

Date: July 29, 2026

Project: 12, 26 Park Street East

Shadow Study Analysis Report

This Shadow Study Analysis Report is to be read in conjunction with the Shadow Study sheets No. A6 00-A6 04 in the ZBA application package. This shadow study is based on the requirements set out in Mississauga's Urban Design Terms Reference – Standards for Shadow Studies.

Introduction

This shadow study evaluates the shadow impacts generated by the proposed development and assesses compliance with applicable shadow impact criteria.

Location

The shadow study references a site latitude of 43 degrees 35' 20" N and longitude of 79 degrees 38' 40" W.

Time Zone

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

Reference Bearing for Park St E

Approximately N38°02'50"E

Astronomic North Orientation and Base Plan

True North orientation was determined using the Topographical Survey by Tarasick McMillan Kubicki Limited. File no. 10412-SRPR-T dated April 17, 2025, and includes verified property boundaries, street alignments, and surrounding contextual and topographical features. The 3D base mapping (CAD file) was obtained from the city of Mississauga. Base mapping includes a minimum coverage area of four times the tallest proposed building height to the North, East and West and 1.5 times the tallest proposed building height to the South.

Shadow Study Summary and Compliance Assessment

The shadow study analysis demonstrates that the proposed development meets the City's standards for sun and daylight access on neighbouring properties and within the public realm.

3.1 Residential Private Outdoor Spaces

Shadow impacts from the proposed development do not exceed one hour in duration on the private rear yards, decks, patios, and pools of surrounding residential dwellings on June 21 and September 21. Shadow impacts occur for no more than two consecutive hourly test times within the "No Impact Zone"; therefore, the criterion is met.

3.2 Communal Outdoor Amenity Areas

Two proposed communal outdoor amenity areas are located within the development site, on Level 7 of the proposed building, and at Ground Level. An existing outdoor pool amenity area for 39 Stavebank Rd is located adjacent to the site on the South-West side.

For the proposed communal outdoor amenity area located on Level 7, the Sun Access Factor is 0.571 for June 21, 0.626 for September 21, and 0.592 for December 21; therefore, the criterion is met.

For the proposed communal outdoor amenity area located at Ground Level, the Sun Access Factor is 0.368 for June 21, 0.389 for September 21, and 0.168 for December 21. The proposed ground-level communal outdoor amenity area is provided as additional amenity space for the existing residential buildings on the site and does not contribute toward the minimum required outdoor amenity area of the proposed building. Although the shadow impact criterion is not met for this ground-level amenity area, the additional shadowing is limited in duration and occurs primarily during the morning and evening, as well as during periods of low solar altitude in December. In addition, the majority of the shadowing is caused by the existing context rather than the proposed development.

The existing ground-level outdoor pool for 39 Stavebank Rd only receives incremental shadows from the proposed development on June 21 between 7:07 a.m. and 8:20 a.m.; therefore, the criterion is met.

3.3 Public Realm

There are no shadow impacts from the proposed development on the opposite sides of Park Street East and Stavebank Road including the full width of the sidewalk at 12:12 p.m., 1:12 p.m. and 2:12 p.m., and three consecutive times at 9:12 a.m., 10:12 a.m. and 11:12 a.m. on September 21; therefore, the criterion is met. There is limited shadow impact on the opposite side of Queen Street East at 2:12 PM on September 21. However, there is no incremental shadow from the proposed development for five consecutive times between 9:12 AM and 1:12 PM.

Vimy Park, located south-east of the development site, receives no incremental shadow from the proposed development at any of the test times on September 21; therefore, the criterion is met for public open spaces, parks, and plazas.

3.4 Turf And Flower Gardens in Public Parks

The proposed development's shadow does not impact the growing season from March to October of any public park.

3.5 Building Faces to Allow for the Possibility of Using Solar Energy

Shadow impacts from the proposed development do not exceed one hour in duration on the roofs, front walls, rear walls, and exterior side walls of adjacent low-rise residential buildings on September 21. Shadow impacts occur for no more than two consecutive hourly test times within the "No Impact Zone"; therefore, the criterion is met.

Yours truly,

Andrea Nagy MArch, OAA, LEED GA
Senior Associate