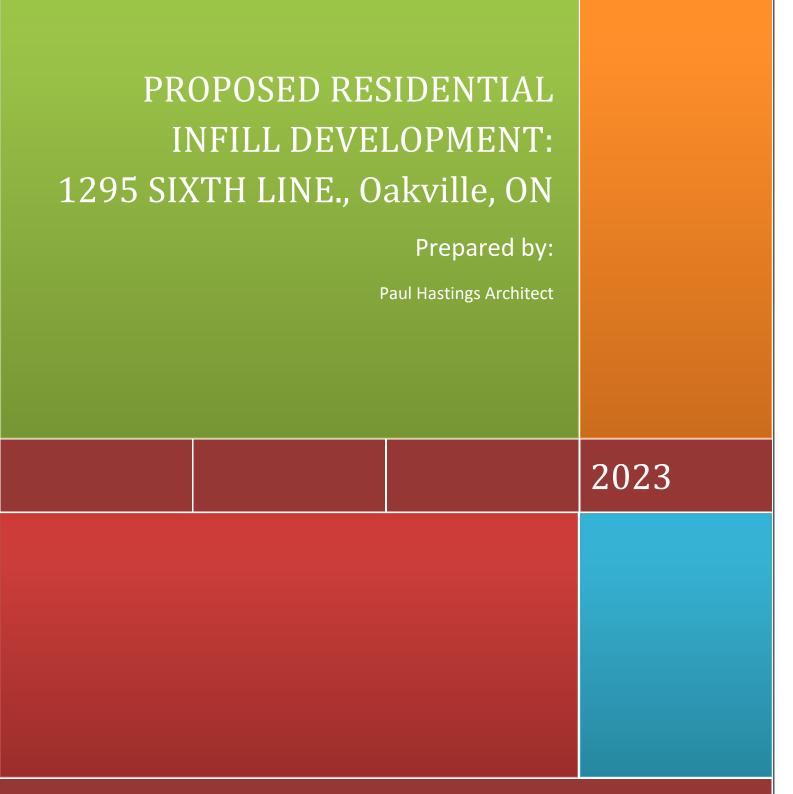
SHADOW STUDIES for 6 STOREY PROJECT.



Paul Hastings Architect

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Appendix AA: Drawings of Project

Appendix BB: Shadow Studies –21<sup>st</sup> day of April, December, June and September

2023

Paul Hastings Architect – 1317 Valerie Crescent, Oakville, Ontario, L6J 7E2

To Whom This May Concern

The information on the SHADOW STUDY is presented in APPENDIX BB. after features of the proposed 6 storey building, site context and building design are presented in APPENDIX AA. This is done to buttress the viability of the proposed building and to orient the relevance and the review of the SHADOW STUDY.

The proposed 6 storey residential building for 1265 Sixth Line addresses the recognized shortfall in housing assets in Ontario and endeavors to alleviate it .

This document serves the purpose of identifying that the shadow impact from the proposed building on the adjacent buildings and the environment is minimal for the 21<sup>st</sup> day of April, December, June and September. It is interesting to note that the shadow study indicates that the existing adjacent 7 storey building actually has a greater impact duration and effect on the existing buildings with the shadow that it casts. Notwithstanding that, the proposed 6 storey building is within the 2-6 storeys zone as indicated on Schedule L2, Midtown Oakville Building Heights.

The propsed 6 storey building has features and design massing that are sensitive to the site context. These features and design massing, along with the site plan treatment of surface parking, landscaping and solid to void ratio of the fenestration are commendable efforts to enhance the built environment. The occupants of the proposed building receive daylighting in their suites due to the deliberate orientation of the window areas.

The impact study follows the protocol for conducting and presenting a shadow study. The longitudinal orientation of the main building axis is a major factor in mitigating shadow impact on the environment. Consequently, support for this proposed building is recommended when the extent and effect of its cast shadows is analysed.

Yours respectfully,

Paret I timp

Paul Hastings, OAA, MRAIC, LEED AP OA A Certificate of Practice Registration Number for Paul Hastings Architect: 3539

## **Background:**

he proposed 6 storey building at 1295 Sixth Line, Oakville, Ontario, is classified classified under the Ontario Building Code as Division B, Part 3, Group C - Residential, 3.2.2.43A\_ sprinklered with a building area maximum of 1500sm (16,145sf). The floor assemblies shall be fire separations with a fire-resistance rating not less than 1 h, and loadbearing walls, columns and arches shall have a fire-resistance rating not less than that required for the supported assembly. The building construction can be combustible, non-combustible or a combination of both.

## **Study Format:**

The shadow impact analysis was conducted for specific times and for specific test dates. The specific dates are April 21, June 21, September 21 and December 21. The specific times are hourly intervals starting 1.5 hours after sunrise and ending 1.5 hours before sunset. As we know the earth goes around the sun, we concede that sunrise is actually "earthset" and sunset is actually "earthrise". But that is for another day and we will use sunrise and sunset.

As well, this report uses images of shadow tests using models that clearly indicate the subject site and its boundary, along with the foot print and mass of buildings within the test site. Streets, public parks and accessible open spaces, and all adjacent properties and buildings affected by shadows are also shown are related to the subject property.

The shadow impact analysis that was performed and which is presented demonstrates that the proposed development allows adequate sunlight on building faces and roofs for the possibility of using solar energy. The 2 consecutive hourly shadow impact for the December 21 test time from proposed development is not exceeded, and shows that the impact of the proposed building is a responsible and suitable fit in the built environment: it contributes to the Town of Oakville's leadership and determination to provide a quality accommodation solution for the underserved housing sector in Ontario.

2023

The building context is illustrated to show the surrounding area that includes existing buildings, open spaces and the 6<sup>th</sup> LINE roadway.

The subject property is currently treed and a landscaping plan will be prepared to Town of Oakville Standards.

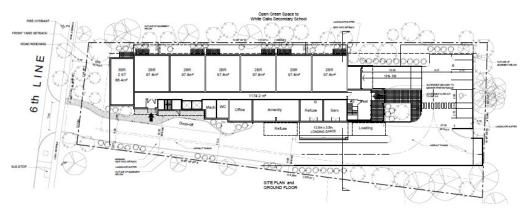
The adjacent 7 storey building to the east is higher than the proposed 6 storey building and as such the character of the area already accommodates a multistorey residential building.

The Shadow Study drawings identified below:

2023-11-27 OPA-Shadows-APRIL 21.pdf
2023-11-27 OPA-Shadows-DEC 21.pdf
2023-11-27 OPA-Shadows-JUNE 21.pdf
2023-11-27 OPA-Shadows-SEPT 21.pdf

will indicate and confirm the low impact of the proposed building's shadow on its surroundings.

#### SITE PLAN of PROPOSED BUILDING WITH GROUND FLOOR PLAN - RBA Inc





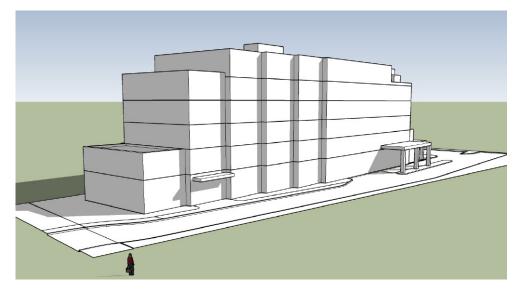
## SUBJECT PROPERTY LOCATION - 1295 SIXTH LINE, OAKVILLE, ON





Site is within the area 2-6 Storeys. (See T. of Oakville Schedule L-2, Midtown Oakville Building Heights.)

MASSING - (RBA Inc)



#### **Conclusion: SHADOW IMPACT**

The shadow impact on the surroundings that would be caused by the proposed 6 storey building at 1295 Sixth Line, Oakville, Ontario and indicated on attached Shadow Study drawings is believed by Paul Hastings, Architect, to be minimal. The shadows cast by the subject building for April 21, December 21, June 21 and September 21 are suitably demonstrated to support the belief and understanding of the author of this document. The author finds that the submitted documents are a fair and reasonable representation to support a conclusion that the proposed building casts shadows at the reference times with minimal impact as stated.

Notes:

Item	Description	Comment

## →Document prepared for Shadow Impact Study Review ←



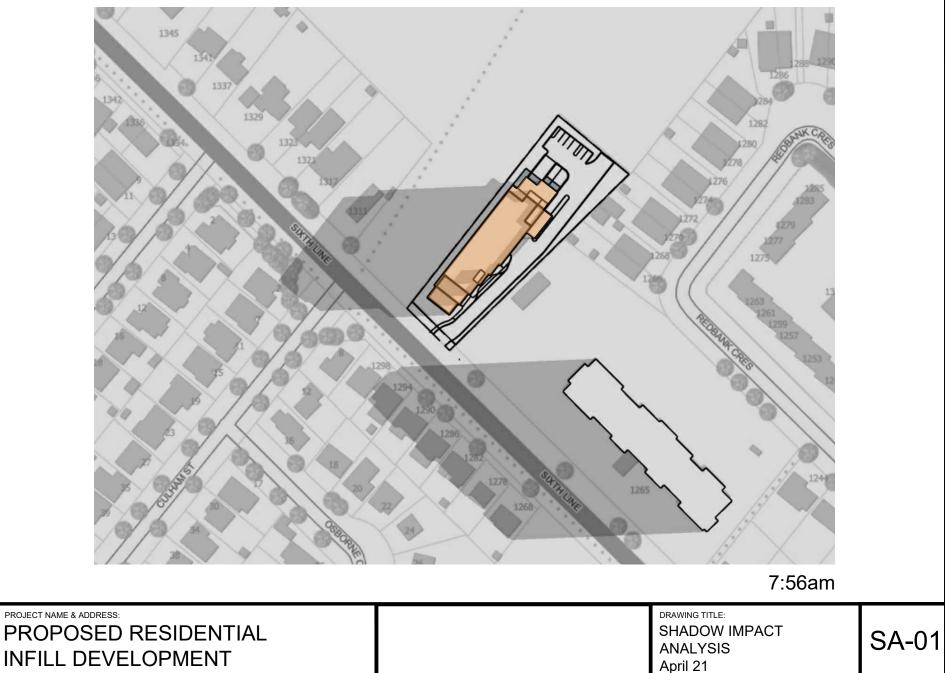
Paul Hastings Architect, PHA, A has prepared this Document on the basis of preliminary drawings by RBA Inc. It is under understood and agreed that the information contained herein is for the client's use, without any responsibility or liability of the architect to any lending institution, person or entity (lender) who may rely on the said information in relation to the lender's financing or approval of the client's project.

Date: Dec.22.2023

# Proposed Residential Infill Development 295 Sixth Line, Oakville

**Appendix BB** 

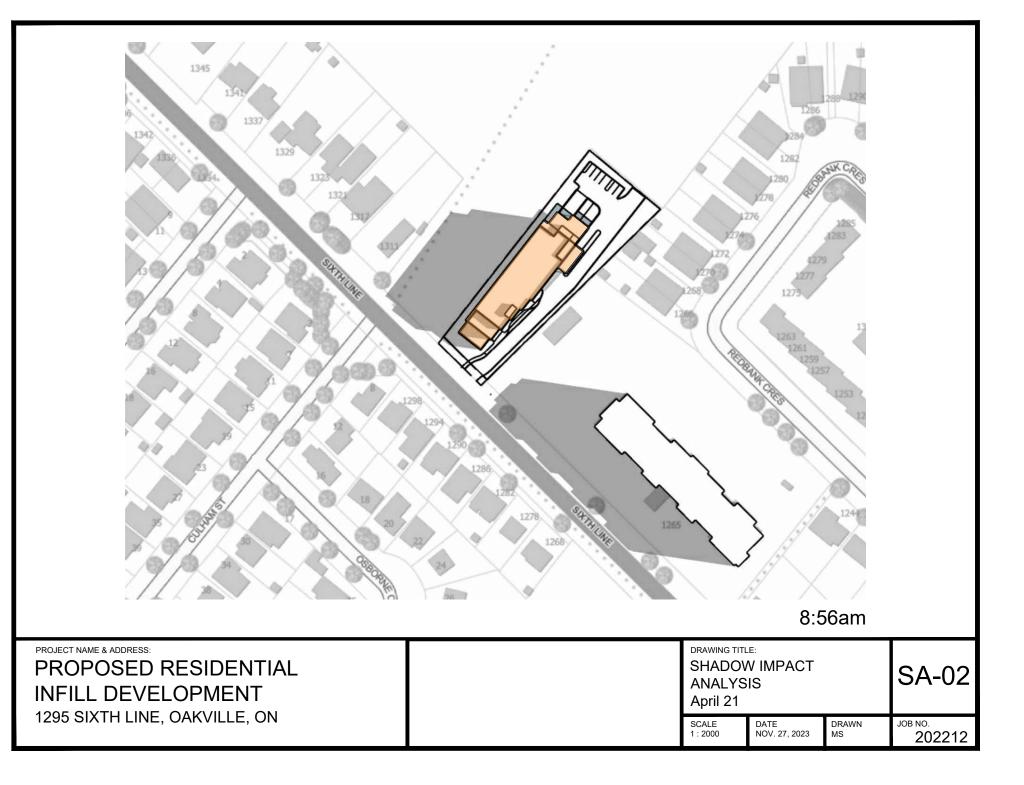
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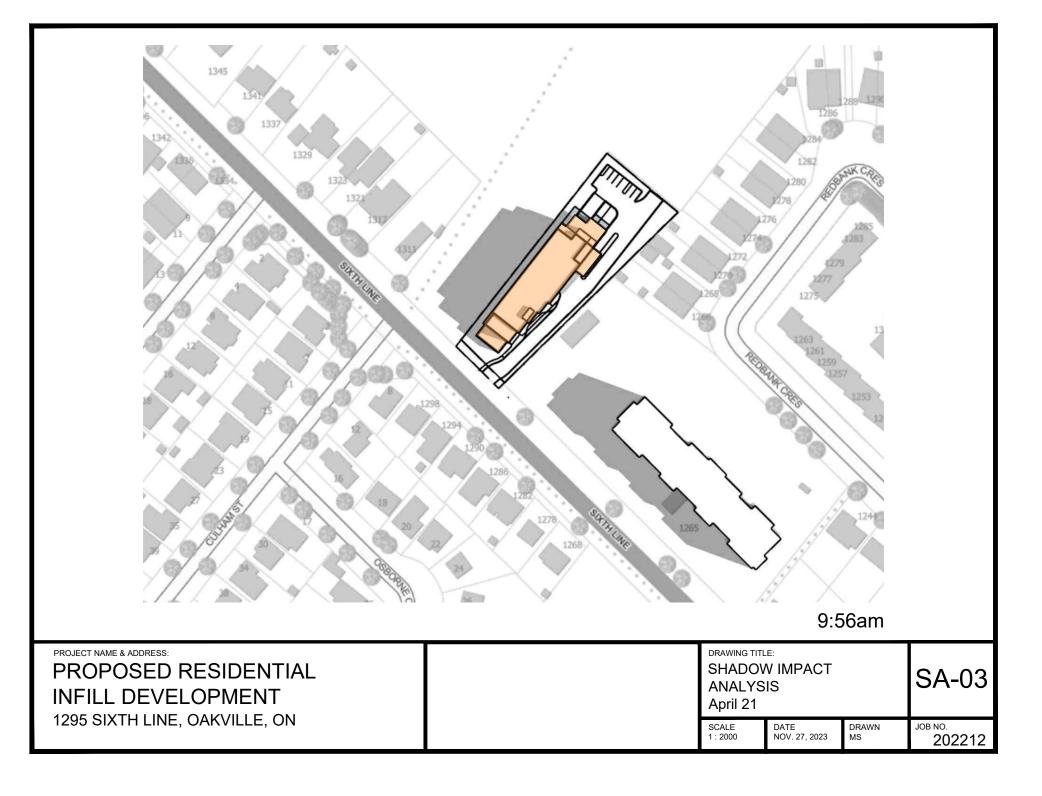


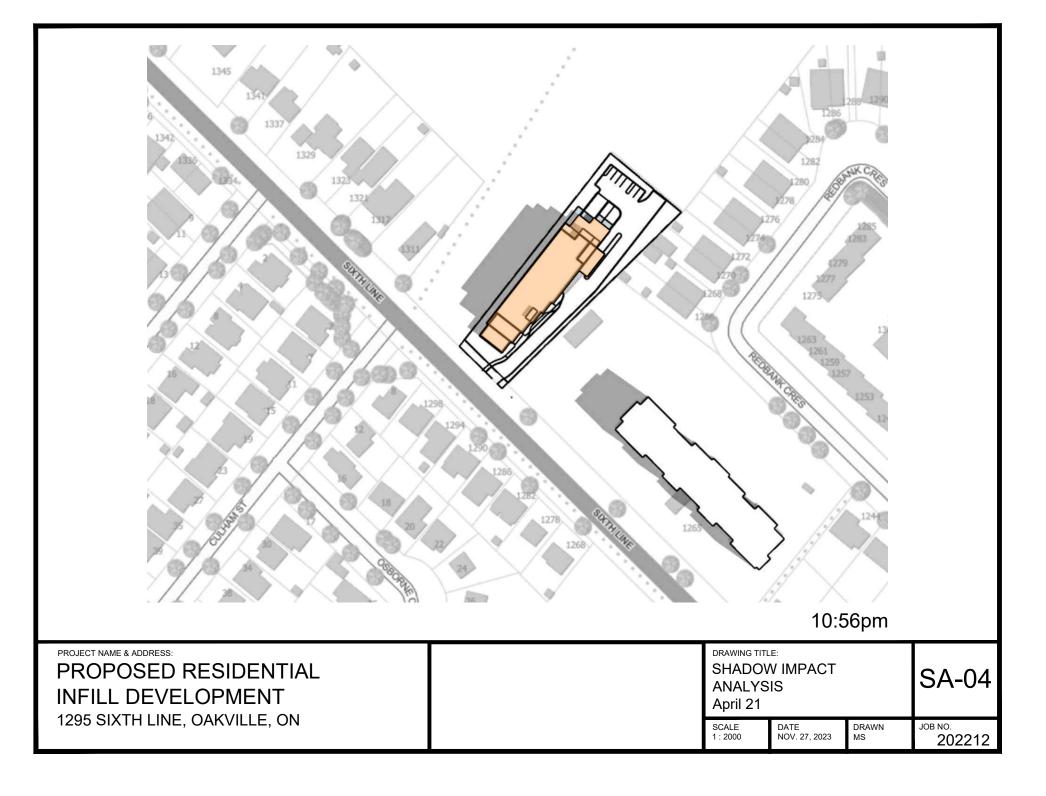
1295 SIXTH LINE, OAKVILLE, ON

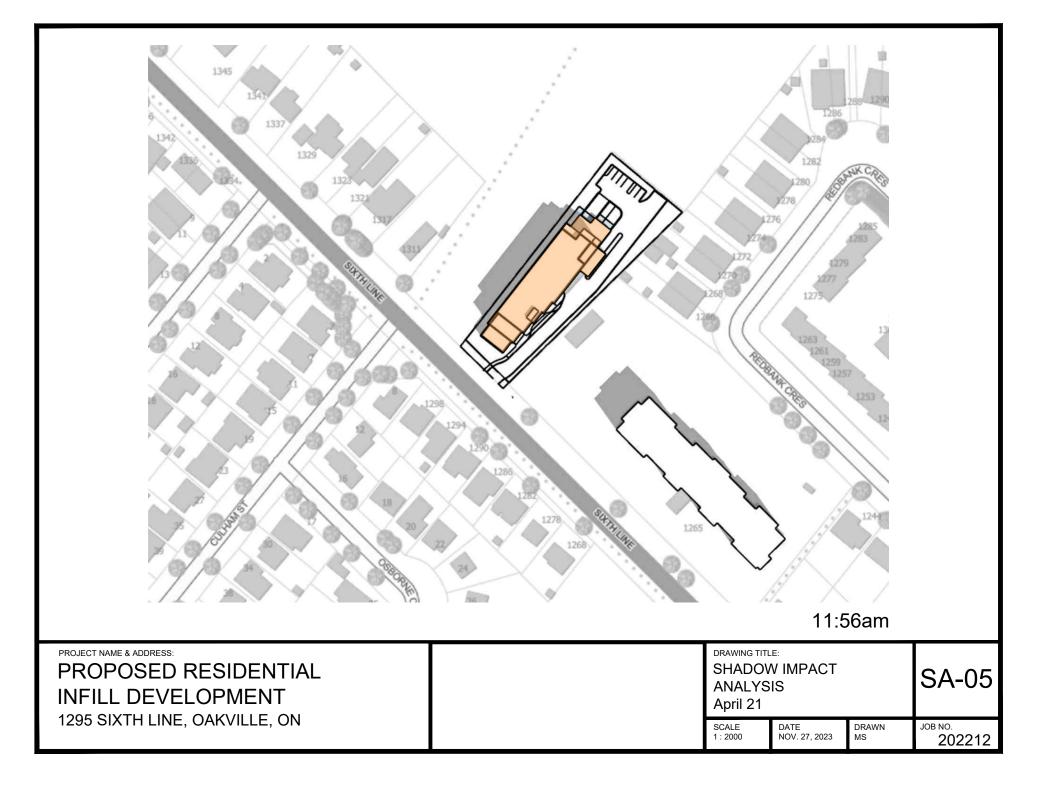
DATE DRAWN JOB NO. NOV. 27, 2023 MS 202212

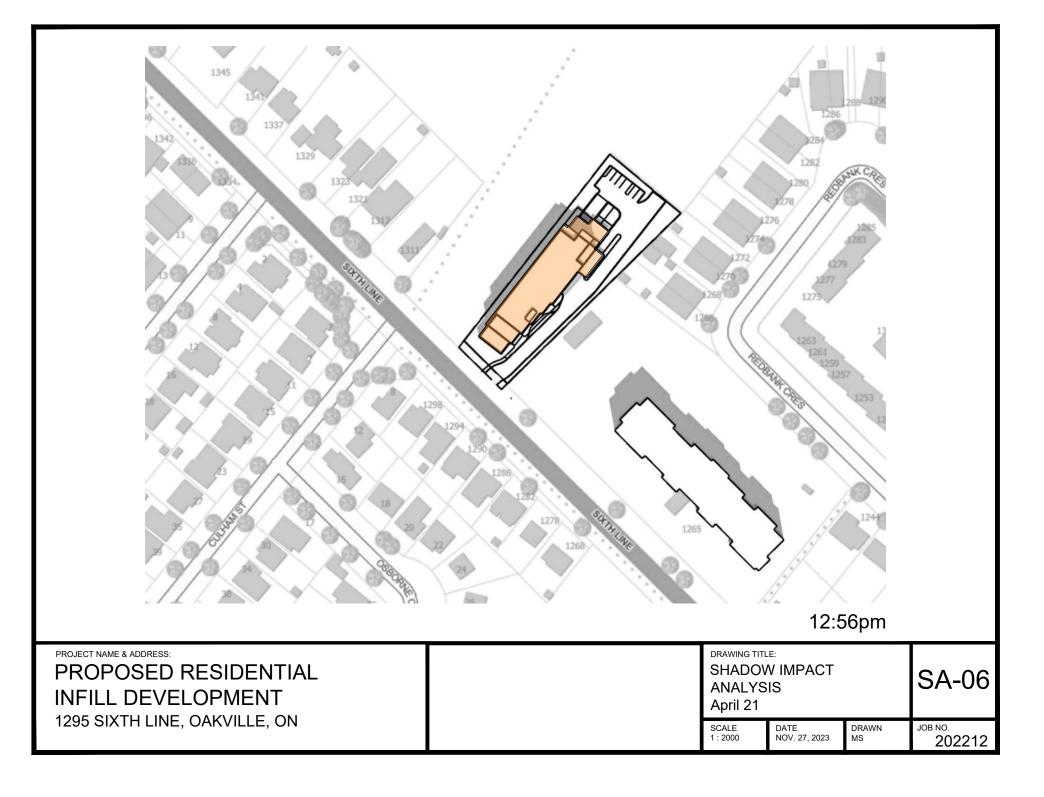
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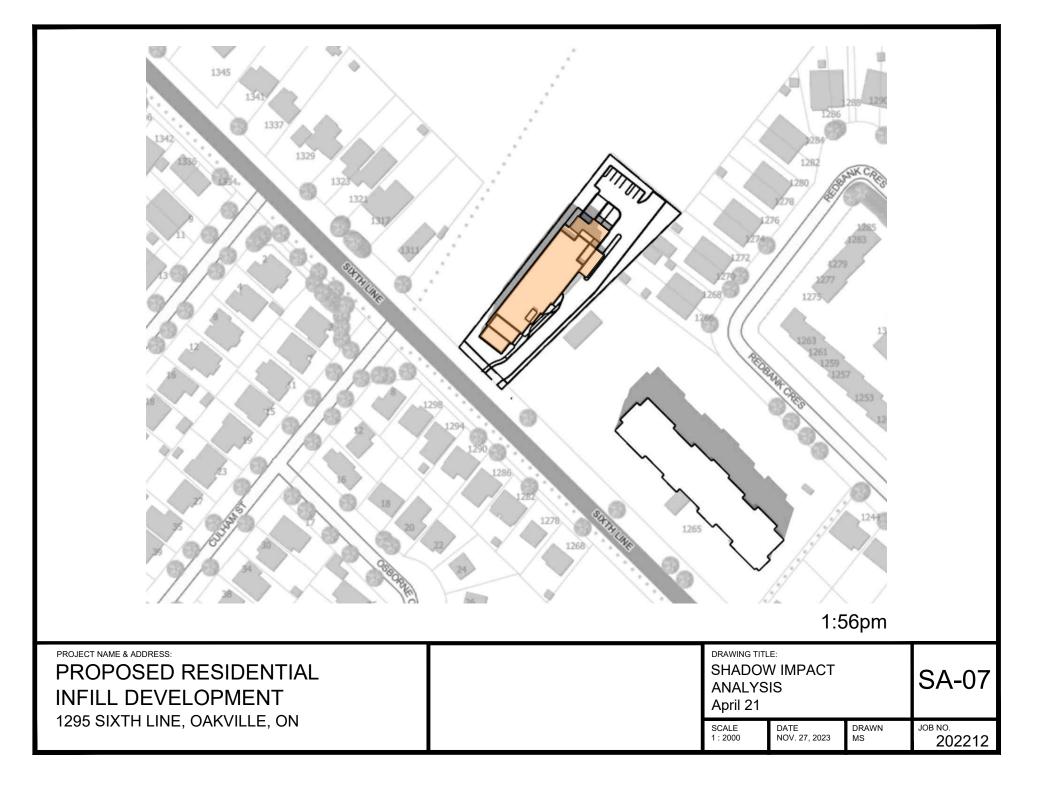


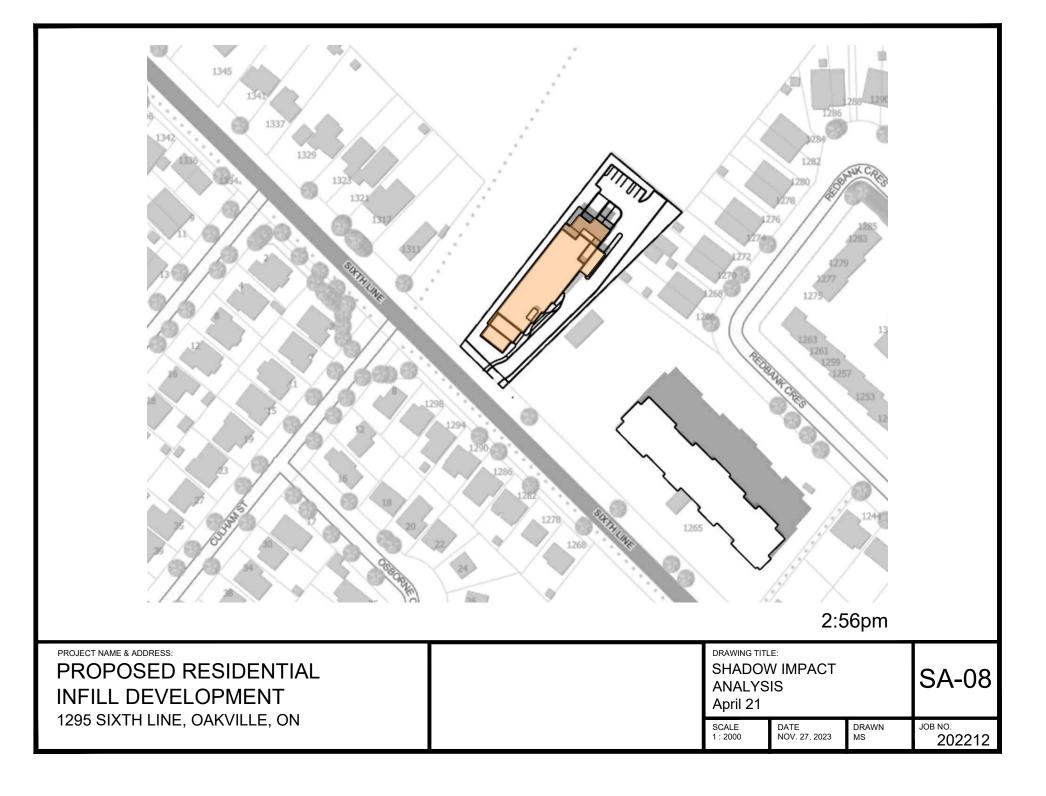


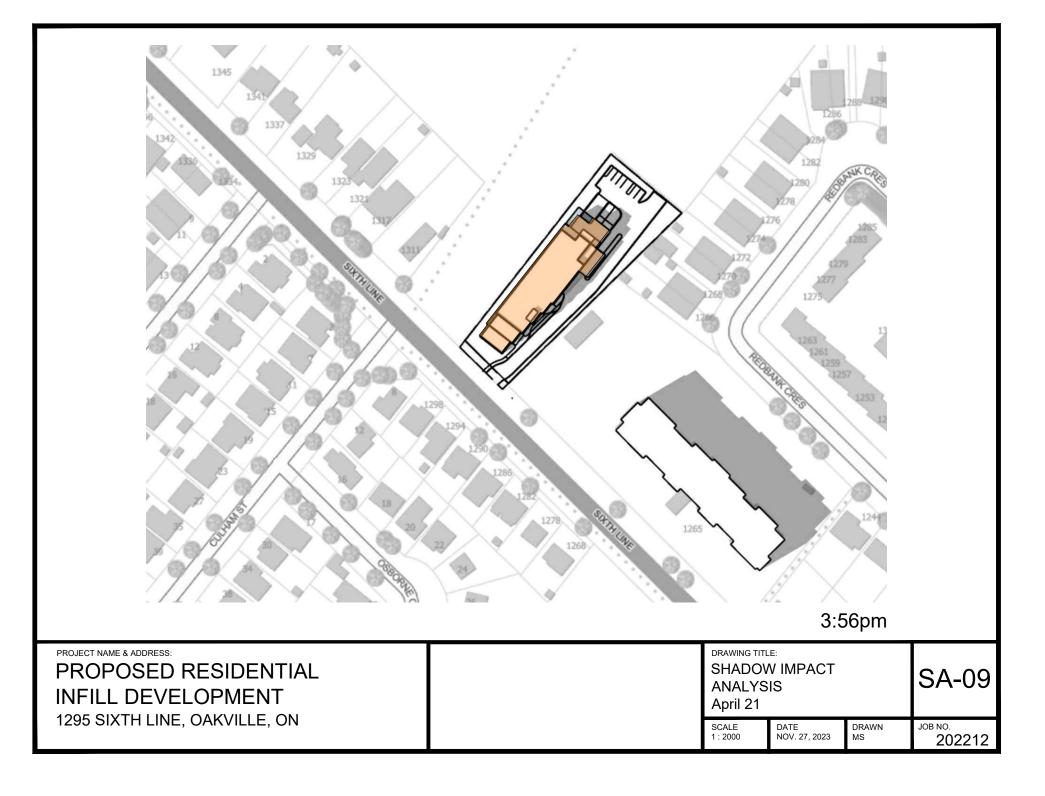


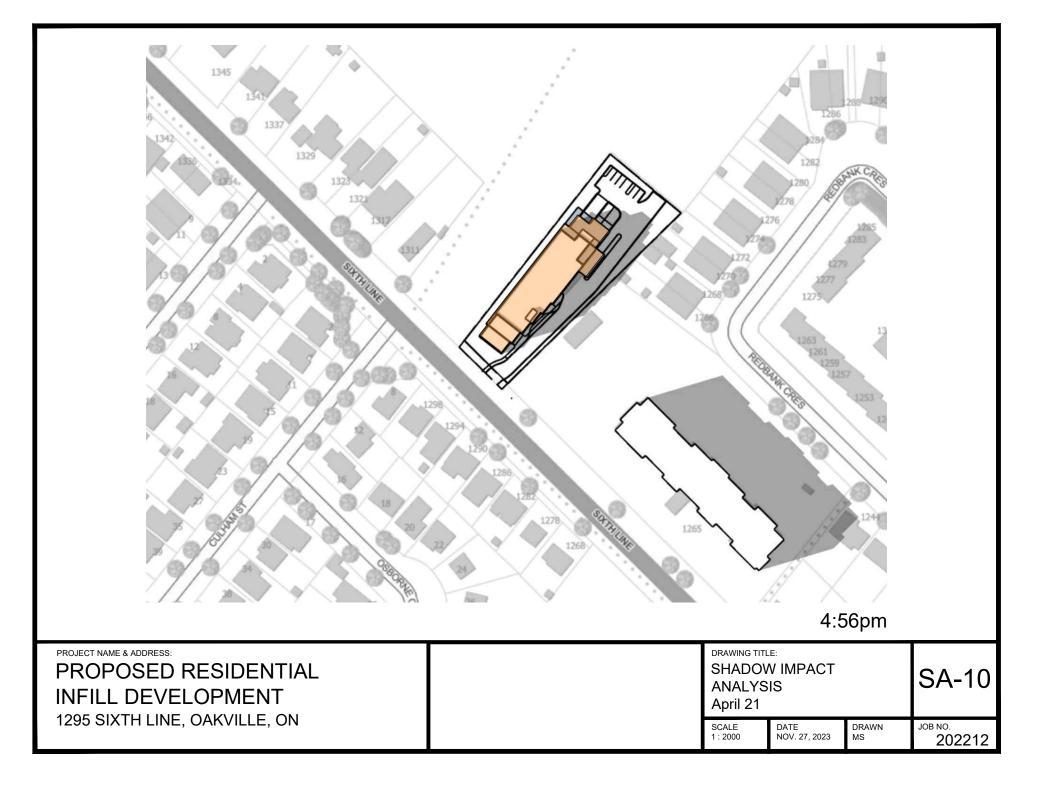


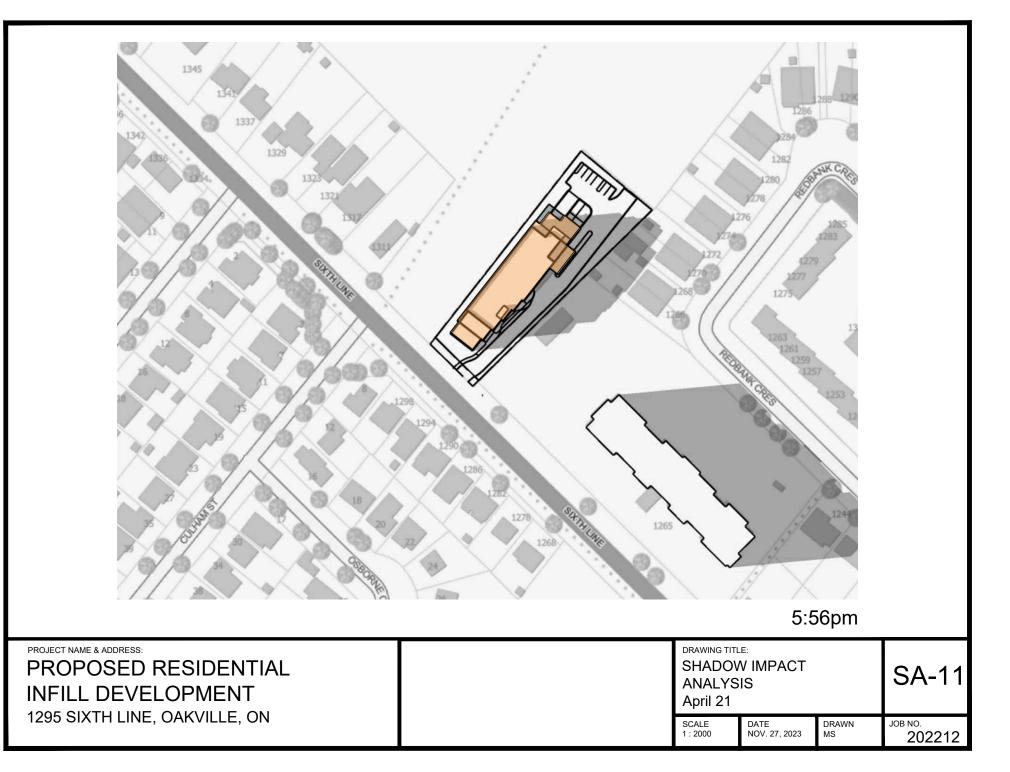








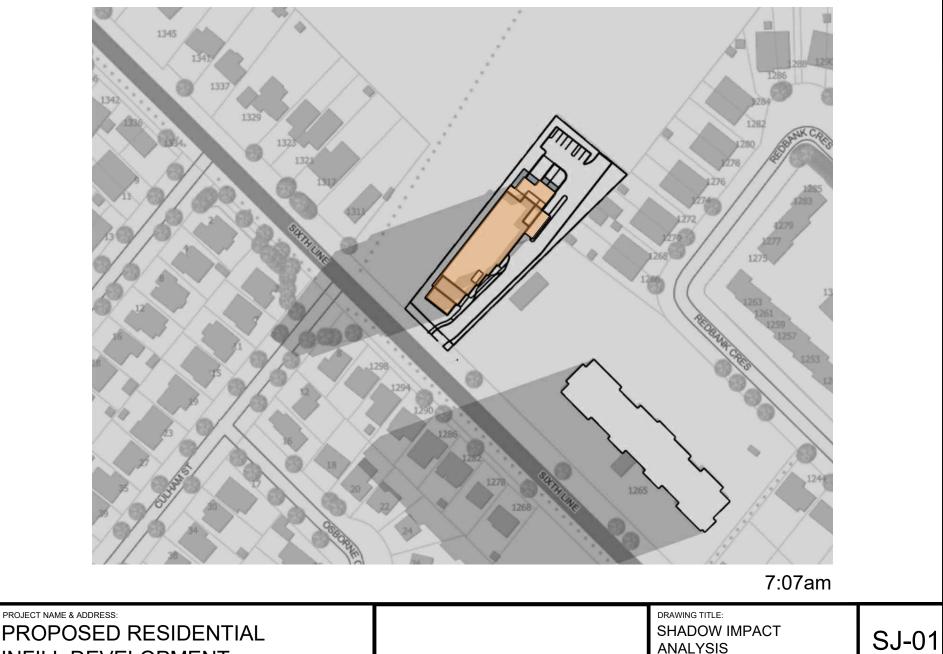




# Proposed Residential Infill Development 295 Sixth Line, Oakville

**Appendix BB** 

June 21.



ANALYSIS

DATE NOV. 27, 2023

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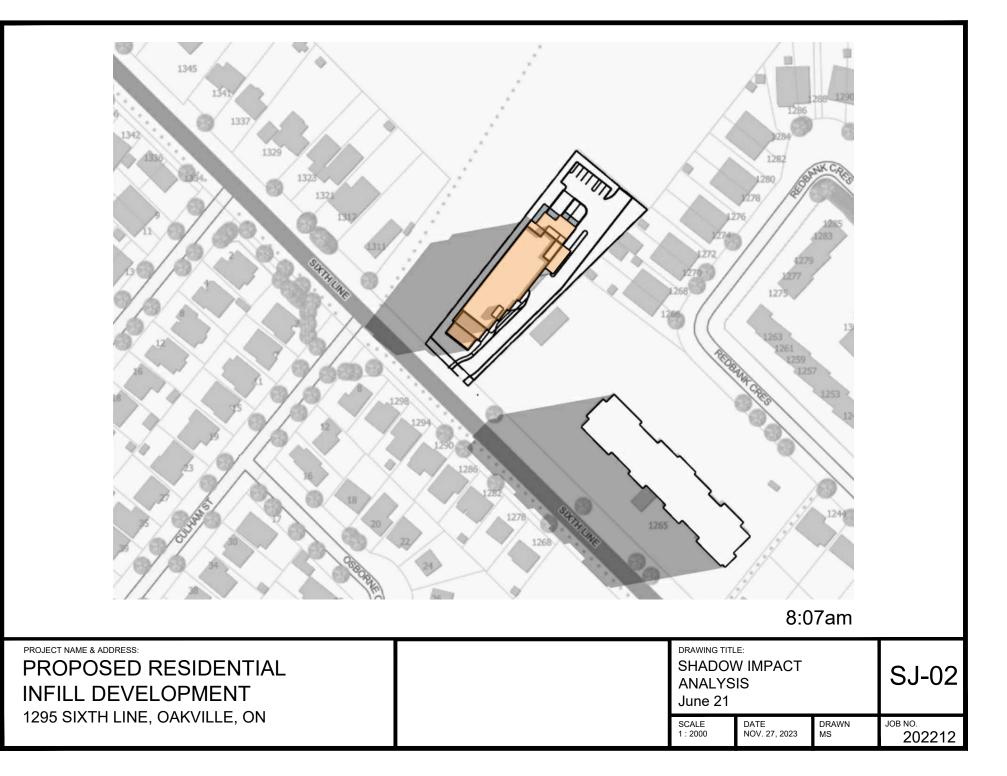
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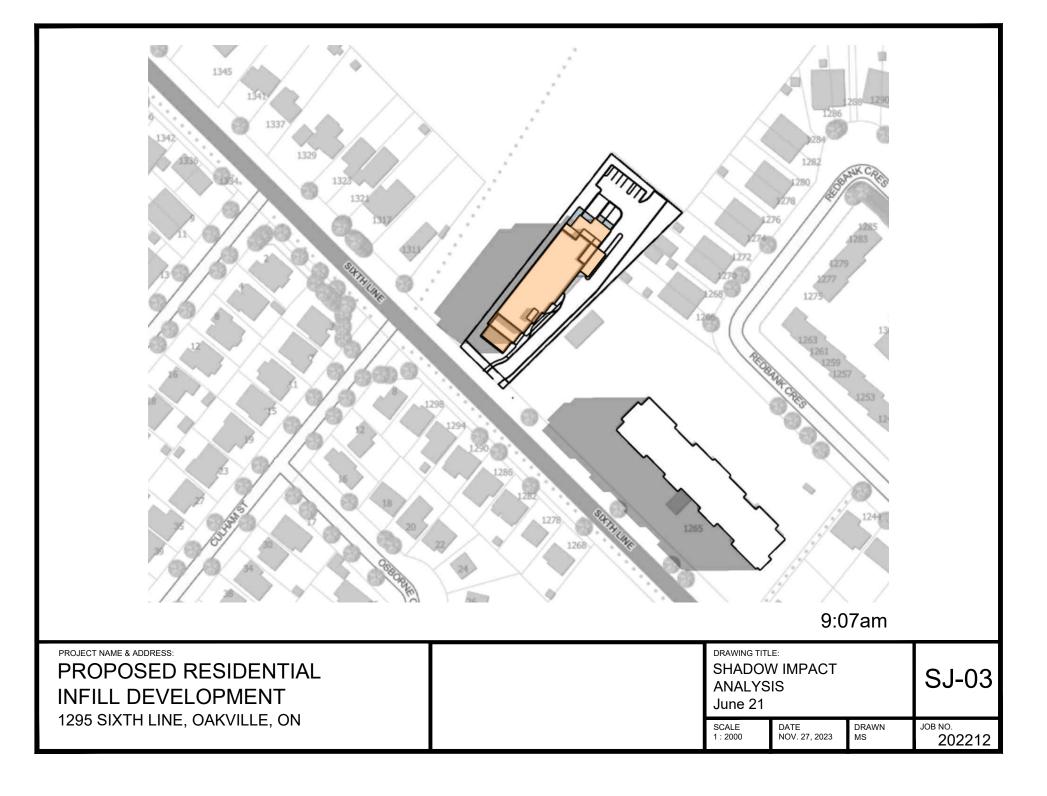
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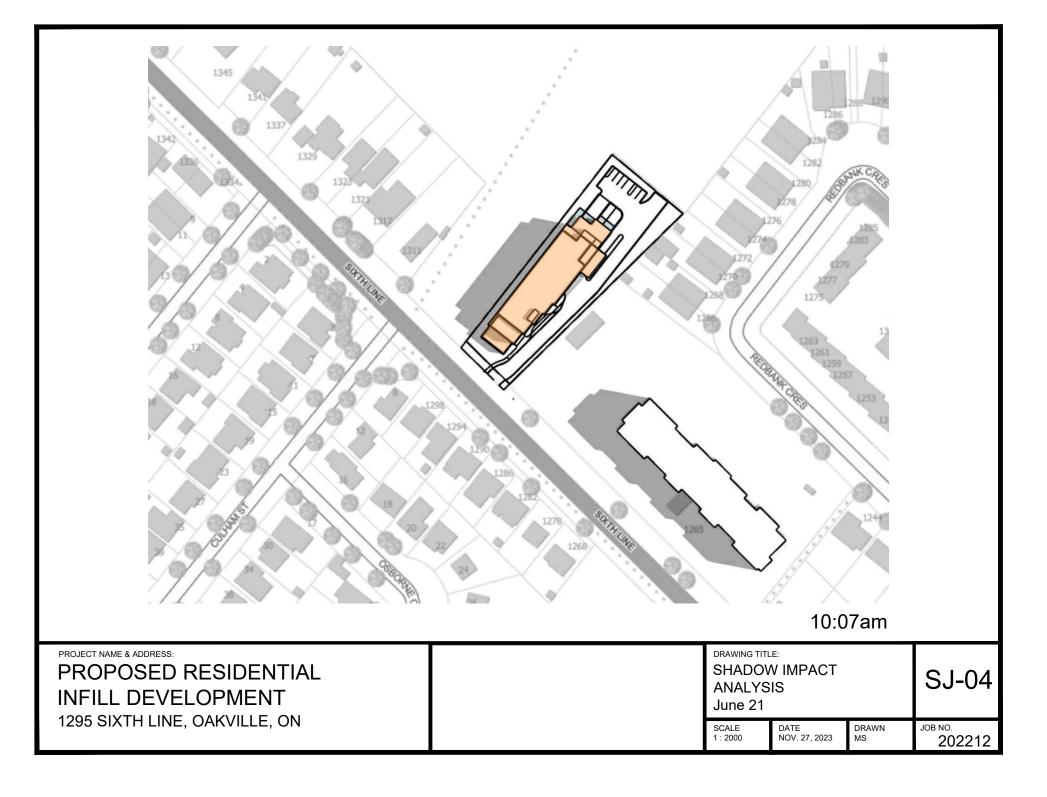
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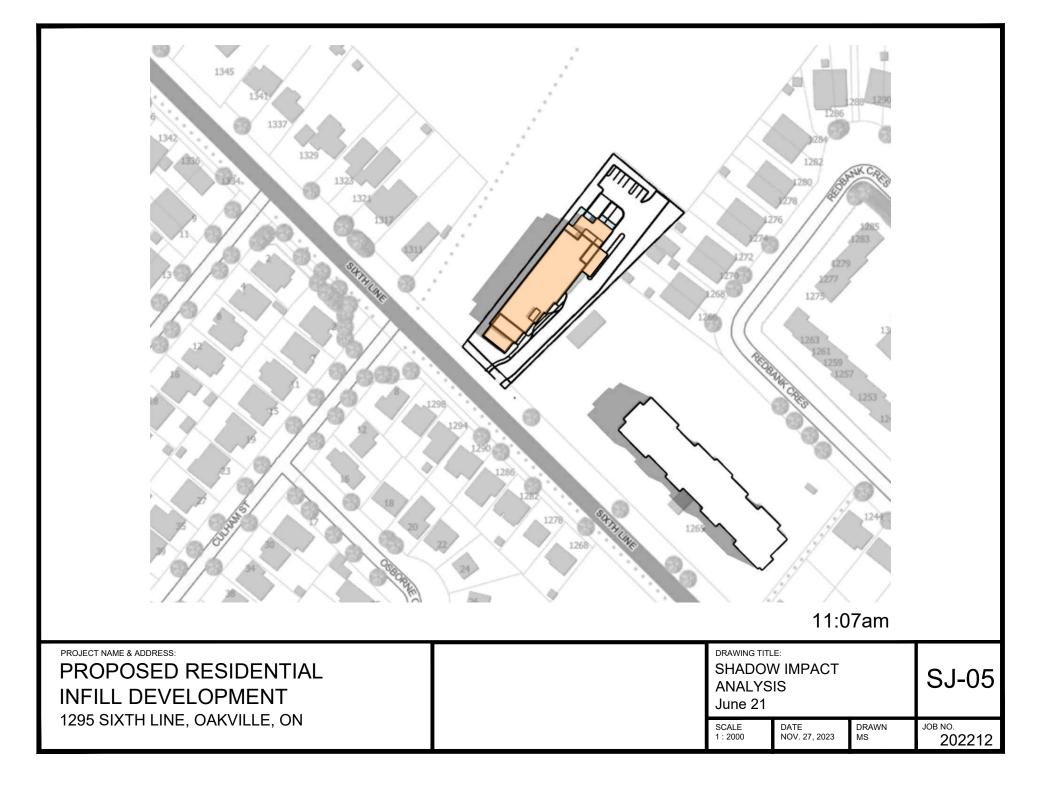
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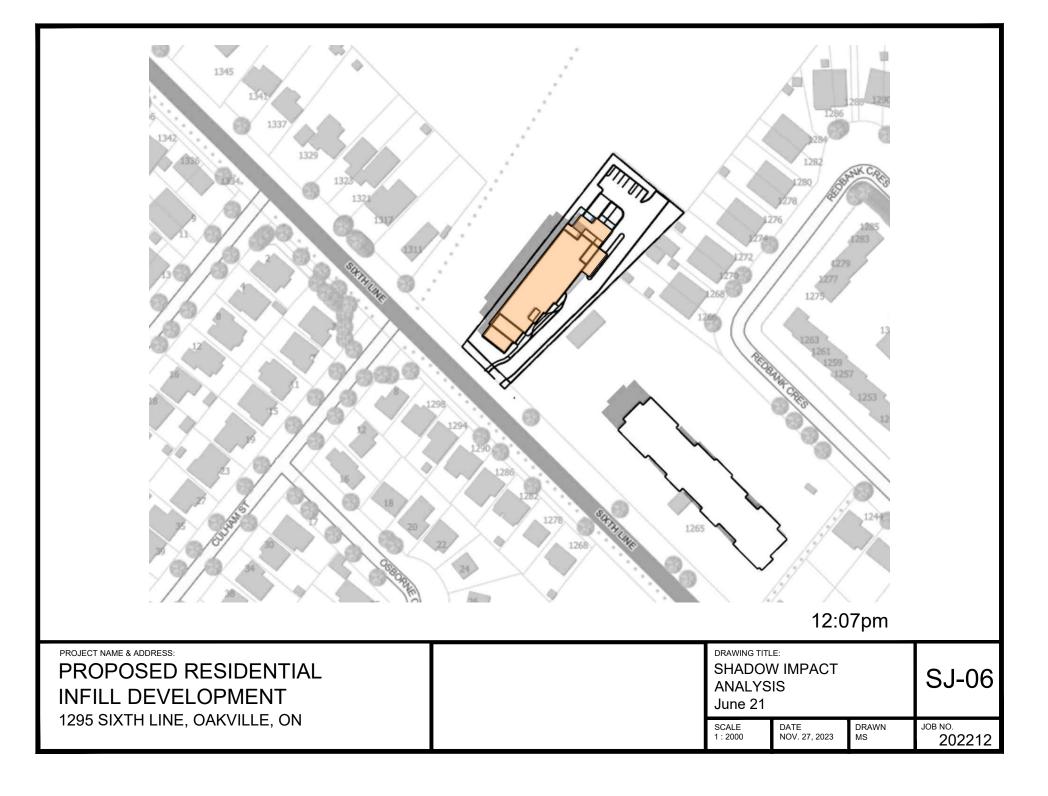
**PROPOSED RESIDENTIAL** INFILL DEVELOPMENT 1295 SIXTH LINE, OAKVILLE, ON

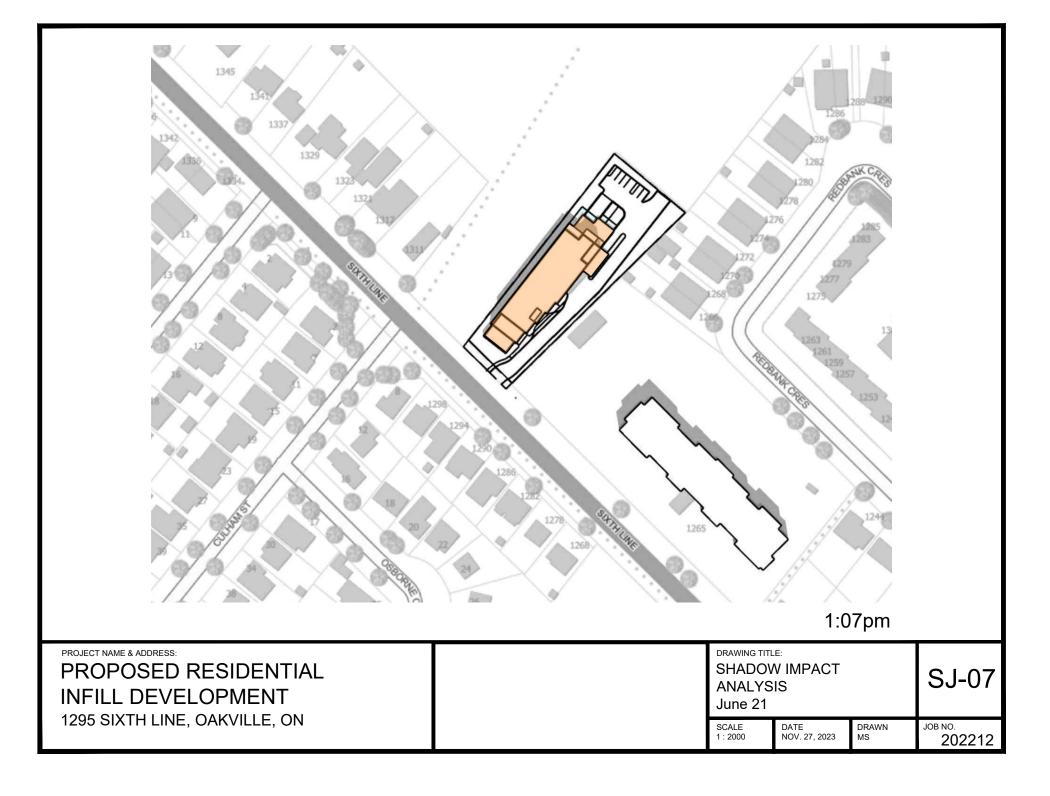


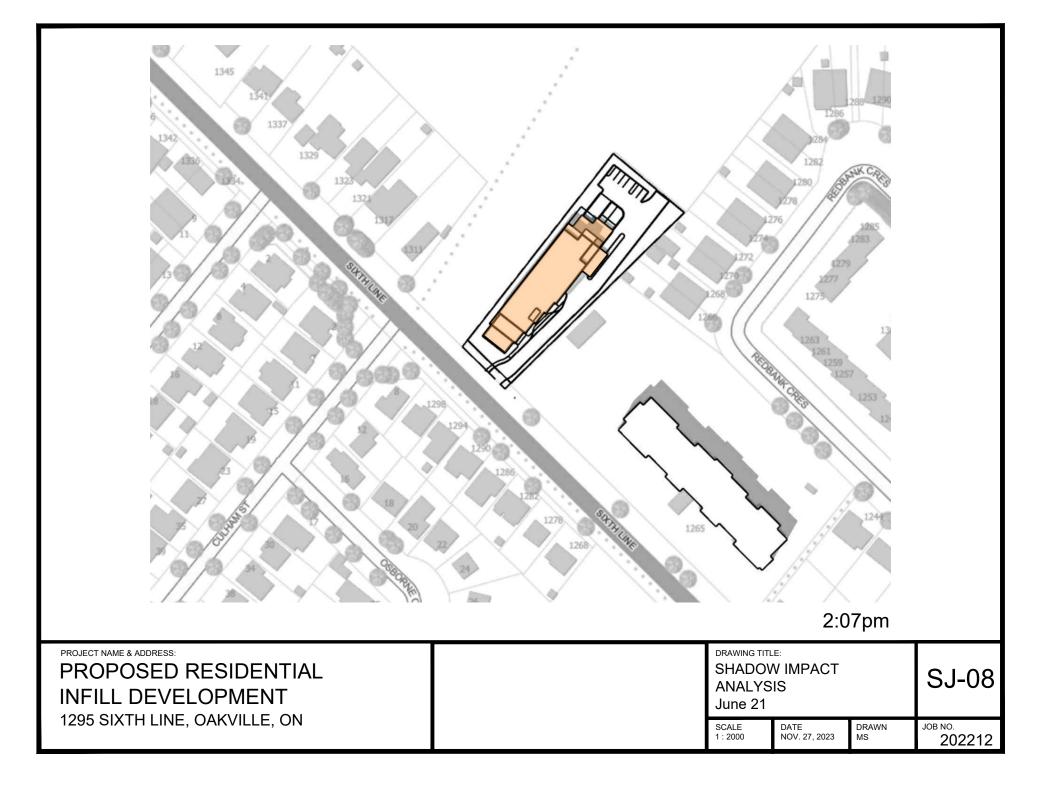


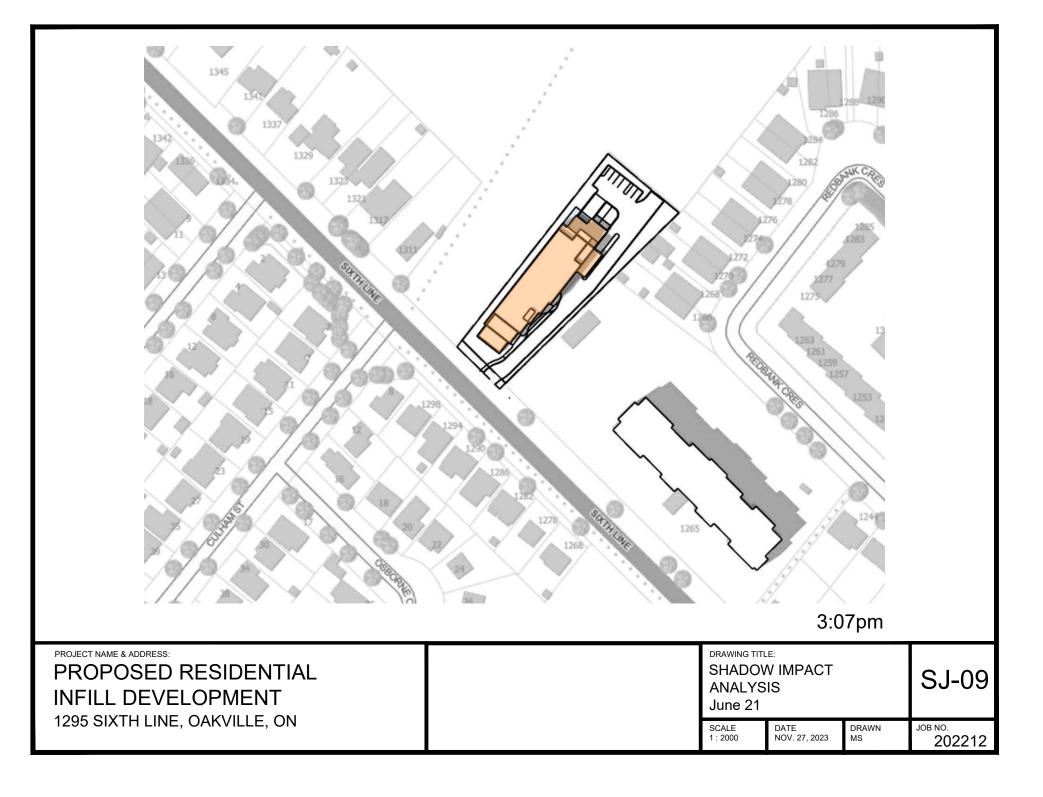


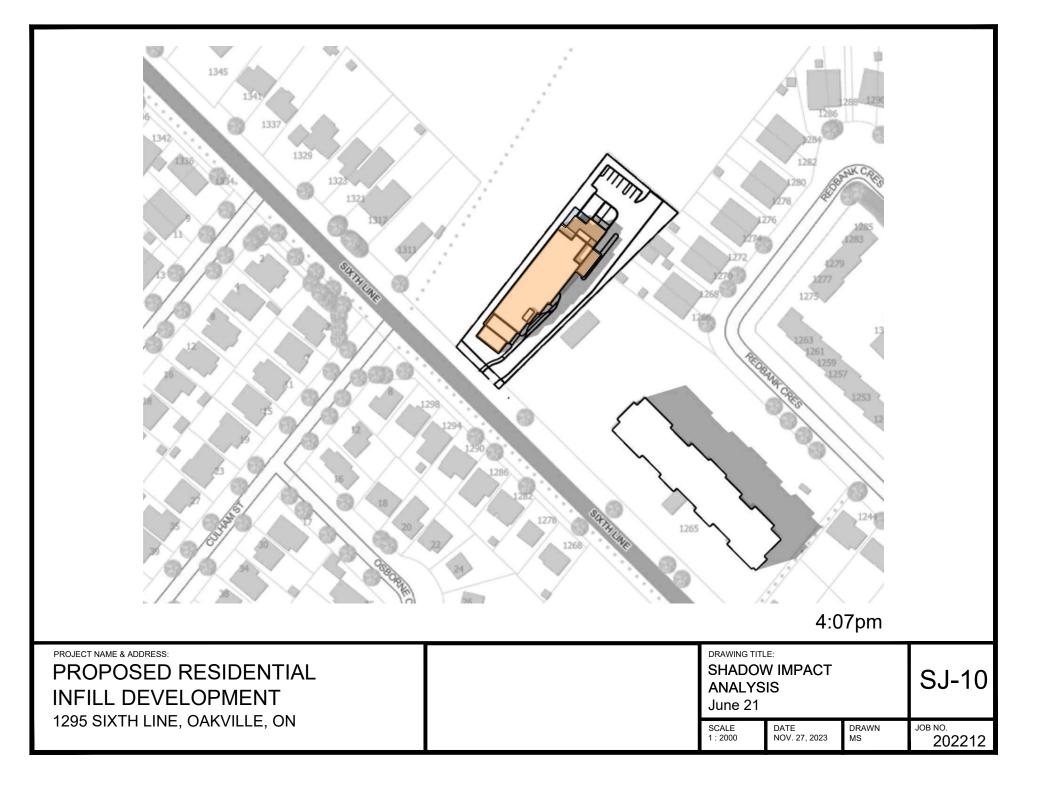


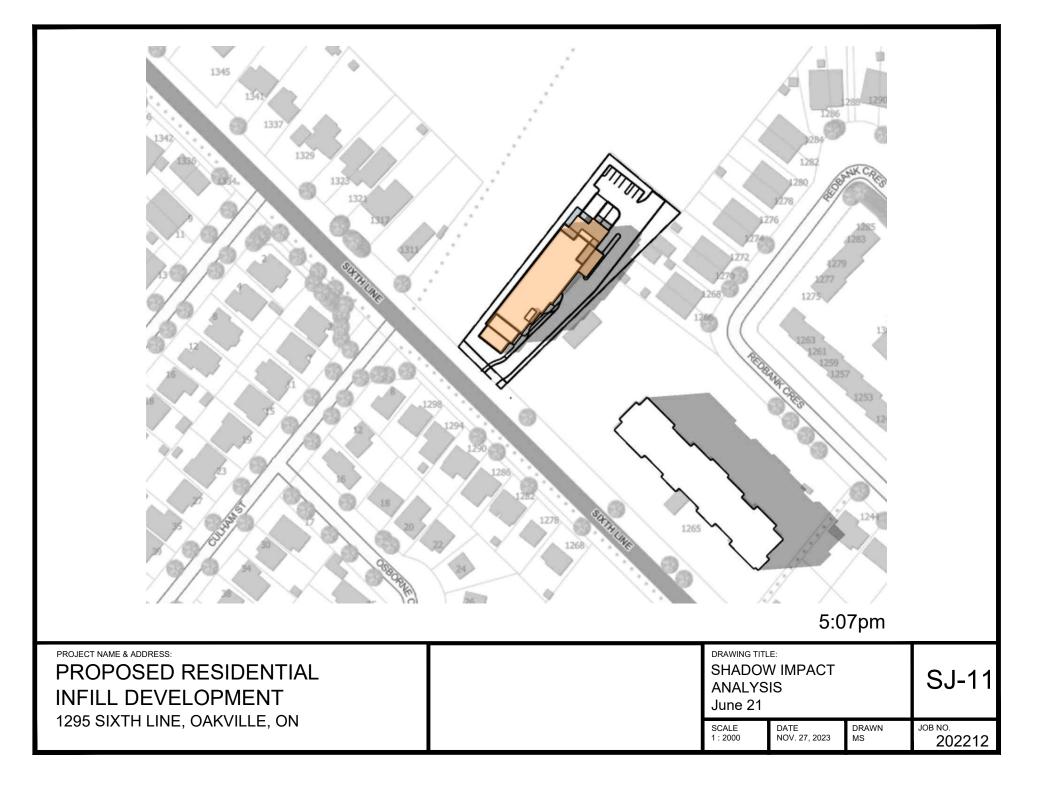


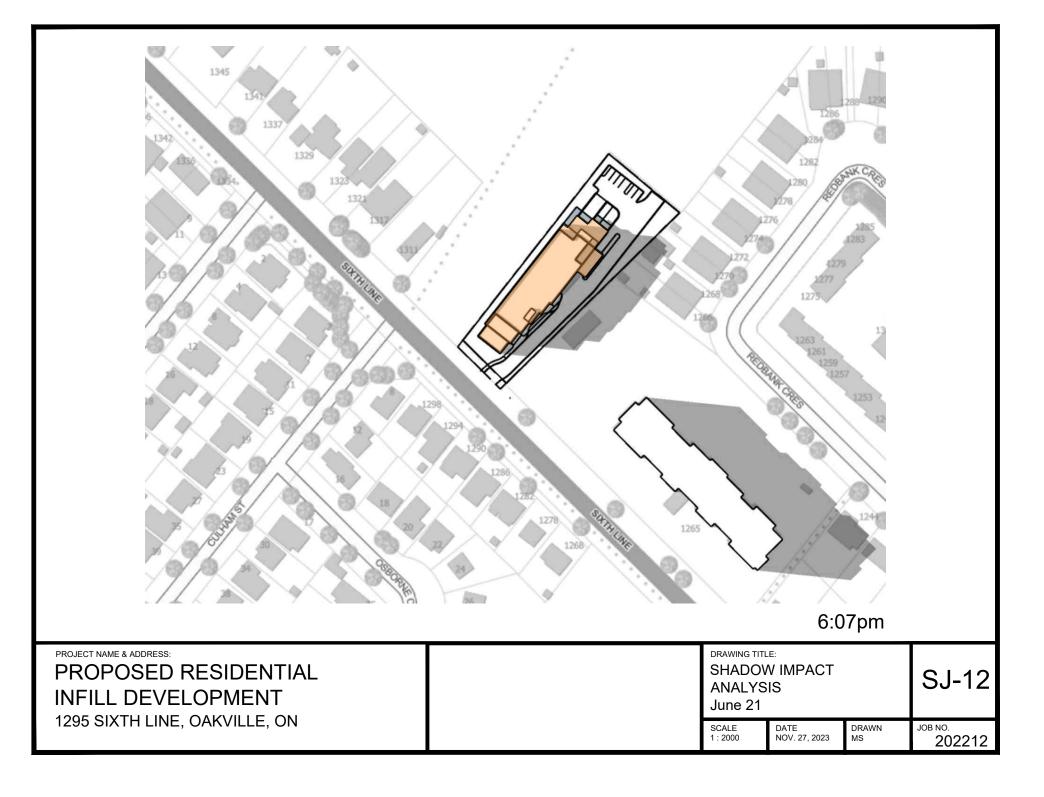








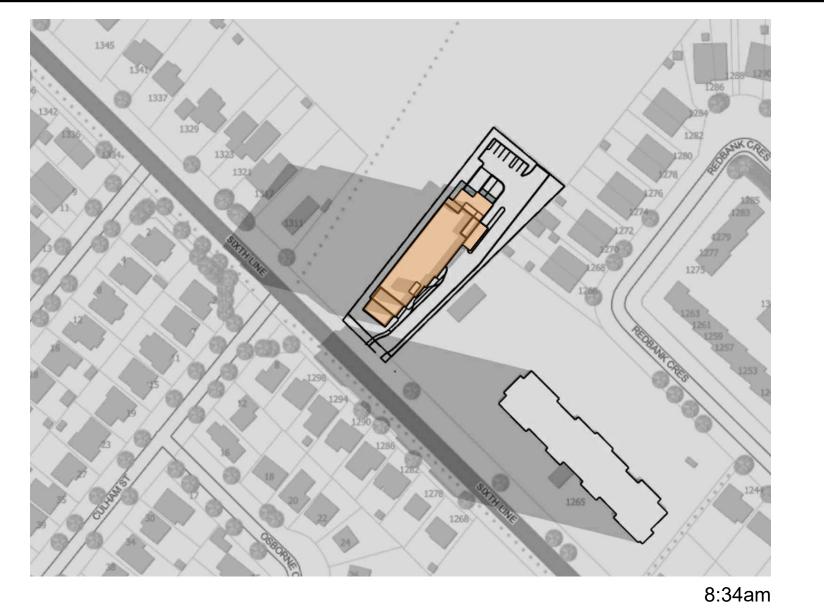




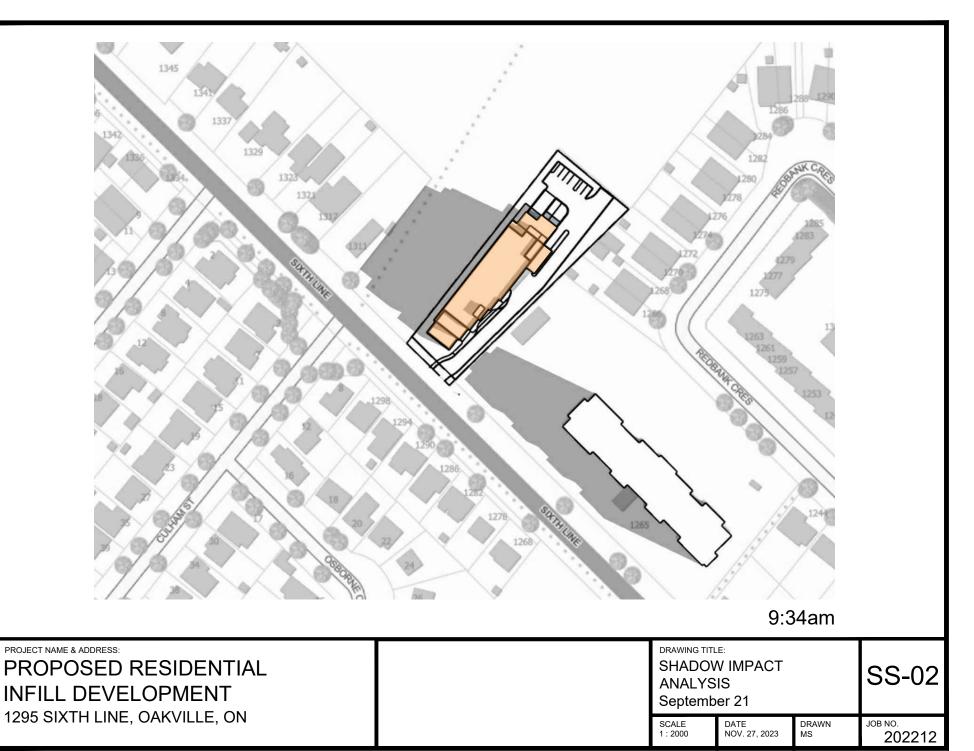
# Proposed Residential Infill Development 295 Sixth Line, Oakville

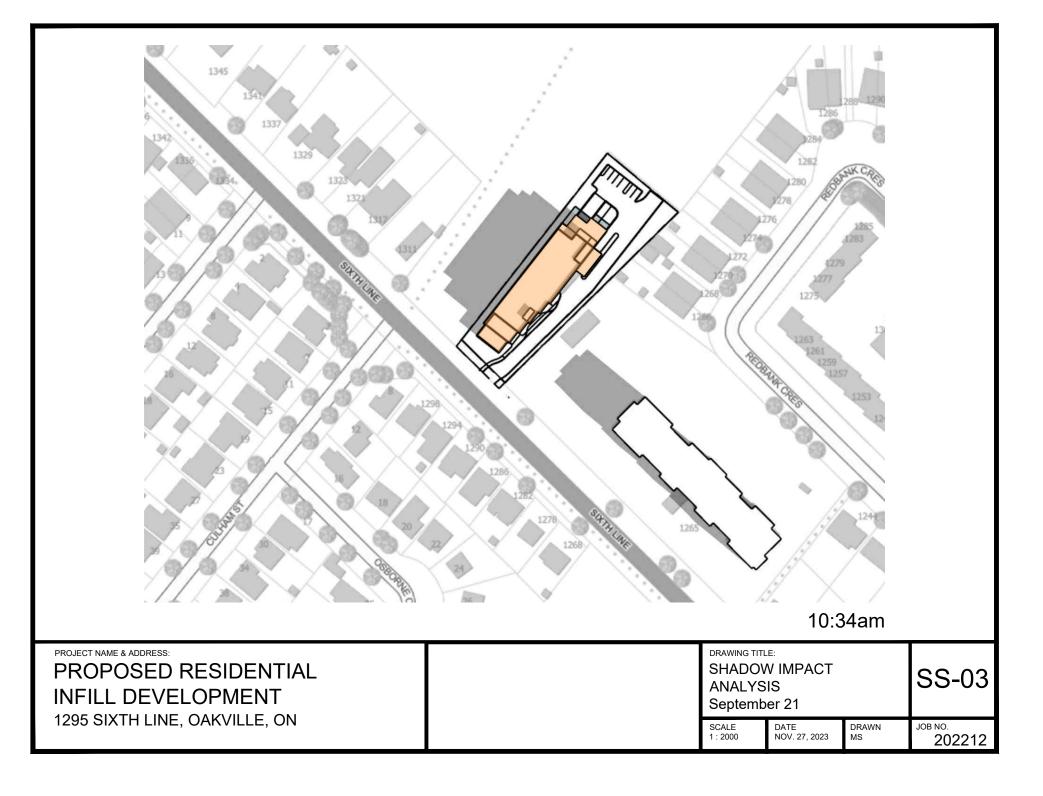
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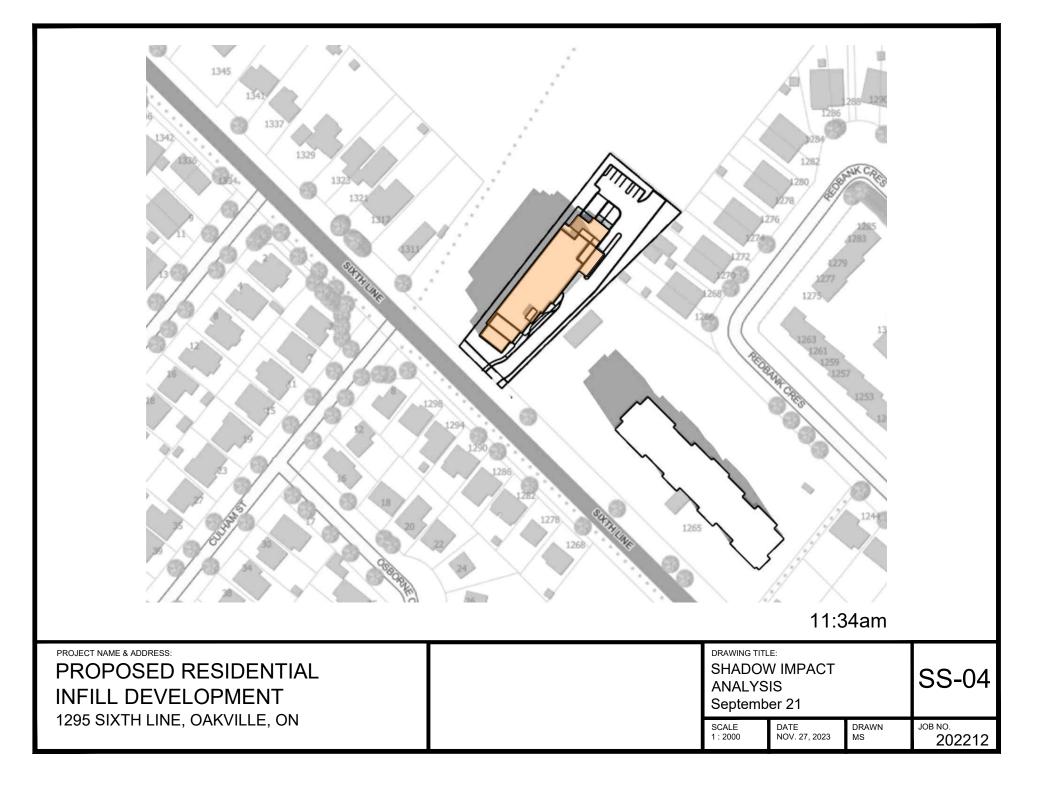
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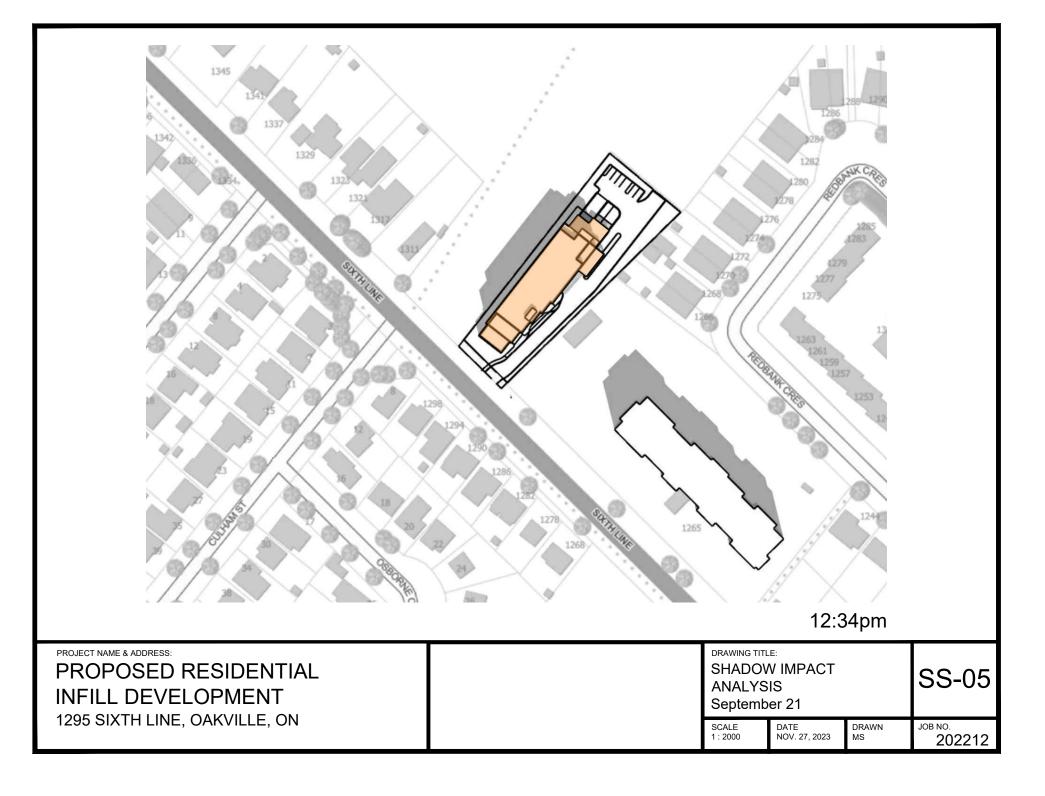


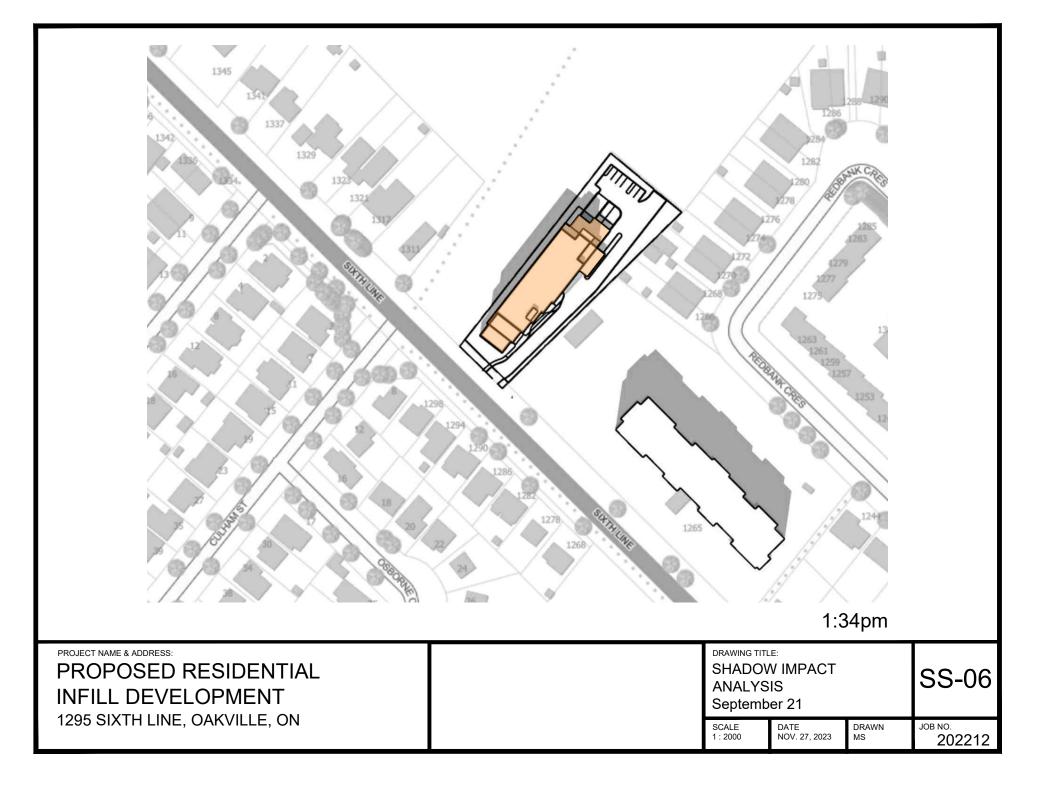
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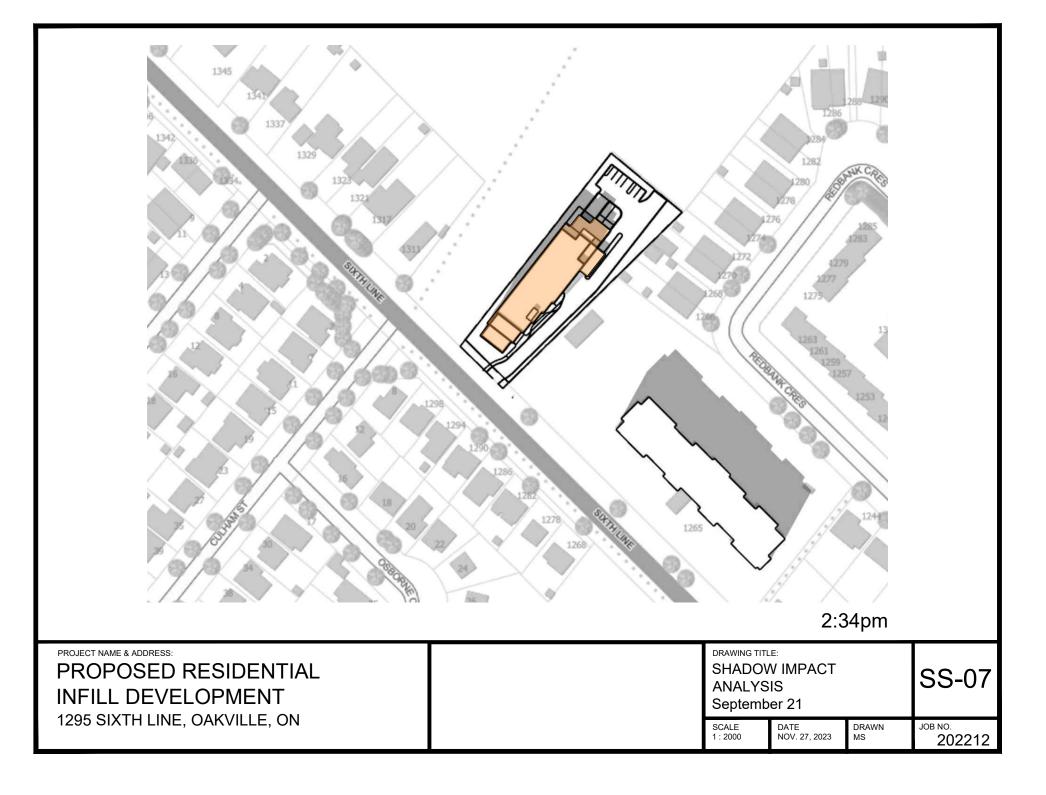


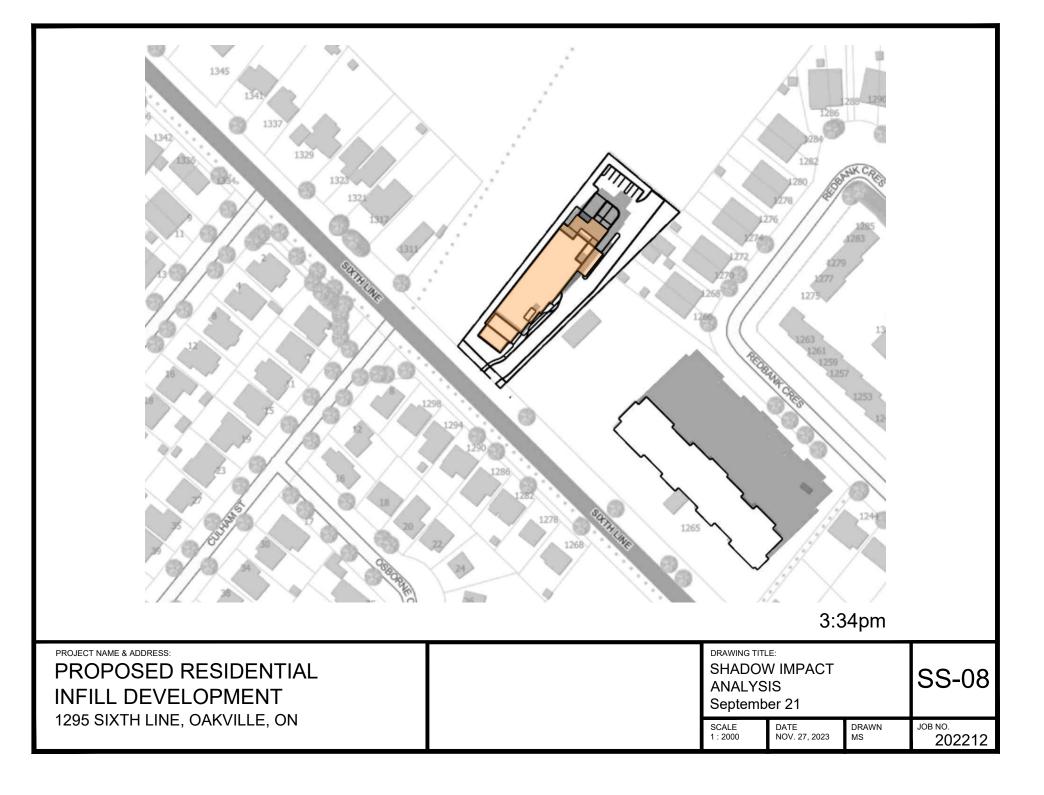


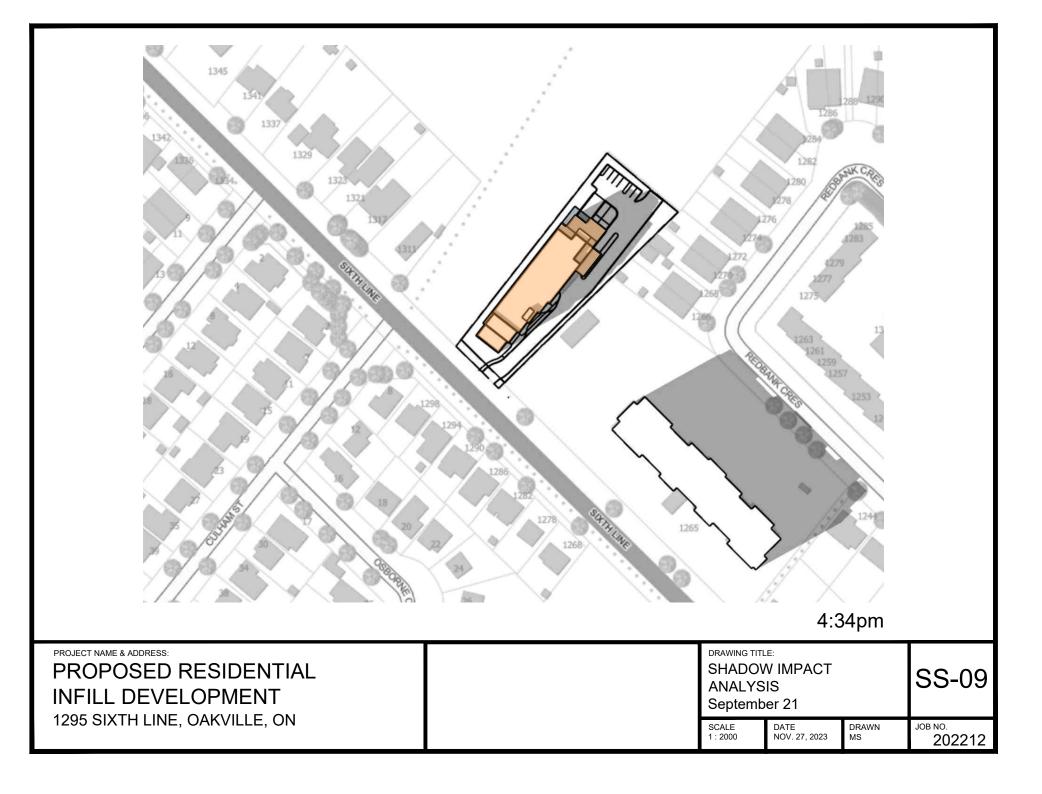


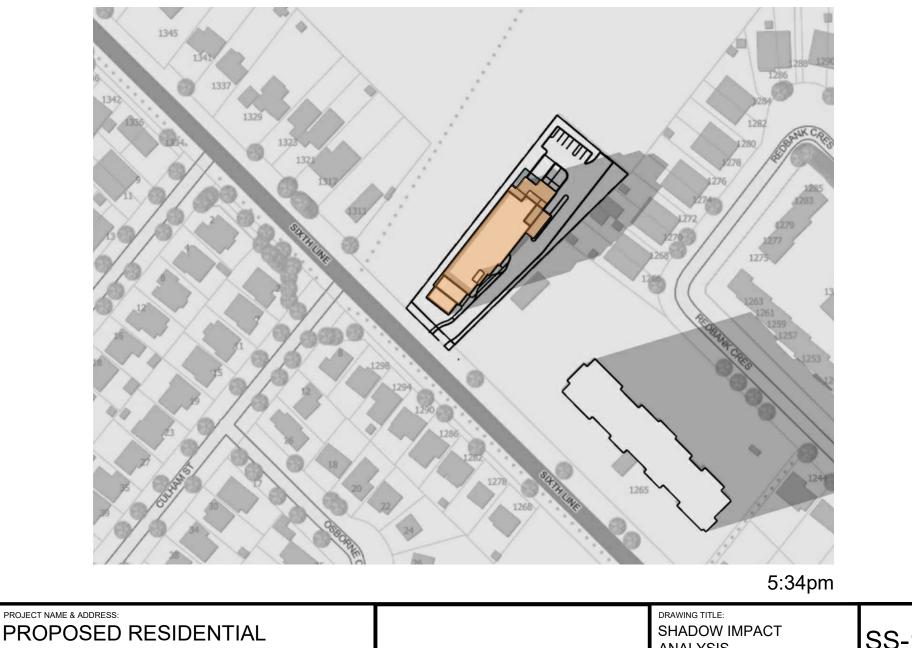












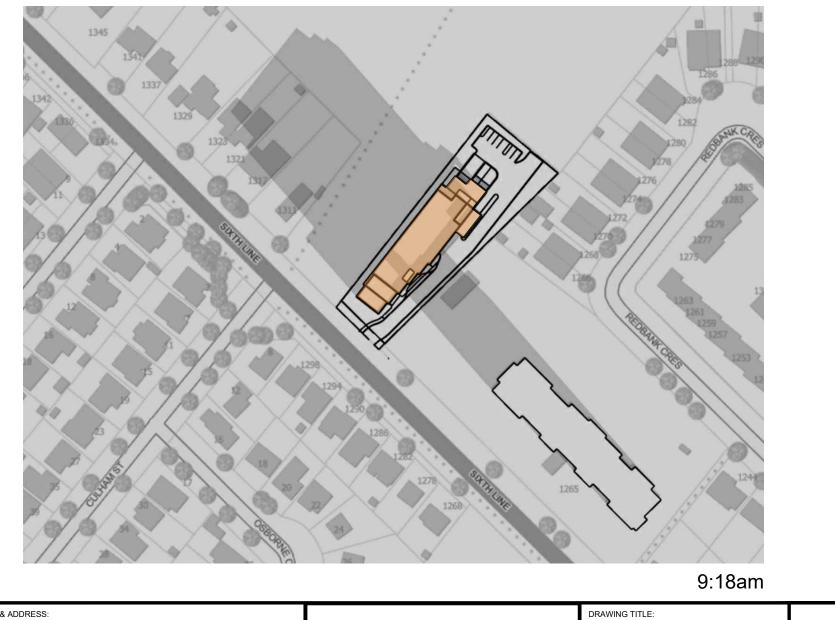
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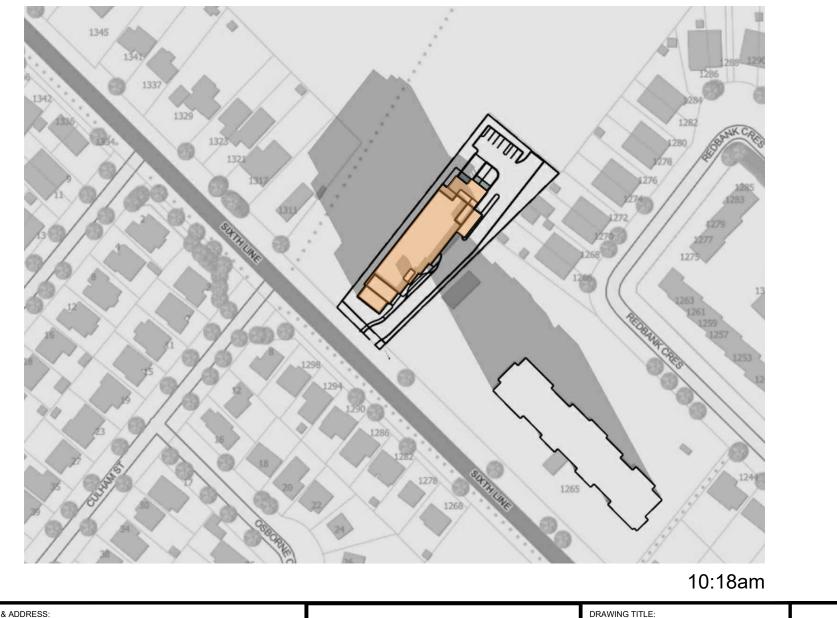
## Proposed Residential Infill Development 295 Sixth Line, Oakville

**Appendix BB** 

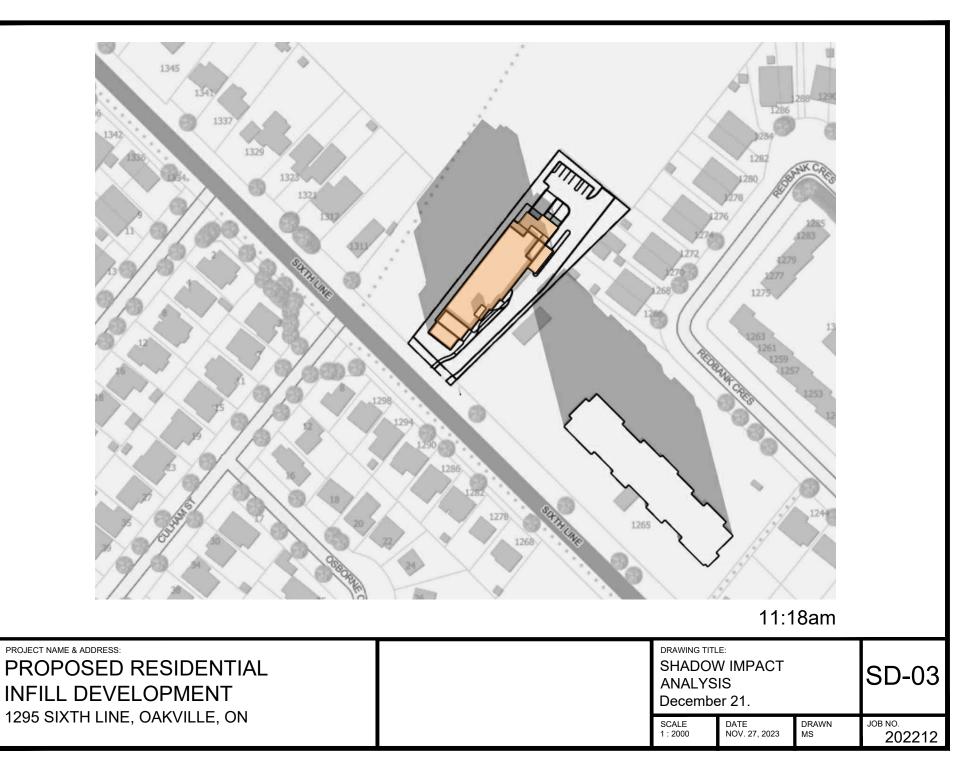
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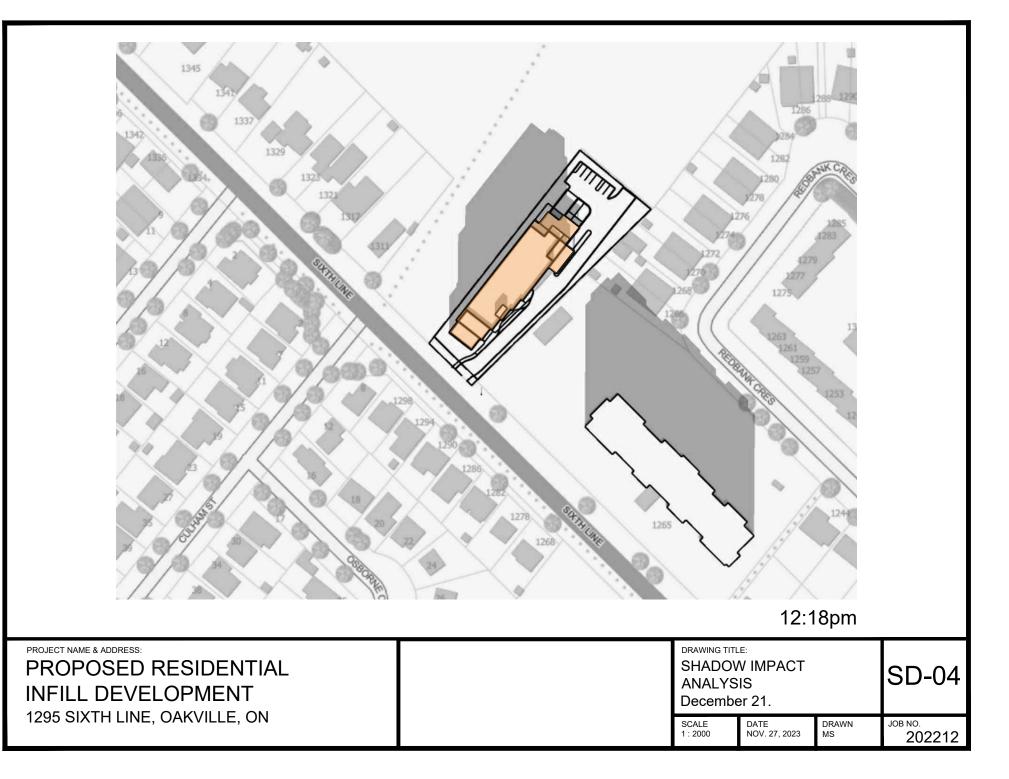


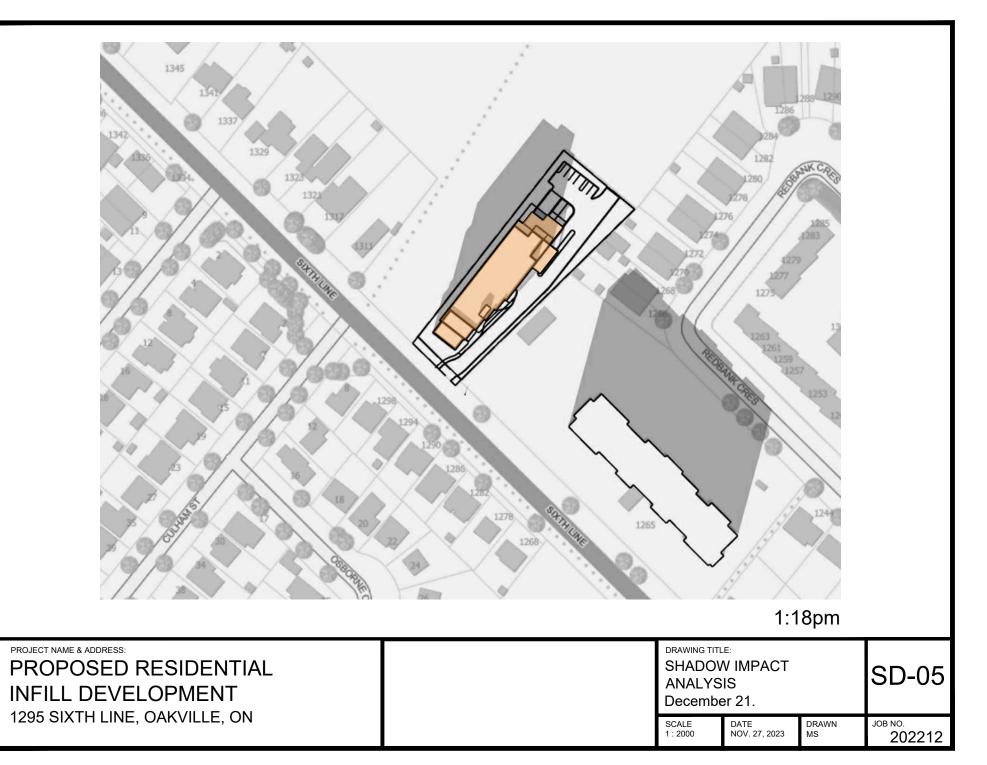
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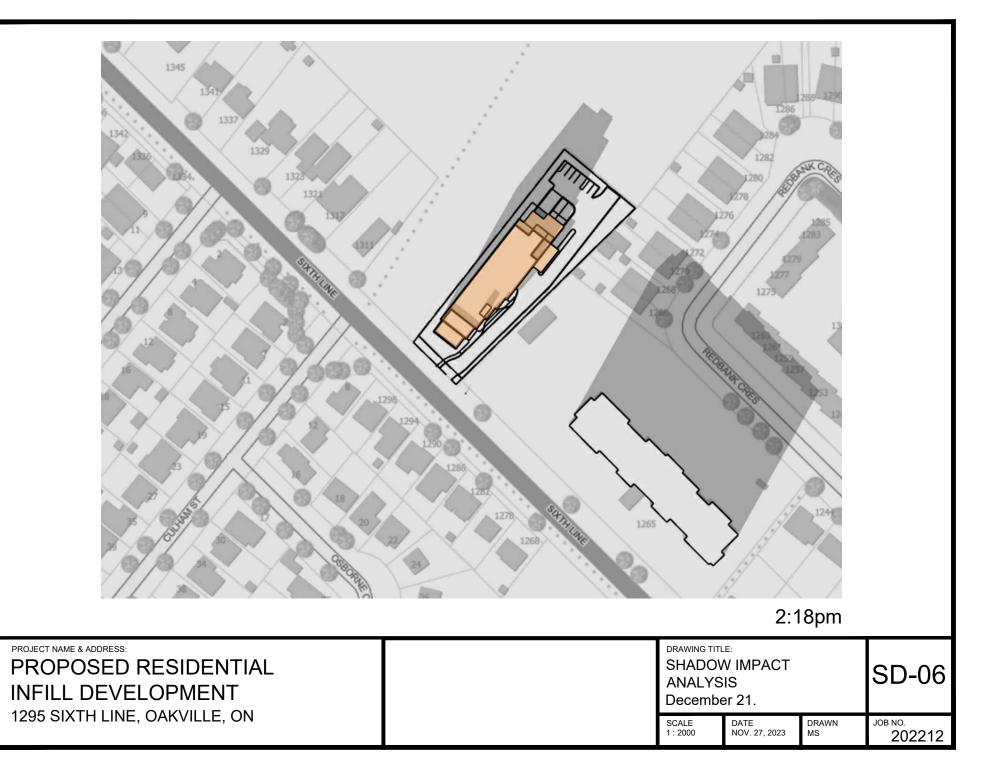


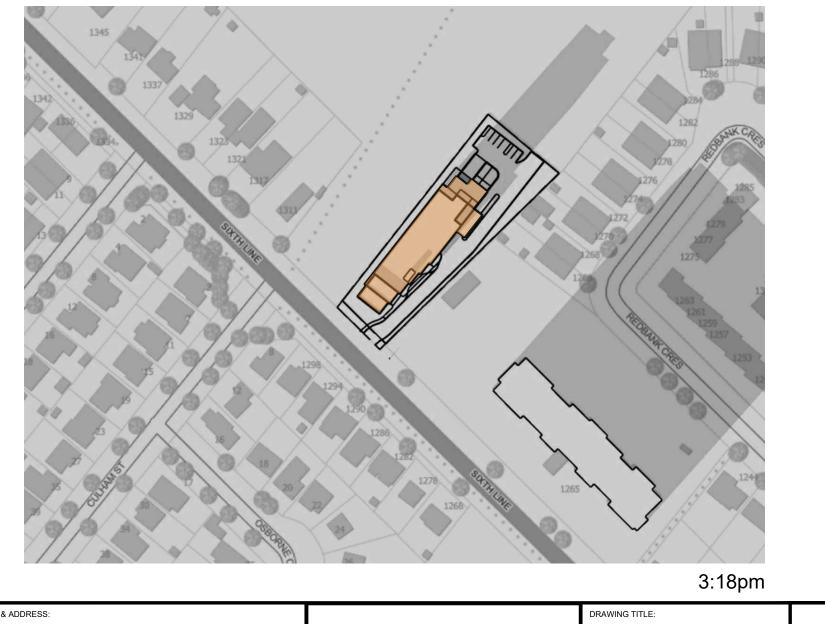
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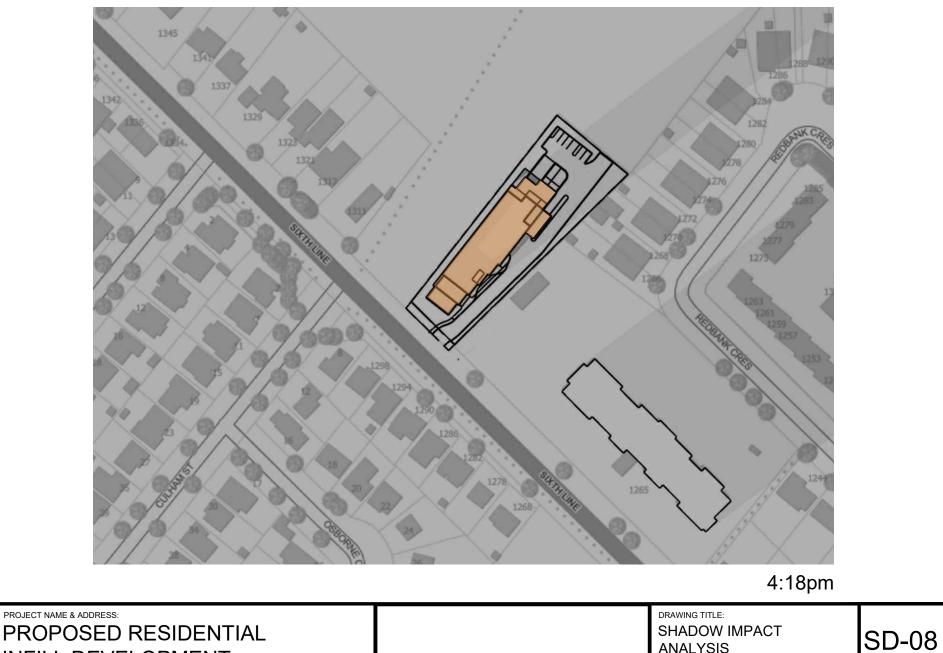








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ANALYSIS

SCALE 1 : 2000

December 21.

DATE NOV. 27, 2023

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202212

**PROPOSED RESIDENTIAL** INFILL DEVELOPMENT 1295 SIXTH LINE, OAKVILLE, ON