

# APRIL 21

SUNRISE 6:25 AM



7:55 AM



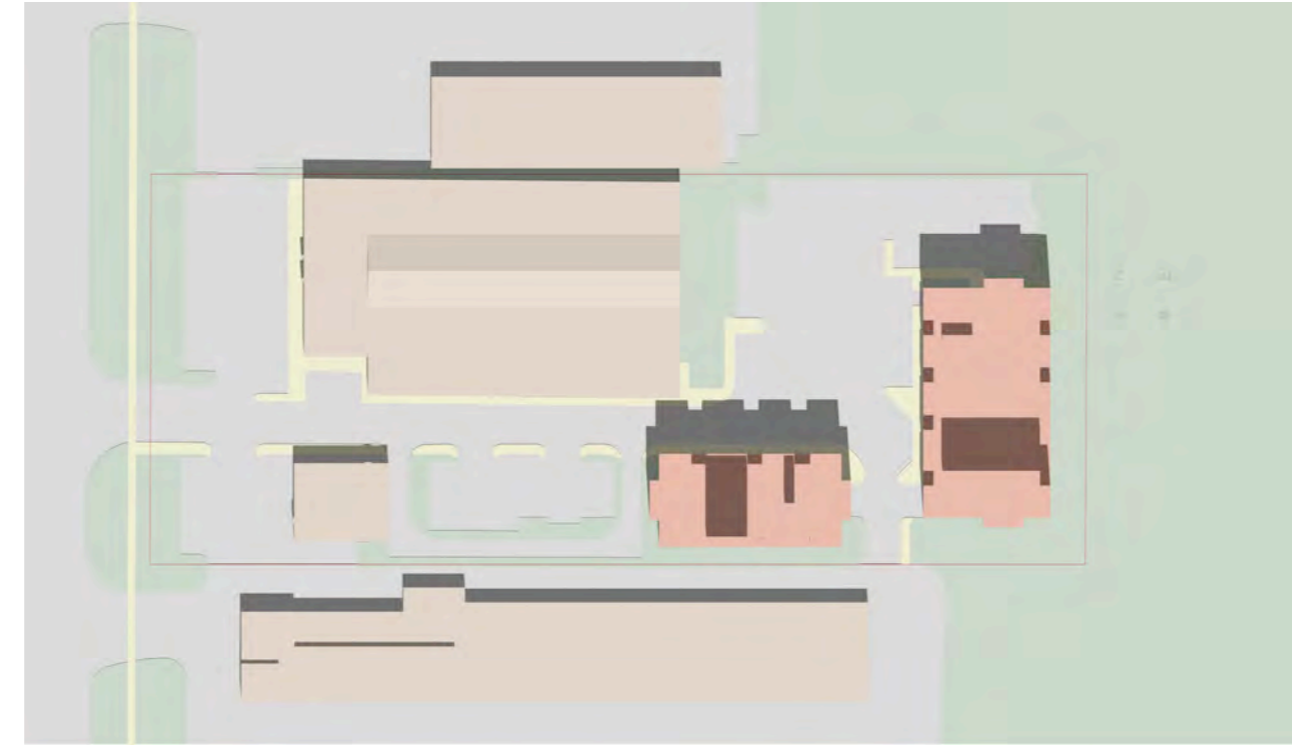
8:55 AM



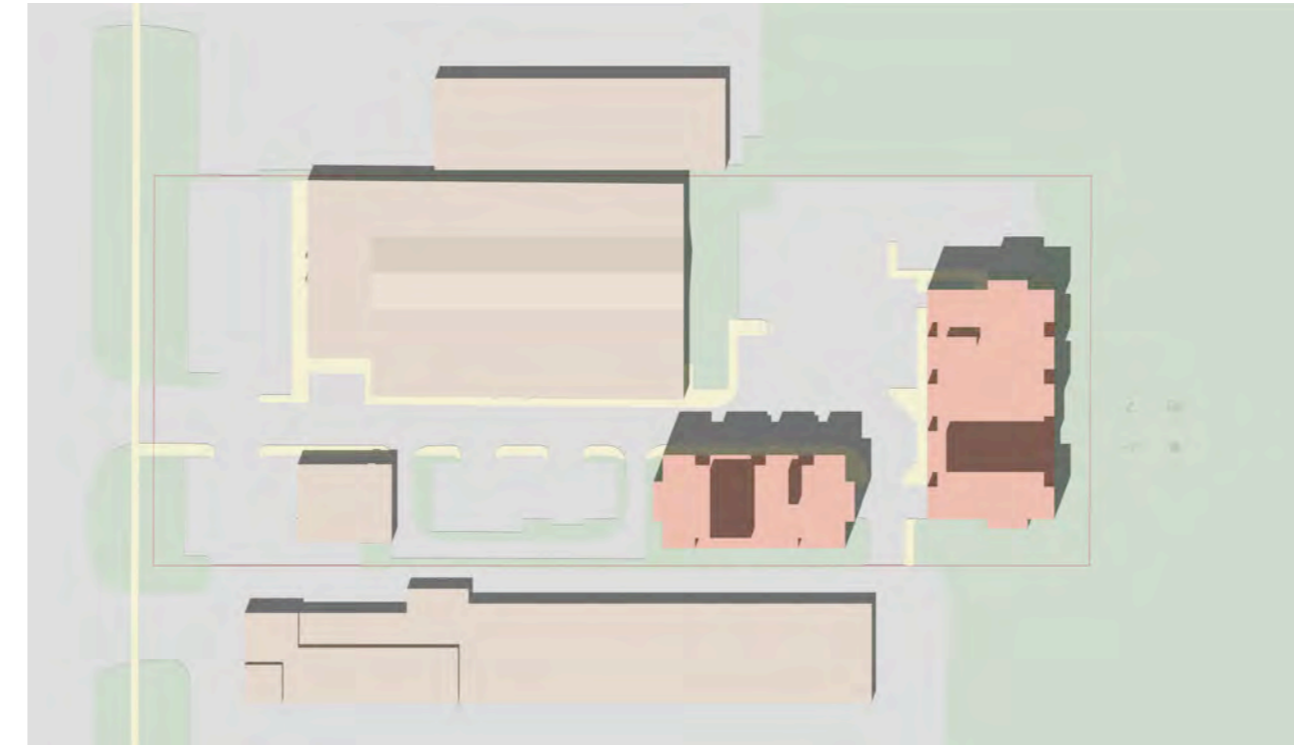
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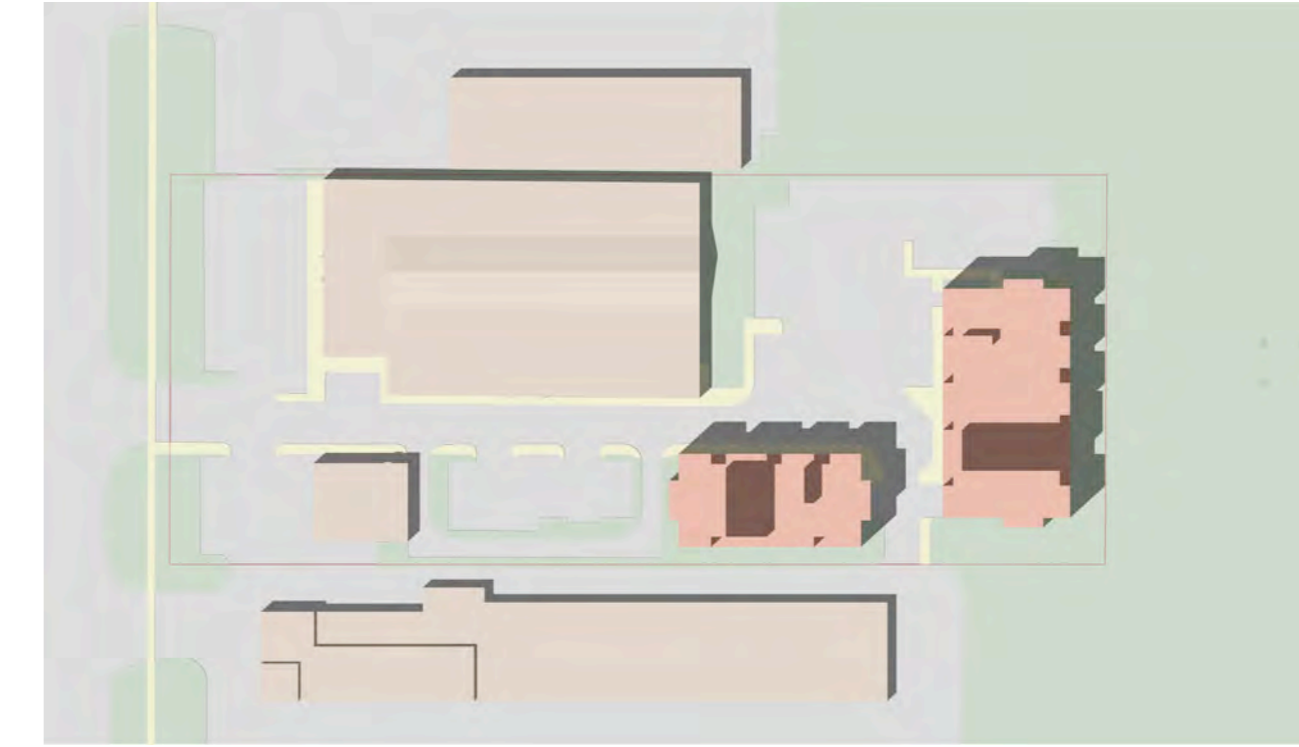
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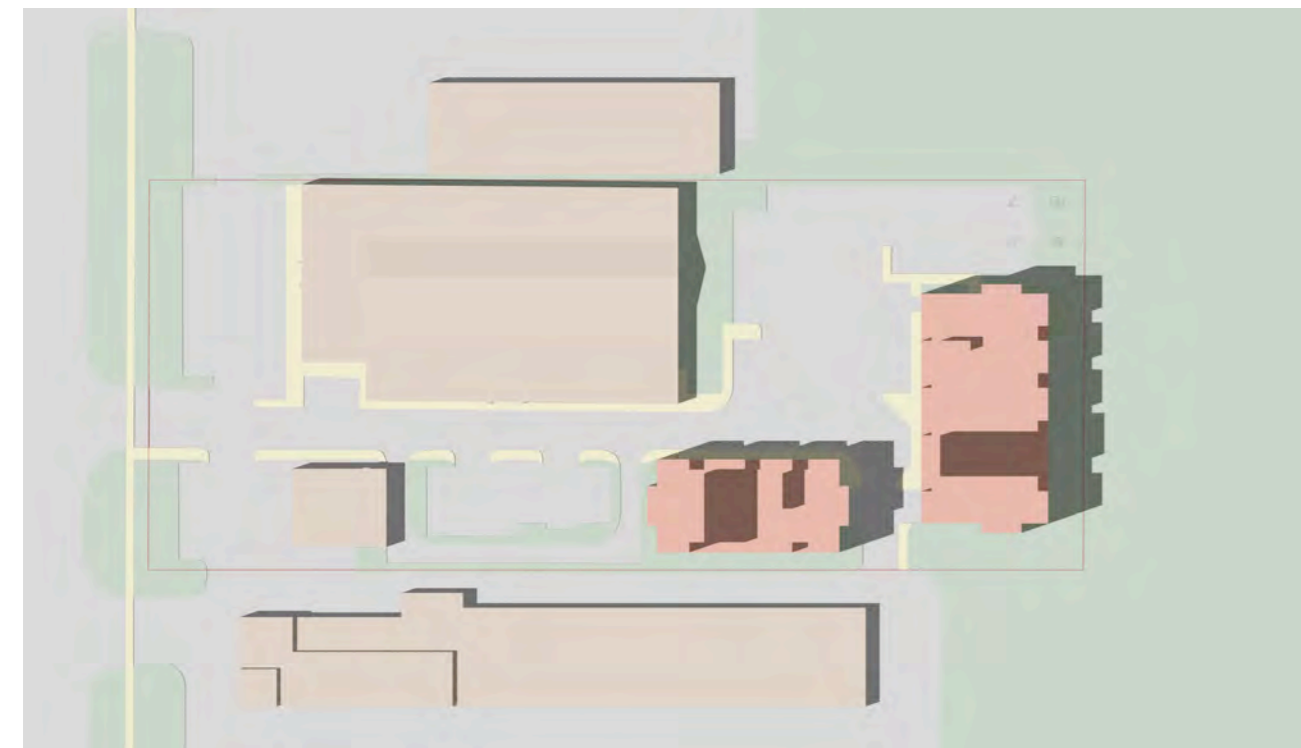
11:55 AM



12:55 PM



1:55 PM



2:55 PM



3:55 PM



4:55 PM



5:55 PM



6:55 PM

## SUNSET 8:11 PM

### NOTES:

1. THERE ARE NO ADJACENT RESIDENTIAL AMENITY SPACES AFFECTED BY CAST SHADOWS.
2. ADJACENT PUBLIC SPACES AND SIDEWALKS ARE EXPOSED TO SUNLIGHT FOR AT LEAST 6 CONSECUTIVE HOURS PER DAY.
3. THERE ARE NO UNDUE SHADOW IMPACTS ON PUBLIC PARKS AND OPEN SPACES, PRIVATE AMENITY AREAS, OR SURROUNDING STREETS.

## Shadow Study

This shadow study has been prepared for the proposed development. The figures shown on these drawing sheets represent shadows cast by the building mass at critical times on the dates outlined in the City of Barrie Shadow/Shading Terms of Reference document (April 21st, June 21st, September 21st, and December 21st.) The sets of shadows on all four days are depicted for hourly intervals beginning 1-1/2 hours after sunrise and ending maximum 1-1/2 hours before sunset.

Shadows cast at time intervals on each of the four days have been generated using three-dimensional computer modelling analysis (including sun intensity contrast). The figures illustrate that the massing of the proposed development will cast limited shadow onto portions of the sidewalk on the east side of Bayfield Street for only short periods of time in the early morning hours. In addition, the massing will cast limited shadow onto portions of the neighbouring properties (including the currently vacant property to the east) only in late afternoon hours.

The development allows full sun on the faces and roofs of all adjacent buildings for at least six consecutive time period intervals each day during all months of the year, and causes no undue shadow impacts on public parks and open spaces, private amenity areas, or surrounding streets and sidewalks.

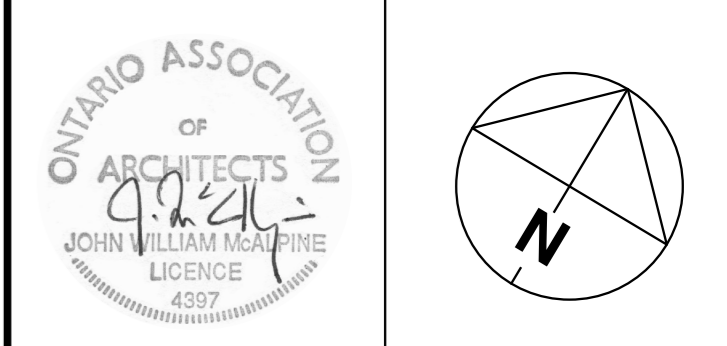


### Key Plan

Issue	Date	Description	By
01	MAR 16/23	SITE PLAN APPLICATION	J.M.

Rev.	Date	Description	By
01	N/A	N/A	J.M.

keith loffler mc Alpine architects  
80 BLOOR STREET WEST, SUITE 401, TORONTO, ONTARIO, M5S 2V1 | (416) 964-1902 | [www.klma.com](http://www.klma.com)



SITE PLAN APPLICATION			
Issued for	Scale	Drawn by	Checked by
MARCH 16, 2023	SEE IMAGES	J.M.	J.M.
1935			

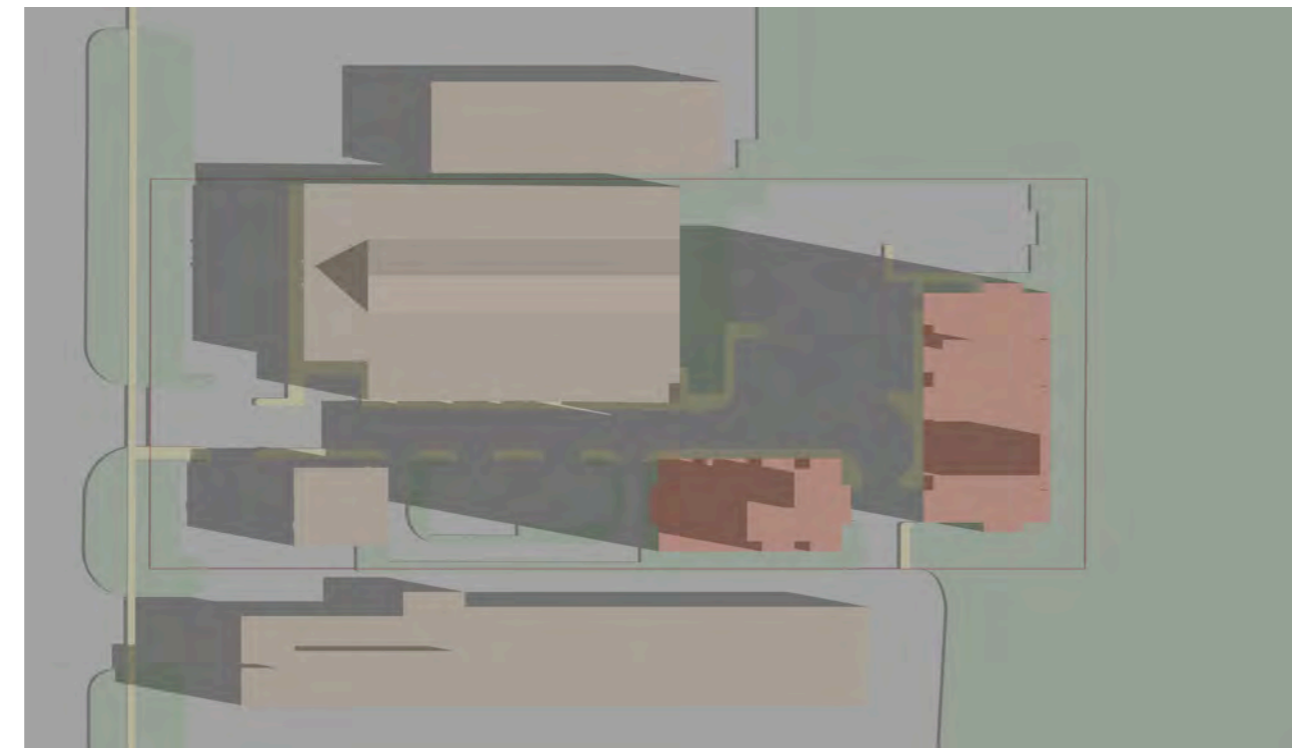
**Mixed Use Development Buildings 3 & 4**  
535 Bayfield Street, Barrie, Ontario  
OWNER: Petro Gold Ltd.

## Shadow Study April 21

Drawing Title  
**SS1**

# JUNE 21

SUNRISE 5:34 AM



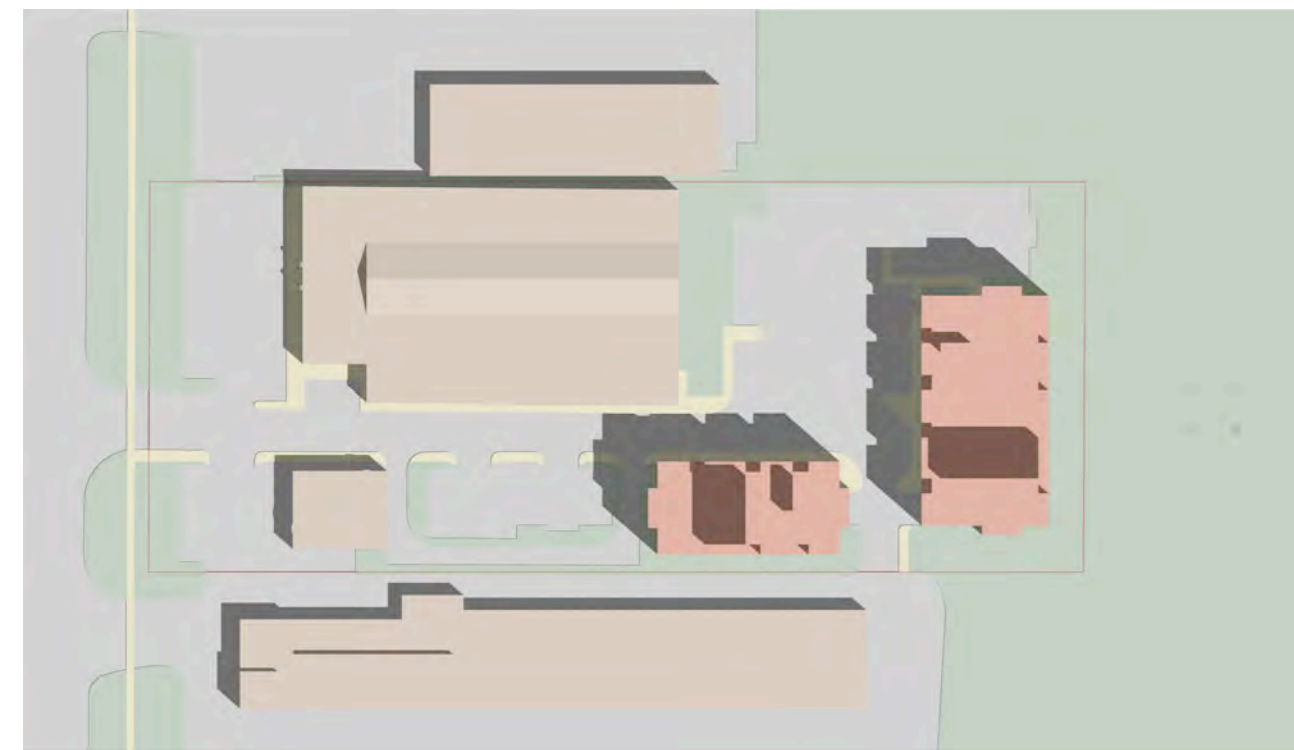
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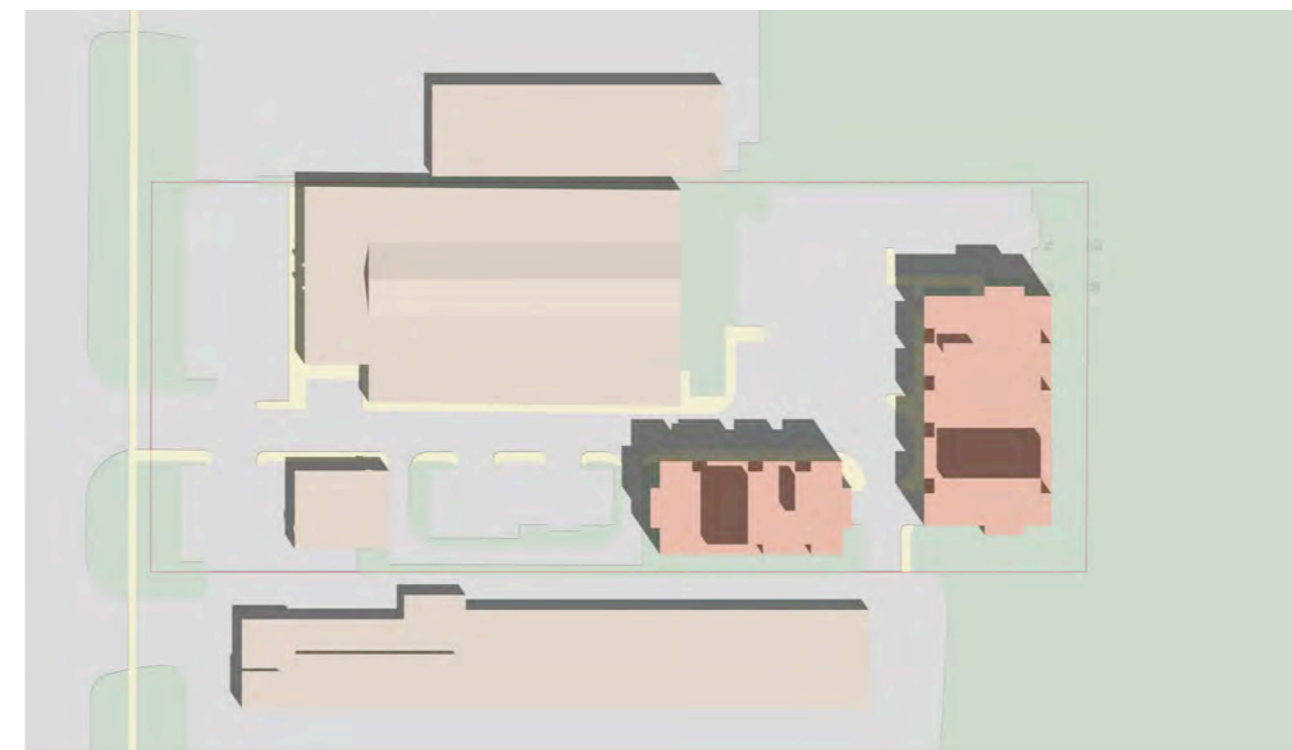
8:00 AM



9:00 AM



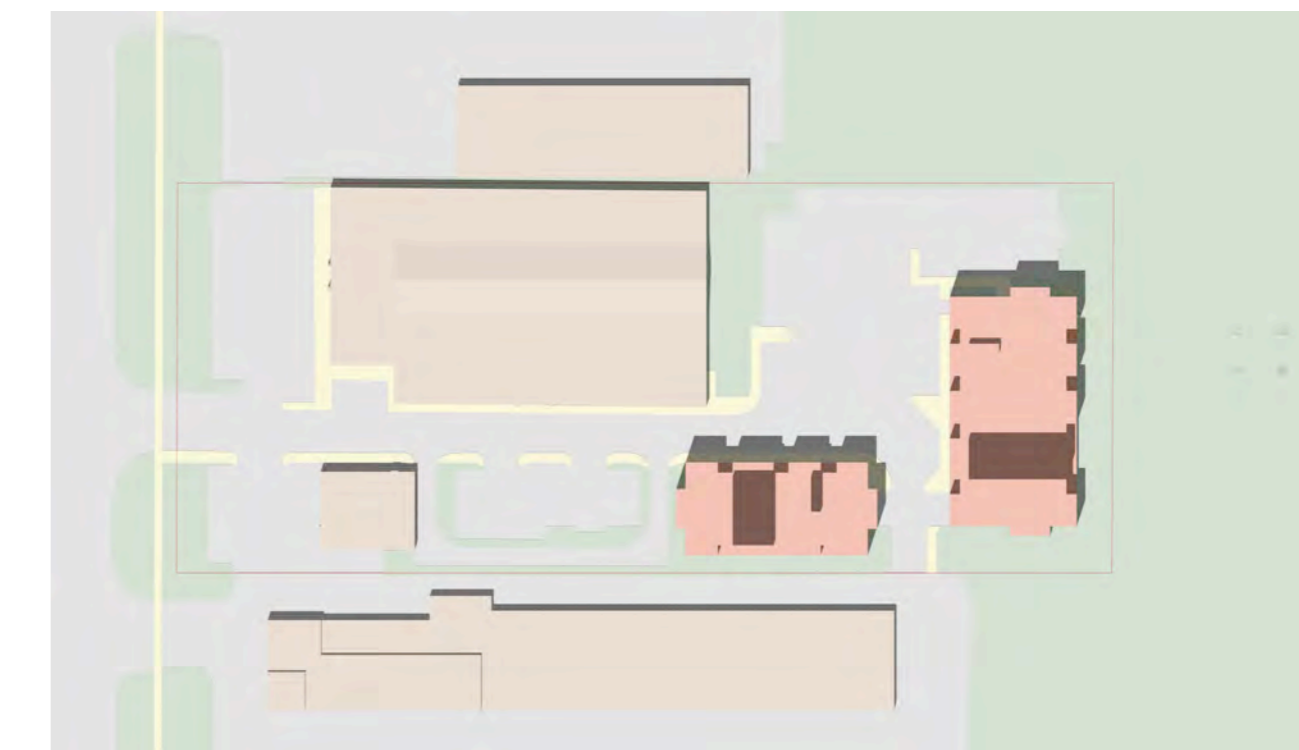
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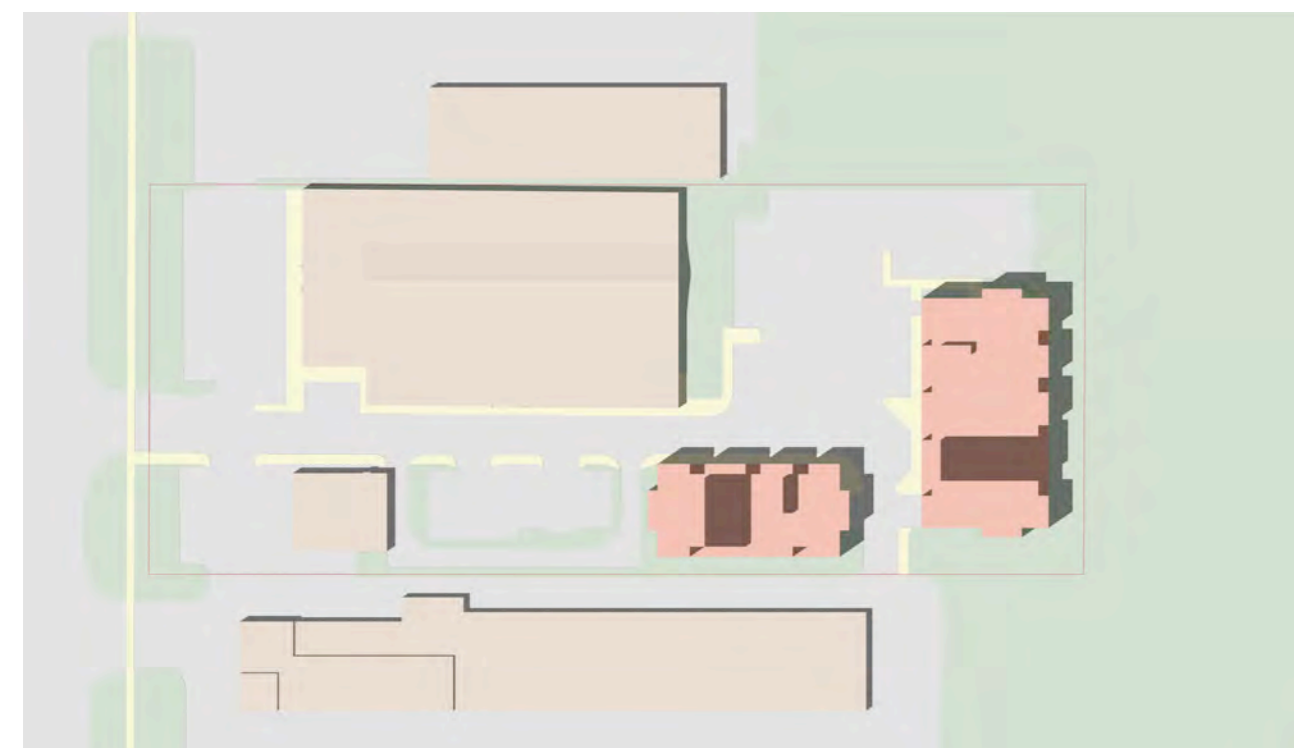
11:00 AM



12:00 PM



1:00 PM



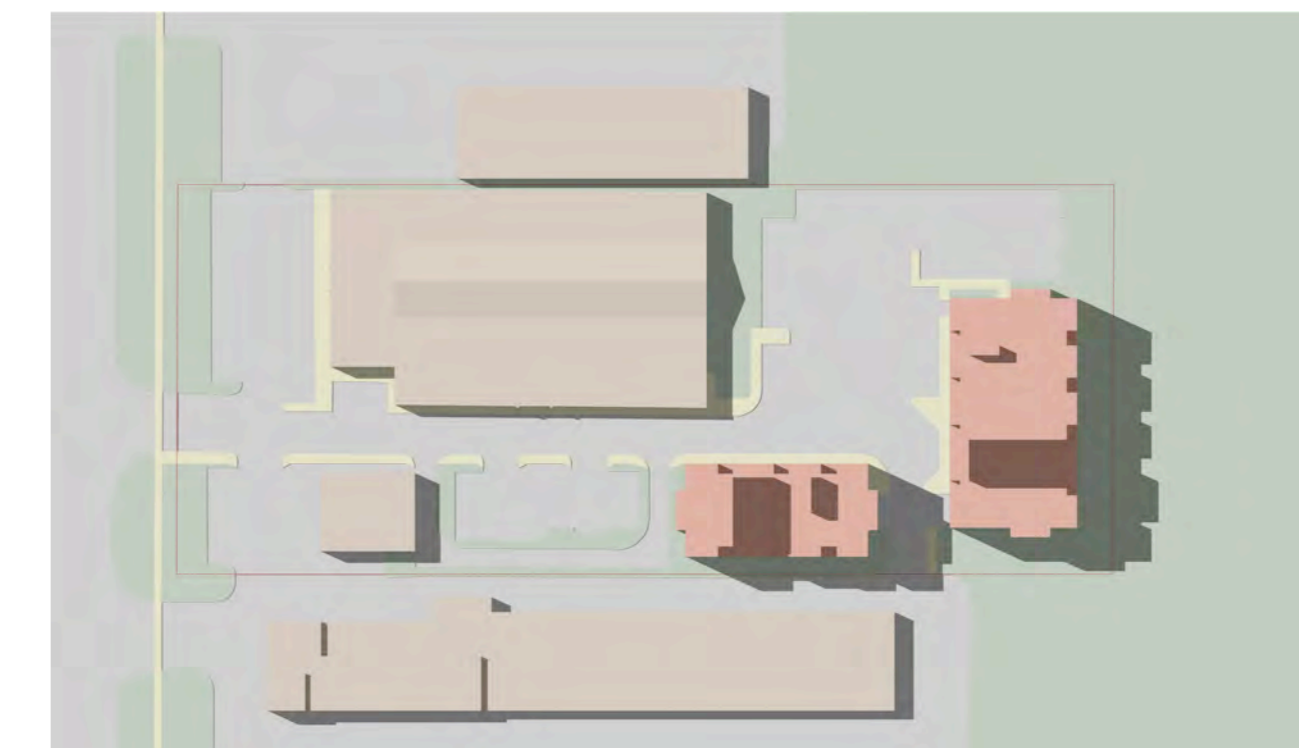
2:00 PM



3:00 PM



4:00 PM



5:00 PM



6:00 PM



7:00 PM



8:00 PM

SUNSET 9:07 PM

**NOTES:**

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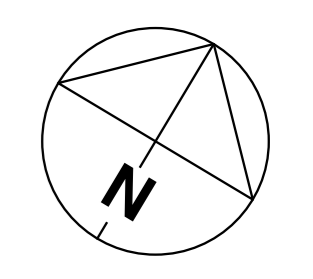


**Key Plan**

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01	N/A	N/A	J.M.

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Professional Certification		
SITE PLAN APPLICATION		
Issued for	SEE IMAGES	
Issue date	MARCH 16, 2023	Scale
Project no.	1935	Drawn by
	J.M.	Checked by
		J.M.

**Mixed Use Development Buildings 3 & 4**  
535 Bayfield Street, Barrie, Ontario  
OWNER: Petro Gold Ltd.

**Shadow Study June 21**

Drawing Title  
**SS2**

# SEPTEMBER 21

SUNRISE 7:05 AM



8:35 AM



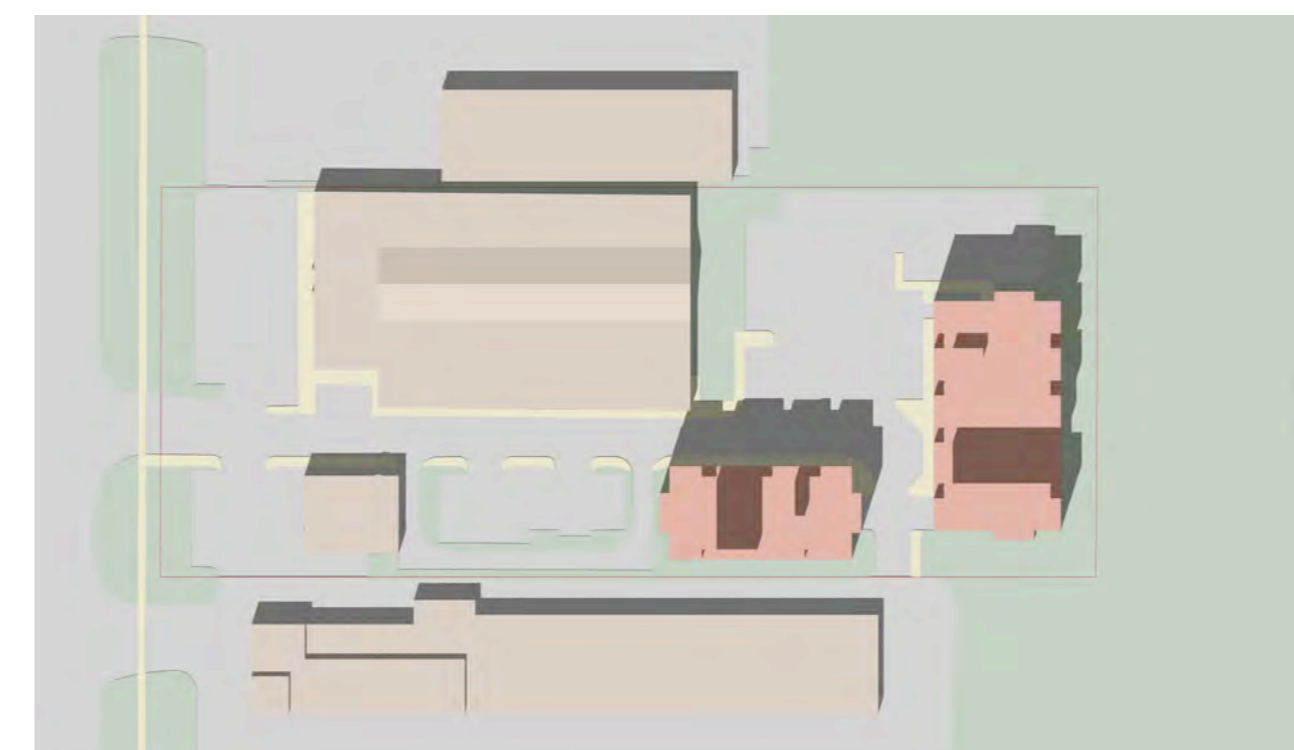
9:35 AM



10:35 AM



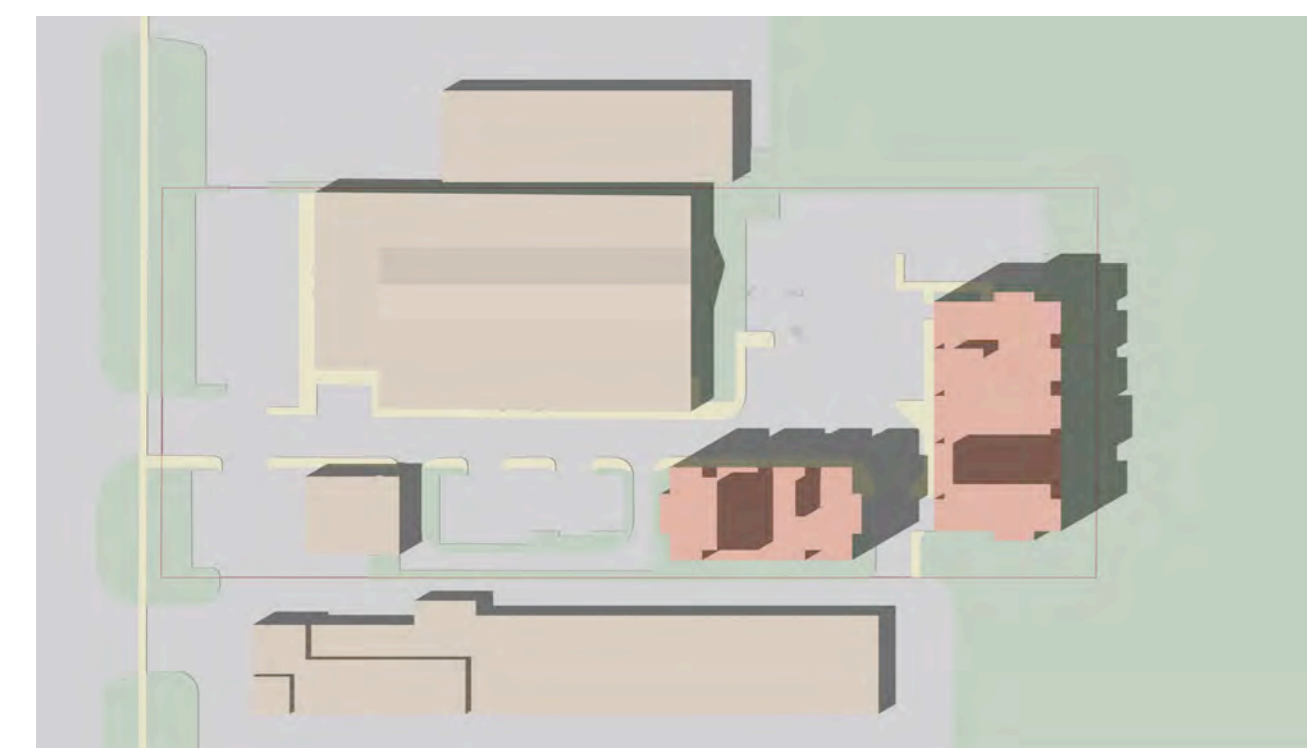
11:35 AM



12:35 PM



1:35 PM



2:35 PM



3:35 PM



4:35 PM



5:35 PM



6:35 PM

## SUNSET 7:18 PM

### NOTES:

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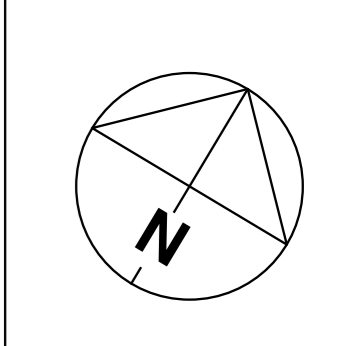


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Project no.	1935	Drawn by: J.M. / Checked by: J.M.

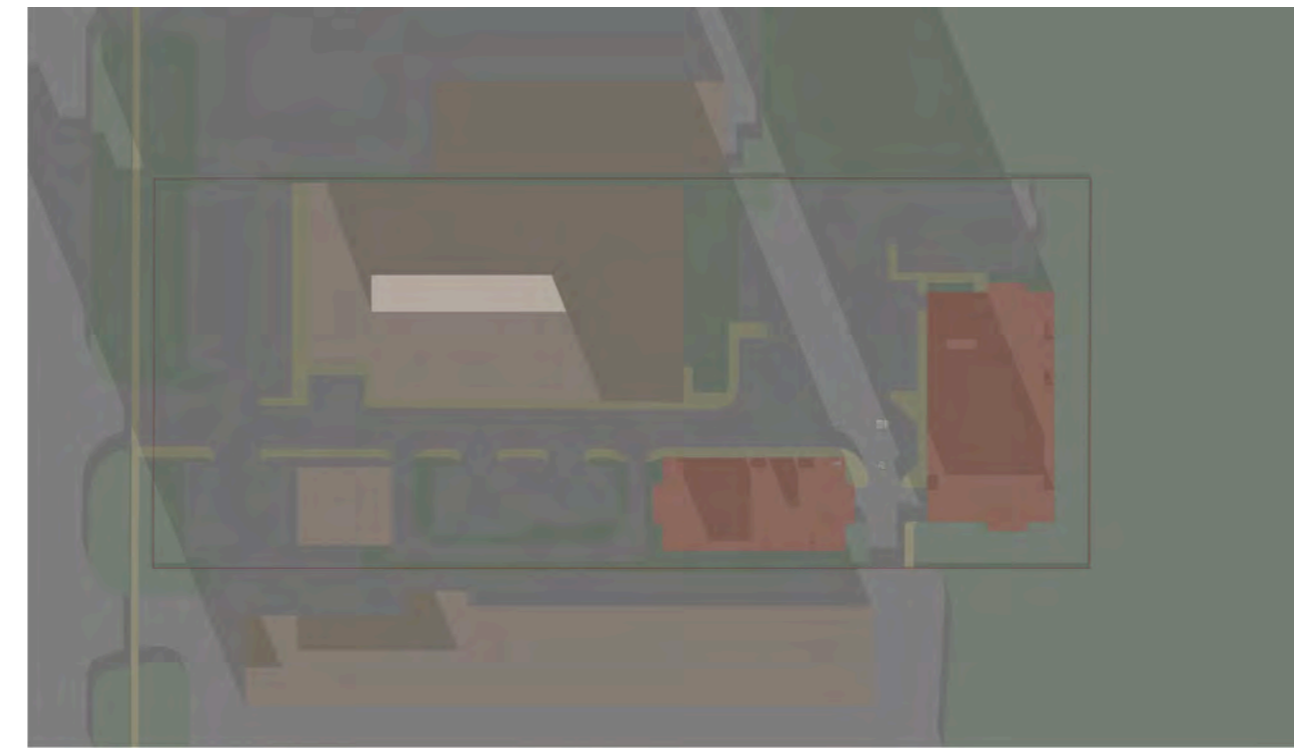
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**Shadow Study September 21**

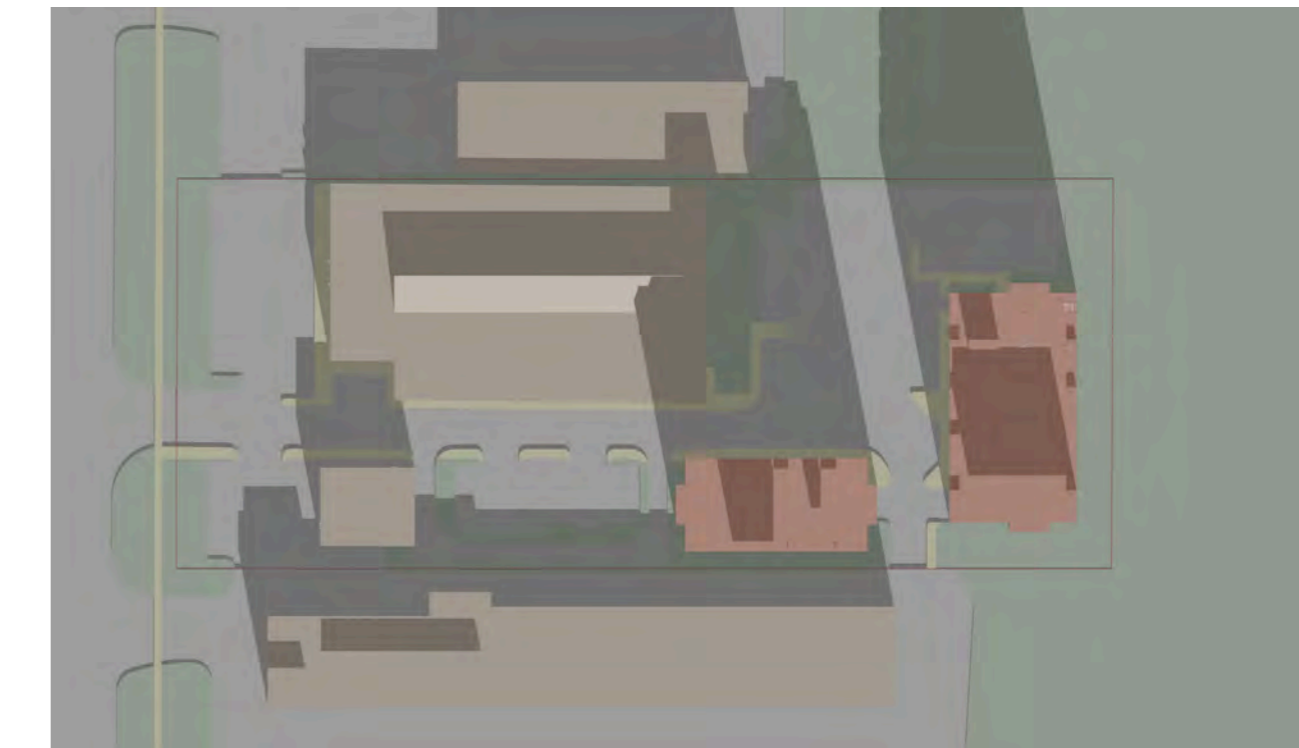
Drawing Title  
**SS3**

# DECEMBER 21

SUNRISE 7:52 AM



9:15 AM



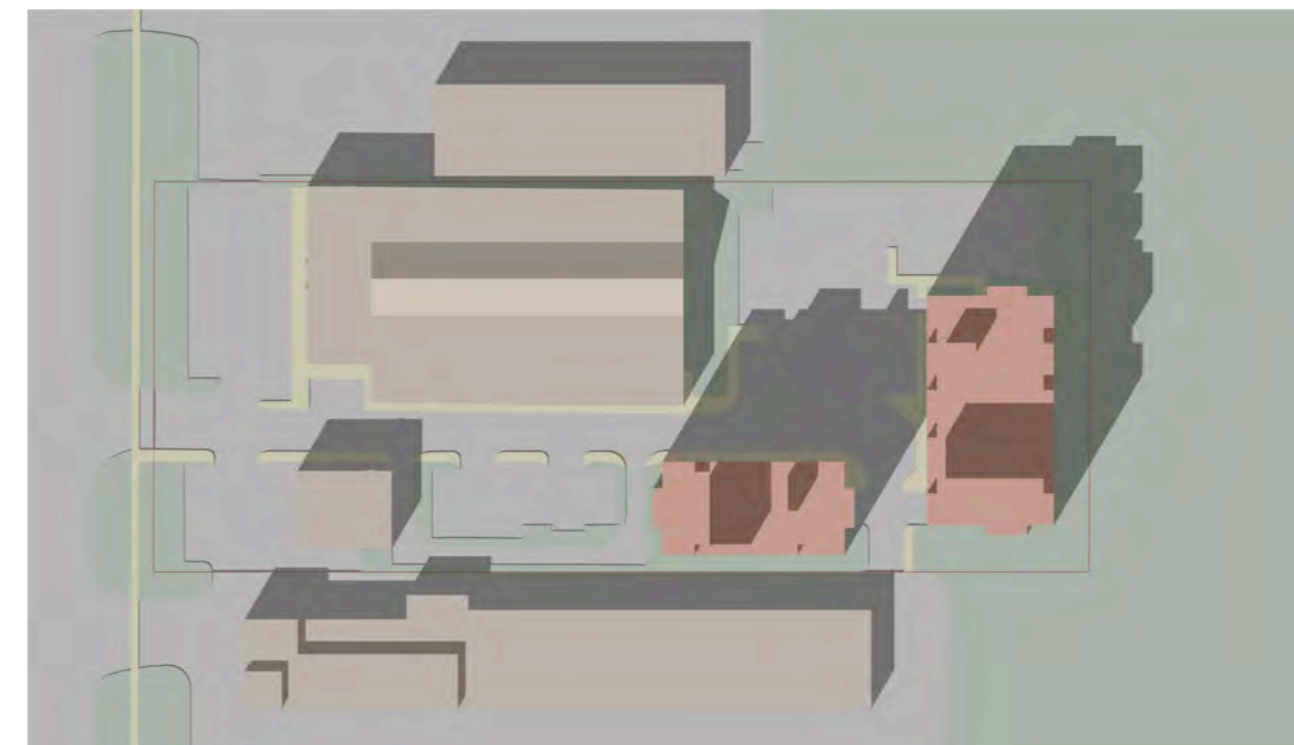
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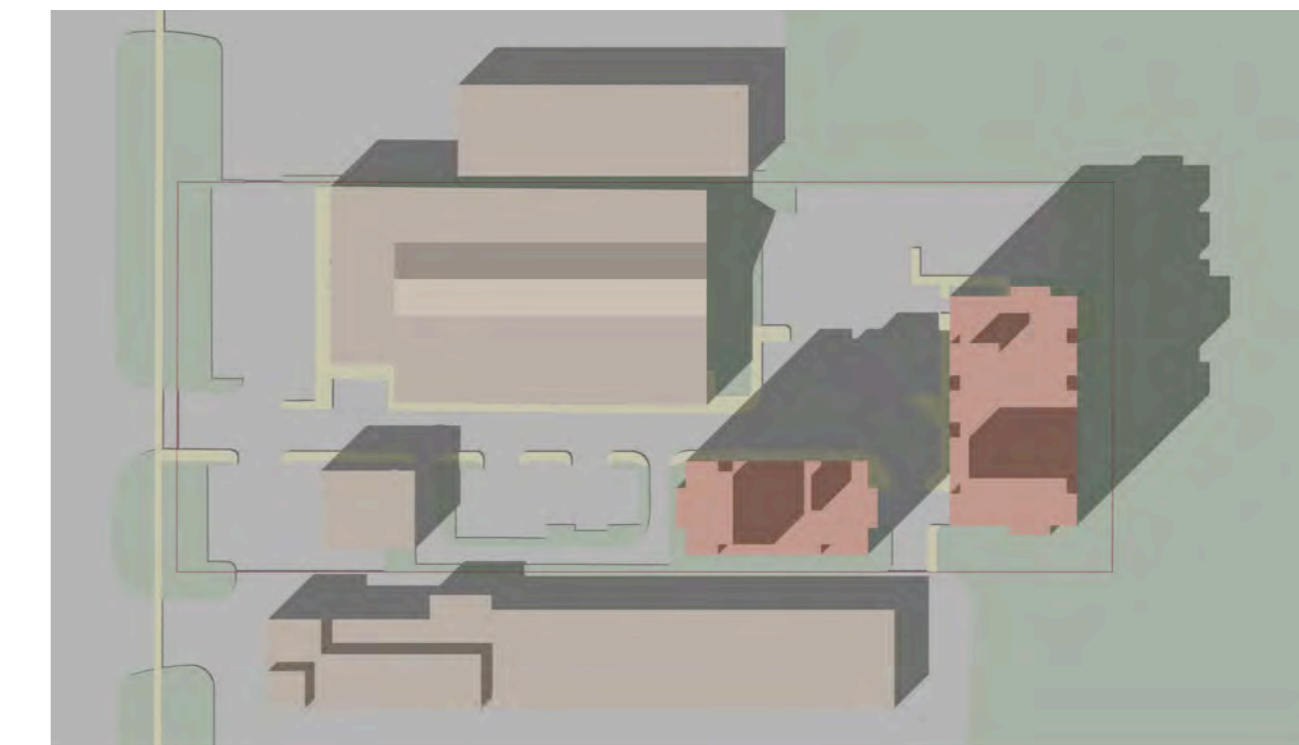
11:15 AM



12:15 PM



1:15 PM



2:15 PM



3:15 PM



4:15 PM

## SUNSET 4:24 PM

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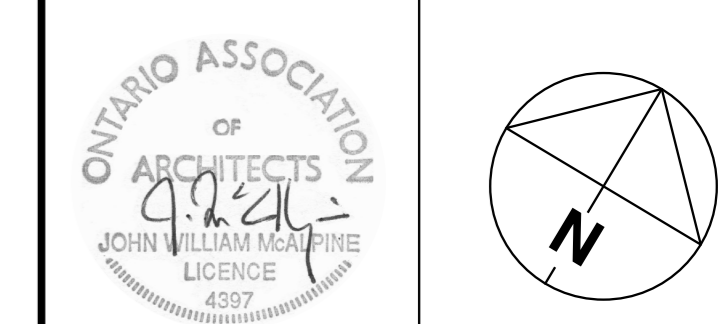


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SITE PLAN APPLICATION			
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1935	J.M.	J.M.	
Project no.	Drawn by	Checked by	

**Mixed Use Development Buildings 3 & 4**  
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OWNER: Petro Gold Ltd.

**Shadow Study December 21**

Drawing Title  
**SS4**