



R.A. LUMBAO ARCHITECTS INC.

Architects .Consultants . Designers

Date: July 30, 2025

Project No: 24018

Project: Mixed Used Condominium Development

51-55 Dundas St. W., 60-78 Agnes St. Mississauga, ON L5B 1J7

Re: Shadow Study Analysis Report:

This Shadow Study Analysis Report has been prepared by R.A. Lumbao Architects Inc. and are to be read in conjunction with the Shadow Study drawings Drawing No. A014-A028 and Architectural Drawings.

Introduction

Location

The proposed Mixed-Use Development is located between the major intersection of Dundas Street West, Hurontario Street at Northeast and Confederation Parkway at Southwest. It is bounded by Cook Street along East road and Agnes Street along North.

Site Latitude and Longitude Acquired through Mississauga Maps by entering address: 60 Agnes Street.

Latitude: 43.57956° N

Longitude: 79.61882° W

Time Zone

Daylight Saving Time GMT-4/Standard Time GMT-5

Reference Bearing for Agnes Street:

Approximately: N38°00'00"E

Astronomic North and Software Use to Prepare Shadow Analysis

The North orientation was determined using the Topographical Survey by Tarasick McMillan Kubicki Limited. File no. 10203-SRPR-T, Dated September 5, 2024, the base plan for the site model was downloaded from CAD Mapper and 3D Sketchup modeler for Shadow analysis.



Shadow Study Summary and Compliance Assessment

The proposed development consists of a 7-storey podium and a single tower with a total building height of 34 storeys. A shadow study was conducted for the seasonal test dates of March 21, June 21, and September 21. The study demonstrates that the proposed development creates no major shadow impacts on neighboring properties, streets, parks, or open spaces.

3.1 Residential Private Outdoor Amenity Spaces

Private residential outdoor amenity spaces within and adjacent to the development include:

- The rooftop amenity spaces of the proposed development, which are clearly identified and labeled in the architectural drawings.

According to the City's shadow study Terms of Reference, the criterion for compliance is met when shadows from the development do not fall within the No Impact Zone for more than two consecutive hourly test times. The shadow analysis confirms this requirement is satisfied.

3.2 Communal Outdoor Amenity Areas

The **TL Kennedy Secondary School** to the north, with outdoor playing fields located further west, represents the main communal outdoor amenity area within the vicinity.

- Shadow diagrams indicate compliance with the Sun Access Factor (SAF) requirement of at least 50% sun coverage on March 21, June 21, and September 21.

These communal spaces receive adequate sunlight and are not adversely impacted by the proposed development.

3.3 Public Realm

The development is located at **Agnes Street and Cook Street**, within a mixed-use area comprising residential high-density, commercial, and employment uses.

Per the Terms of Reference, proposed developments must allow full sunlight on the opposite boulevard and sidewalk on September 21 for at least 5 hours, including:

- A mandatory 2-hour window between 12:12 p.m. and 2:12 p.m.
- An additional 2-hour window on either side of that time frame.

The shadow analysis confirms that there is no shadow impact on the opposite side of Agnes Street during these required periods. The proposal fully complies with this criterion.



3.4 Building Faces and Solar Energy Potential

The development is located within the Downtown Mississauga Intensification Area, designated for high-density residential use.

- The surrounding area are planned for high-density residential, mid to high -rise residential
- As such, the proposed development does not impede opportunities for solar energy use on adjacent building facades.

The shadow study confirms full compliance with this standard.

We are confident that the Shadow study analysis and Sun/ Shadow Analysis Report prepared by our team suffice the requirements for Zoning By-Law Amendment approval and should the City of Toronto have any further concerns, we are ready to discuss and resolve it to ensure public safety, environmental protection and relevant by-laws are adhered to and complied with.

Yours truly,

Rommel Lumbao, UAP, MRAIC, OAA

Principal Architect