# VIC 2

SHADOW STUDY

April 26, 2024

PREPARED FOR: FOREST GREEN HOMES 5332 HIGHWAY NO. 7 WOODBRIDGE, ONTARIO L4L 1T3

VIC 2 150 RUTLEDGE ROAD MISSISSAUGA, ONTARIO



## **SHADOW STUDY - SUMMARY**

This shadow study illustrates the impact of the proposed 10 storey condominium. The study has been completed as per the Mississauga Standards for Shadow Studies (November 2022).

Shadows for each designated time produced with Autodesk Revit Architectural Software, using location:

Mississauga, Ontario Latitude 43 deg. 35' 20" N Longitude 79 deg. 38' 40" W

LEGAL INFORMATION TAKEN FROM COMBINATION OF:

TOPOGRAPHY OF
PART OF LOT 4
CONCESSION 5
WEST OF HURONTARIO STREET
(GEOGRAPHIC TOWNSHIP OF TORONTO)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

SURVEY PREPARED BY: KRCMAR SURVEYORS LTD. 1137 CENTRE STREENT THORNHILL, ON, L4HJ 3M5 DATED: MAY 2, 2022

Surrounding building and road locations based on Ontario Property Data Maps and City of Mississauga 3D mapping.

Proposed buildings Massing and location as prepared by Global Architect Inc.



#### SHADOW STUDY - SUMMARY

Criteria 3.1, 3.3 and 3.5 of Section 3 of "Urban Design Terms of Reference -Standards for Shadow Studies" have been identified as applicable to the study site. The times of day simulated for each date are shown herein. The shadow cast by the proposed development are assessed based on its impact on the areas identified in the criterion.

## Criterion3.1: "Residential Private Outdoor Amenity Spaces"

Based on this criterion, "Shadow from proposed development should not exceed one hour in duration on areas such as private rear yards, decks, patios and pools of surrounding residential dwellings on June 21 and September 21". "This criterion is met if there is shadow impact for no more than two consecutive hourly test times". No properties are affected for two consective hourly test times by the proposed development.

## Criterion3.2: "Communal Outdoor Amenity Areas"

Based on this criterion, communal outdoor amenity areas should allow for full sun of 50% of the area for each of the required dates. The proposed development allows for full sun for 42% of June 21, 36% on September 21 and 12% on December 21.

The courtyard experiences more than 50% sun on June 21, between 11:20 and 17:20, with a mid afternoon peak at 14:20 of 84%. On September 21, the majority of the afternoon between 13:12 and 16:12 experiences more than 50% sun with a peak of 65% at 15:12.

The Street amenity area experiences 70% sun average on June 21, and 49% sun average on September 21.

### Criterion3.3: "Public Realm", for "Low and Medium Density Residential Streets"

The project site was identified as Low and Medium Density Residential Streets. Based on this criterion, the development must not impact the opposite boulevard including the full width of the sidewalk at 9.12am, 10.12am, 11.12am, 3.12pm, 4.12pm and 5.12pm on September 21. For this development there is no boulevard to the North side of Rutledge as there is the rail lands. To the South-East there is no impact to the sidewalk fronting the Credit River Retirement Residence at 175 Rutledge Road.

# Criterion3.5: "Building faces to allow for the possibility of using solar energy"

The criterion states that the shadow impacts from the proposed developments should not "exceed two consecutive hourly test times in duration on the roofs, front, rear and exterior side walls of adjacent low-rise residential buildings including townhouses, detached and semi-detached dwellings on September 21 to allow for the possibility of harvesting solar energy".

This new proposed development generates no incremental shadows in more than two consecutive hourly test times within the 7.5m "No Impact Zone" for adjacent properties.

Ranieri Possamai B. Arch Sci., M. Arch. OAA, MRAIC Principal Architect





#### **JUNE 21**

Shadows for each designated time produced with Autodesk Revit Architectural Software, using location:
Mississauga, Ontario
Latitude 43 deg. 35' 20" N
Longitude 79 deg. 38' 40" W

#### LEGAL INFORMATION TAKEN FROM:

TOPOGRAPHY OF PART OF LOT 4 CONCESSION 5 WEST OF HURONTARIO STREET (GEOGRAPHIC TOWNSHIP OF TORONTO) CITY OF MISSISSAUGA REGIONAL MUNICIPALITY OF PEEL

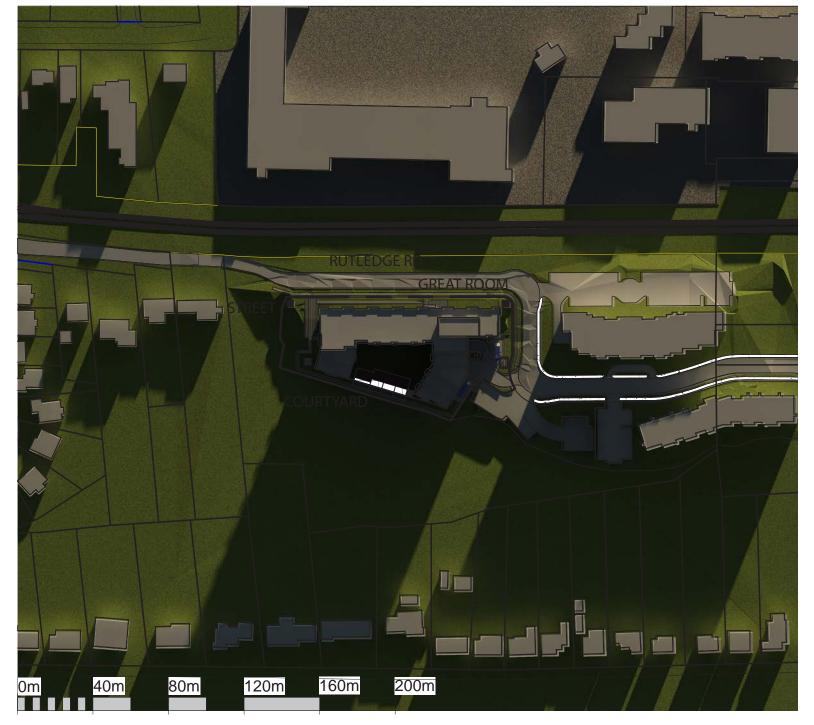
SURVEY PREPARED BY: KRCMAR SURVEYORS LTD. 1137 CENTRE STREENT THORNHILL, ON, L4HJ 3M5 DATED: MAY 2, 2022

Surrounding building and road locations based on Ontario Property Data Maps and City of Mississauga 3D mapping.

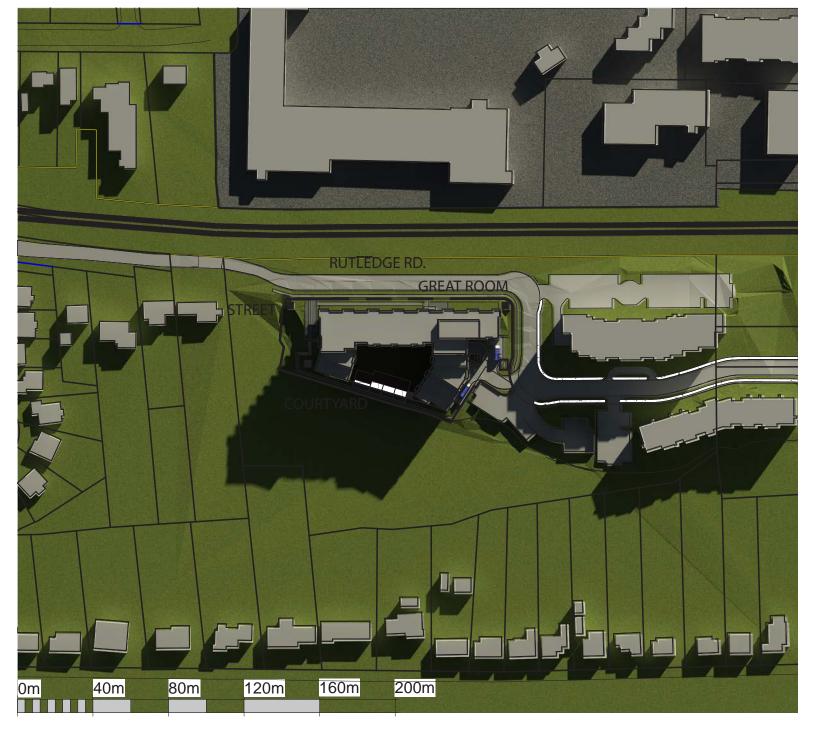
Proposed buildings Massing and location as prepared by Global Architect Inc.

June 21							
		Great					
Time	Courtyard	Room	Street	Total			
707	0	41		41			
720	0	41	76.6	117.6			
820	0	41	61	102			
920	8.5	41	49.3	98.8			
1020	232	41	38.3	311.3			
1120	429	17.9	20	466.9			
1220	488	0	1.7	489.7			
1320	532	0	122.8	654.8			
1420	573	0	132	705			
1520	548	0	132	680			
1620	471	0	132	603			
1720	369	0	132	501			
1820	215	0	132	347			
1920	7	0	132	139			
1933	2	0	132	134			
Average Area	258	15	92	359			
Total Area	682	41	132	855			

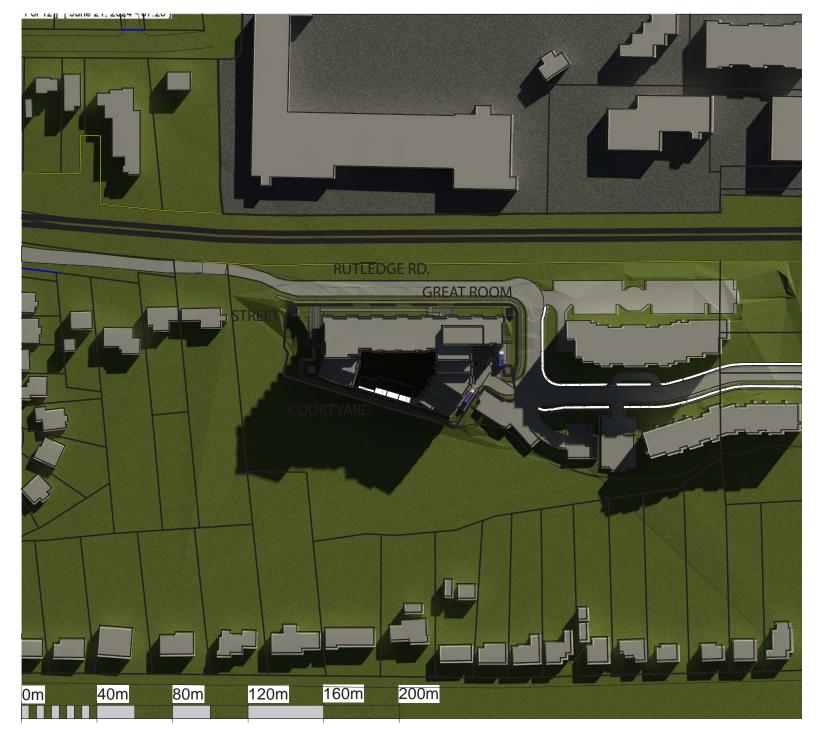




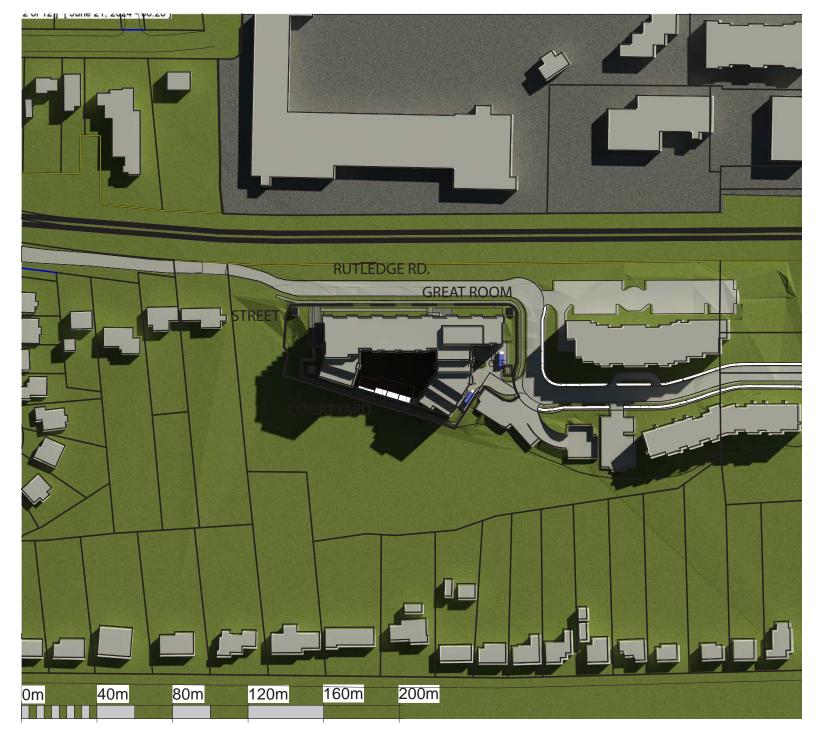




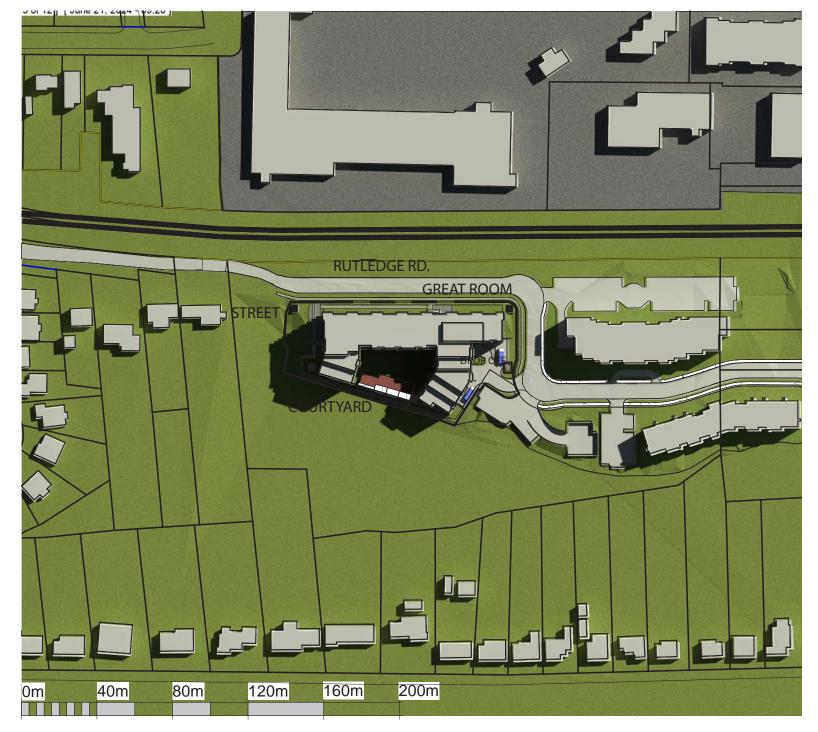




































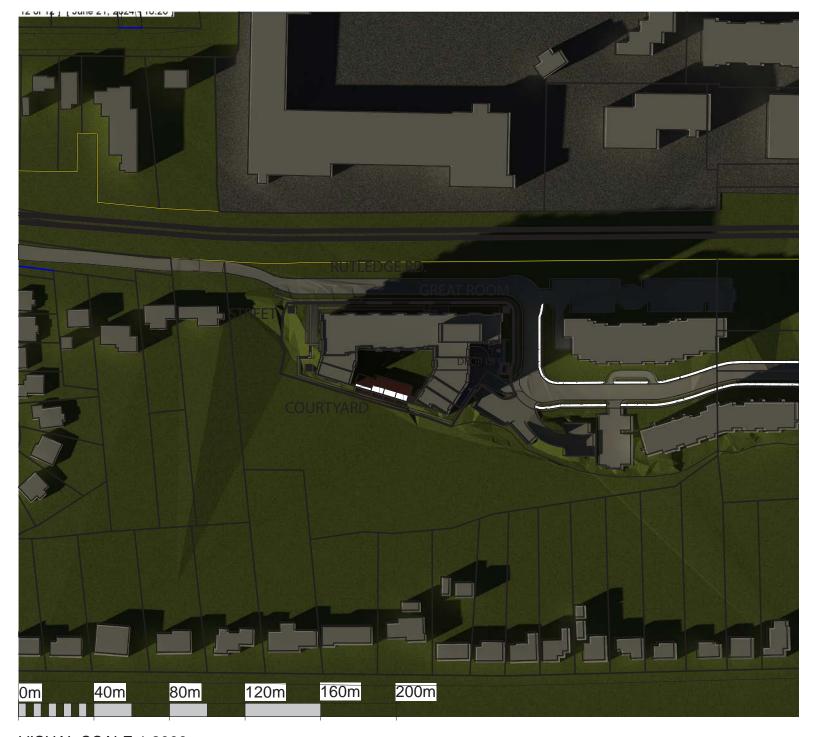


























#### **SEPTEMBER 21**

Shadows for each designated time produced with Autodesk Revit Architectural Software, using location:
Mississauga, Ontario
Latitude 43 deg. 35' 20" N

Longitude 79 deg. 38' 40" W

#### LEGAL INFORMATION TAKEN FROM:

TOPOGRAPHY OF PART OF LOT 4 CONCESSION 5 WEST OF HURONTARIO STREET (GEOGRAPHIC TOWNSHIP OF TORONTO) CITY OF MISSISSAUGA REGIONAL MUNICIPALITY OF PEEL

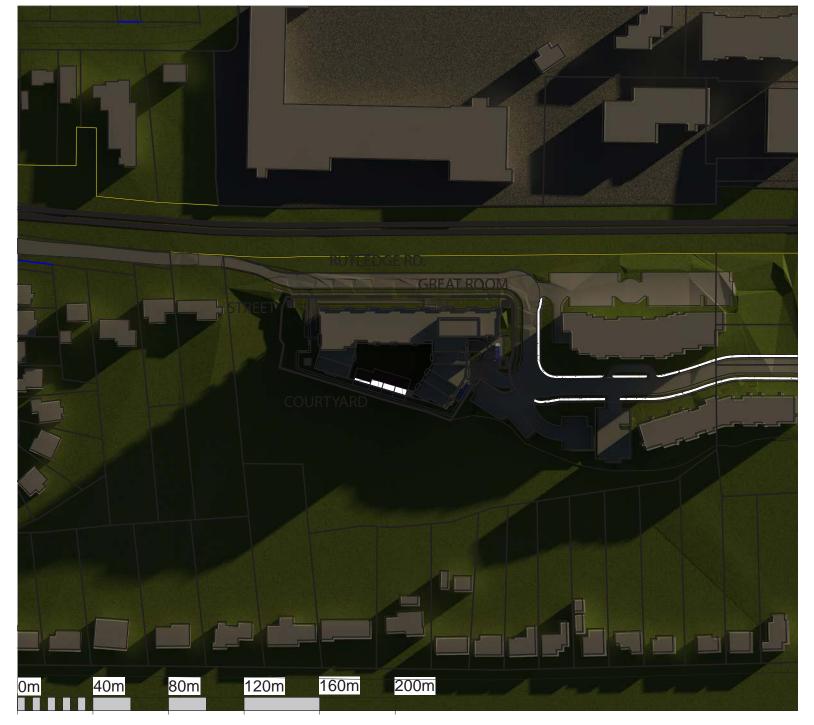
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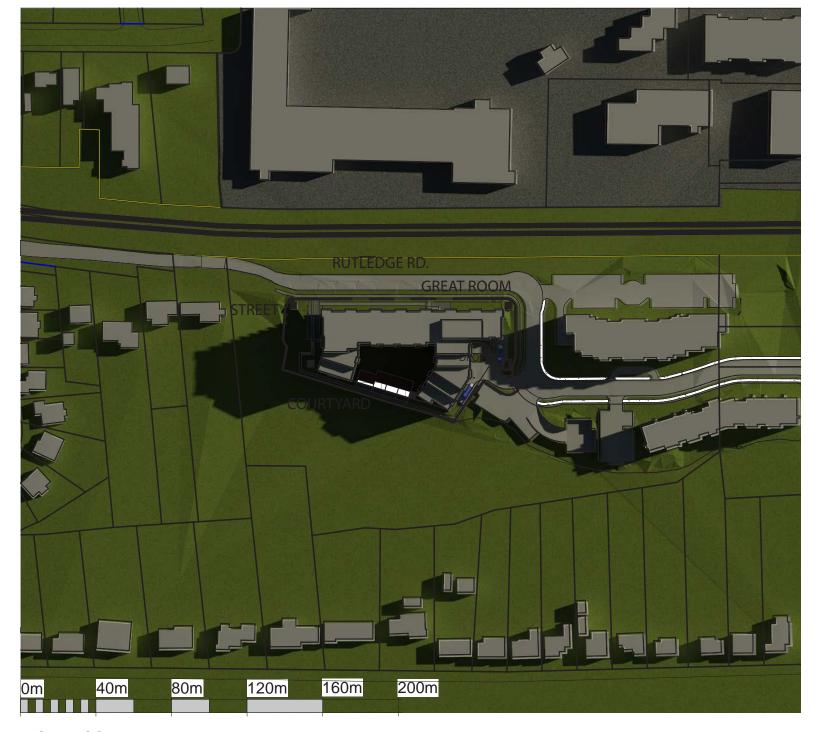
Proposed buildings Massing and location as prepared by Global Architect Inc.

September 21						
		Great				
Time	Courtyard	Room	Street	Total		
835	0	41	48.3	89.3		
912	102	41	40	183		
1012	110	7.5	10	127.5		
1112	232	0	0	232		
1212	279	0	0	279		
1312	332	0	0	332		
1412	387	0	82.7	469.7		
1512	440	0	132	572		
1612	420	0	132	552		
1712	215	0	132	347		
1748	40	0	132	172		
Average Area	232	8	64	305		
Total Area	682	41	132	855		























































#### **DECEMBER 21**

Shadows for each designated time produced with Autodesk Revit Architectural Software, using location:

Mississauga, Ontario Latitude 43 deg. 35' 20" N Longitude 79 deg. 38' 40" W

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TOPOGRAPHY OF PART OF LOT 4 CONCESSION 5 WEST OF HURONTARIO STREET (GEOGRAPHIC TOWNSHIP OF TORONTO) CITY OF MISSISSAUGA REGIONAL MUNICIPALITY OF PEEL

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December 21						
		Great				
Time	Courtyard	Room	Street	Total		
919	0	0	0	0		
1017	0	0	0	0		
1117	19	0	0	19		
1217	115	0	0	115		
1317	181	0	0	181		
1417	187	0	2.6	189.6		
1515	103	0	84	187		
Average Area	86	0	12	99		
Total Area	682	41	132	855		



