BDP.
Quadrangle



38-50 Park Road

Toronto, Ontario
Shadow Study Package

05 June 2025

t 416 598 1240
www.bdpquadrangle.com

Quadrangle Architects Limited
The Well, 8 Spadina Avenue, Suite 2100
Toronto, ON M5V 0S8

Executive Summary

This Shadow Study was prepared by BDP Quadrangle in consultation with Bousfields Inc. in support of Official Plan and Zoning By-law Amendment applications to assess the incremental shadow impacts from the proposed development at the spring and fall equinoxes (March 21st and September 21st), and the summer and winter solstices (June 21st and December 21st) in accordance with the City of Toronto Terms of Reference for Sun/Shadow Studies.

Official Plan Policy 3.1.3(5) requires that new development be located and massed to ensure access to direct sunlight and daylight on the public realm. Policy 3.1.4(10) further provides that the tower portion of a tall building should be designed to limit shadow impacts on the public realm and surrounding properties and maximize access to sunlight and open views of the sky from the public realm. Policy 3.2.3(3) provides that the effects of development from adjacent properties on parks and open spaces, including additional shadows, will be “minimized as necessary to preserve their utility”.

The policies specific to the Apartment Neighbourhoods designation direct that new buildings are to provide separation distances between buildings on and adjacent to the site to achieve adequate sunlight (Policy 4.2.3(c)) and that those new buildings be massed to “adequately limit” shadow impacts on adjacent Neighbourhoods, particularly
during the spring and fall equinoxes (Policy 4.2.2(b)).

It should be noted that there are significant differences in topography in this area associated with the Rosedale Ravine. In that regard, the subject site sits at a geodetic height of 110.1m (established grade), whereas the bottom of the Ravine is at a geodetic height of about 105m near the subject site. On the north side of Rosedale Valley Road grading slopes up with the majority of the Neighbourhoods designated lands being situated at a geodetic height of about 114 to 115 metres and higher further to the north.

Downtown Plan includes additional policy direction with respect to shadowing of open spaces including on Rosedale Valley Ravine under Policy 7.13 which is part of the Core Circle identified on Map 41-6. Section on Creating a Comfortable Microclimate includes policy that requires development to address microclimating condition for people on adjacent streets and sidewalks, parks and open spaces by adequately limiting shadow conditions, as necessary to preserve their utility as set out in Policy 9.21. That same policy includes measures to help achieve these conditions and they include: reducing the floorplates of tall buildings, reducing the overall height and scale of buildings, re-orienting, reducing the size of and/or setting tall building elements on the site and increasing the space between tall building elements. It should also be noted that Rosedale Ravine is not identified as a Sun Protected Park and Open Space on Map 41-13.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Neighbourhoods
The closest stable residential Neighbourhoods-designated lands are located north of Rosedale Ravine on the north side of Rosedale Valley Road about 58 metres away from the proposed tower. Some of the properties within this Neighbourhoods consist of apartment buildings (including at 120 and 130 Rosedale Valley Road to the north of the subject site) while the vast majority of this residential area sits at the top of the Ravine.

There is also a smaller pocket of Neighbourhoods along Collier Street to the east of the subject site. These Neighbourhoods are situated in a more direct relationship with the high rises that characterize the Yonge/Bloor intersection as the City’s principal node in an area that already experiences shadowing from some of the tallest buildings in Toronto. This juxtaposition of scales is a frequent occurrence throughout the City’s Downtown.

The Shadow Study demonstrates that, at the spring and fall equinoxes, there will be minor incremental shadow impacts from the proposal on the larger stable Neighbourhoods, north of Rosedale Ravine. During the March/September 21 period shadows reach the low scale residential Neighbourhoods properties at 12:18pm and largely move off the area around 3:18pm. During that time the shadows move quickly across 5 properties in total.

There are no shadow impacts during the Spring/Fall Equinox period on the Neighbourhoods pocket along Collier Street to the east. In that regard, the proposed development satisfies the policy criteria with respect to adequately limiting shadow impacts in accordance with Policy 4.2.2.

Parks and Open Spaces
The majority of open space areas associated with Rosedale Ravine are designated Natural Areas in the City’s Official Plan including Lawrence Harris Park directly north of the subject site. In the general vicinity of the subject site, Rosedale Ravine is characterized by a dense, mature tree canopy including within Lawrence Harris Park which incorporates scattered seating and a pedestrian walkway but no formal active recreation zones. Many areas of the Ravine are not accessible to pedestrians due to grading and vegetation.

The shadow study prepared by BDP Quadrangle demonstrates that the shadow cast by the proposed development will move quickly across Rosedale Ravine throughout the day during the Spring and Fall Equinox Period. Later in the afternoon, its shadows will be mitigated by other existing high rises in the surrounding context. The shadow study also demonstrates that other buildings in the general vicinity cast comparable shadows on open space in this area which is reflective of the general character of built form which is dominated by tall and super tall buildings.

June shadows (i.e. Summer Solstice) produces the shortest shadows during the year due to the position of the sun above the horizon. As a consequence, shadow cast by the proposal stays on the south side of Rosedale Valley Road and continues to move quickly without any lingering impacts. Furthermore, the proposed tower configuration has a slender profile resulting in a narrow shadow that moves quickly across the area while the tower itself is situated away from the Park. Based on the foregoing, the proposal satisfies the policy criteria set out in Policy 3.2.3(3) of the Official Plan as well as Policy 7.13 of the Downtown Plan.

Existing Conditions



March 21 | 9:18 am

Proposed



March 21 | 9:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 10:18 am

Proposed



March 21 | 10:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 11:18 am

Proposed



March 21 | 11:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 12:18 pm

Proposed



March 21 | 12:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 1:18 pm

Proposed



March 21 | 1:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 2:18 pm

Proposed



March 21 | 2:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 3:18 pm

Proposed



March 21 | 3:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 4:18 pm

Proposed



March 21 | 4:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 5:18 pm

Proposed



March 21 | 5:18 pm

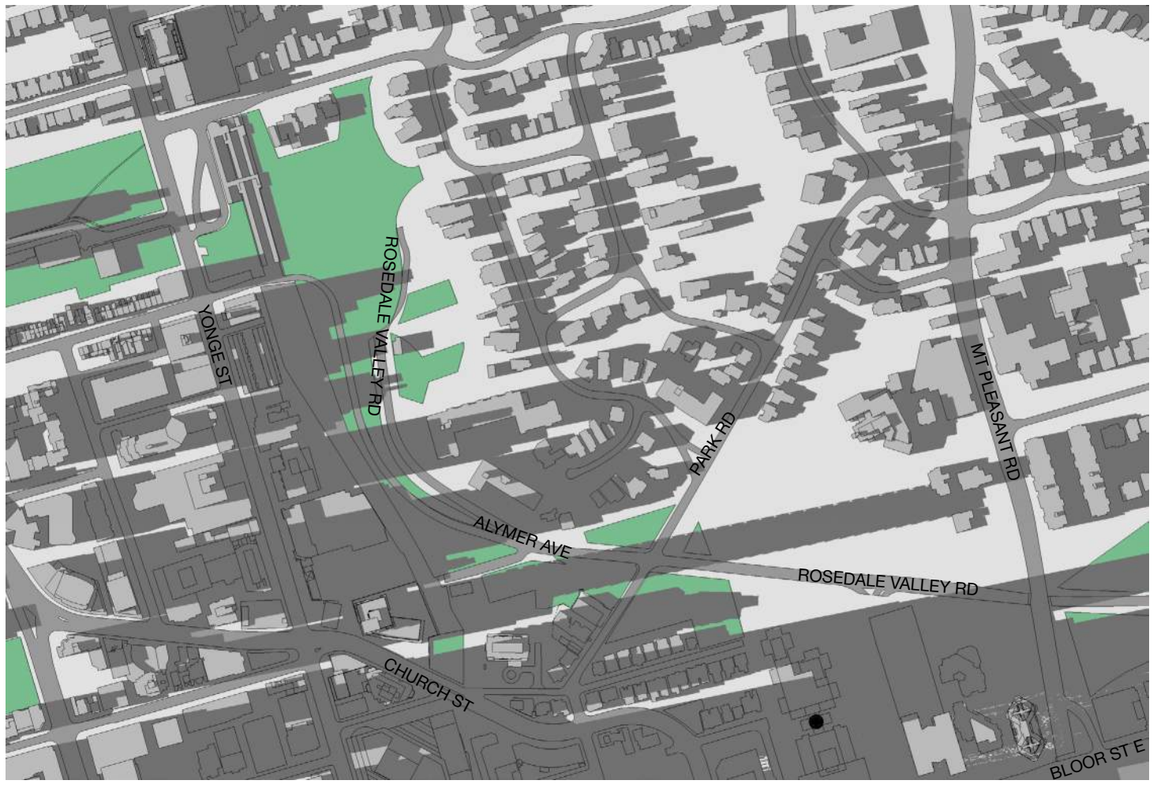
Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

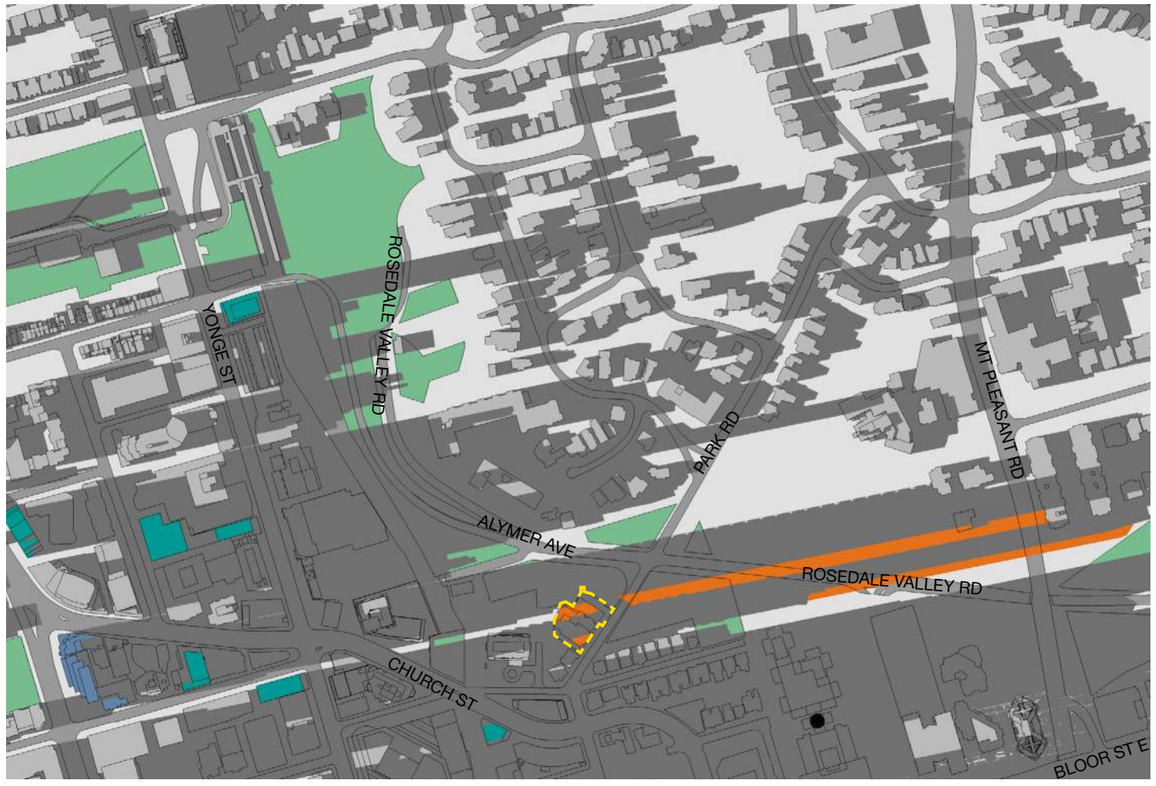
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



March 21 | 6:18 pm

Proposed



March 21 | 6:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 9:18 am

Proposed



June 21 | 9:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 10:18 am

Proposed



June 21 | 10:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 11:18 am

Proposed



June 21 | 11:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 12:18 pm

Proposed



June 21 | 12:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 1:18 pm

Proposed



June 21 | 1:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 2:18 pm

Proposed



June 21 | 2:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 3:18 pm

Proposed



June 21 | 3:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 4:18 pm

Proposed



June 21 | 4:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 5:18 pm

Proposed



June 21 | 5:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



June 21 | 6:18 pm

Proposed



June 21 | 6:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

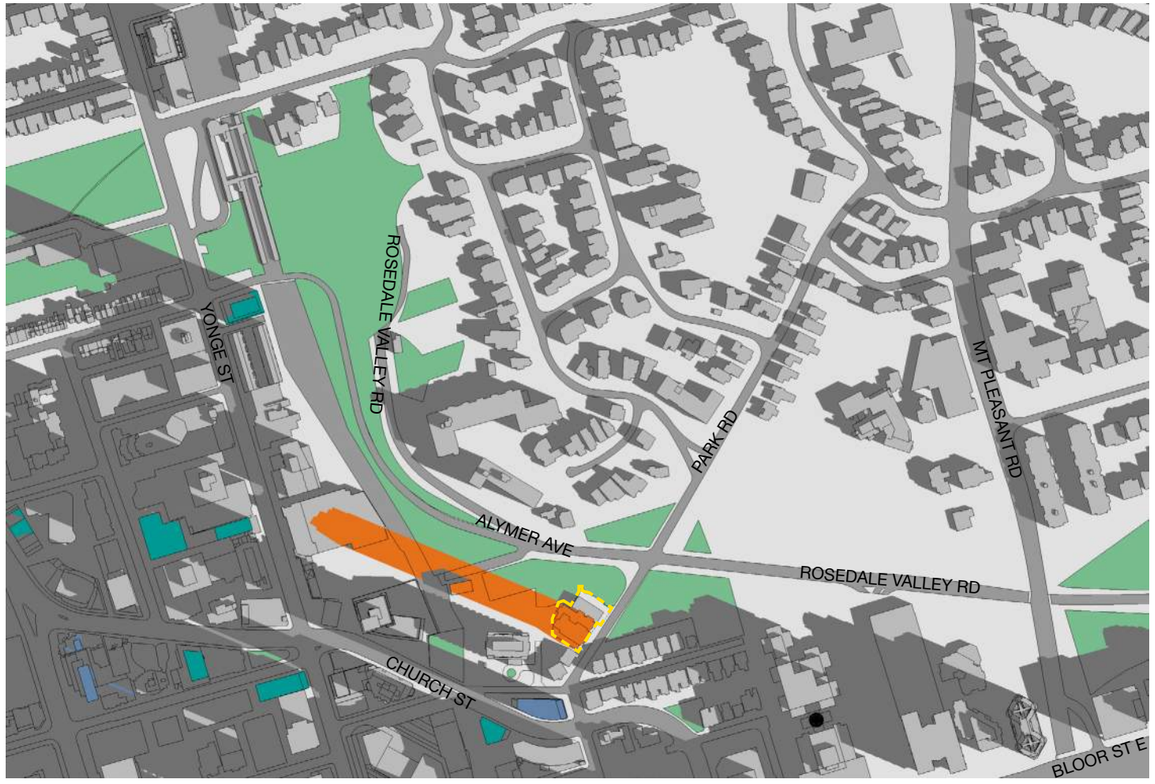
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 9:18 am

Proposed



September 21 | 9:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 10:18 am

Proposed



September 21 | 10:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 11:18 am

Proposed



September 21 | 11:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 12:18 pm

Proposed



September 21 | 12:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 1:18 pm

Proposed



September 21 | 1:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 2:18 pm

Proposed



September 21 | 2:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 3:18 pm

Proposed



September 21 | 3:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 4:18 pm

Proposed



September 21 | 4:18 pm

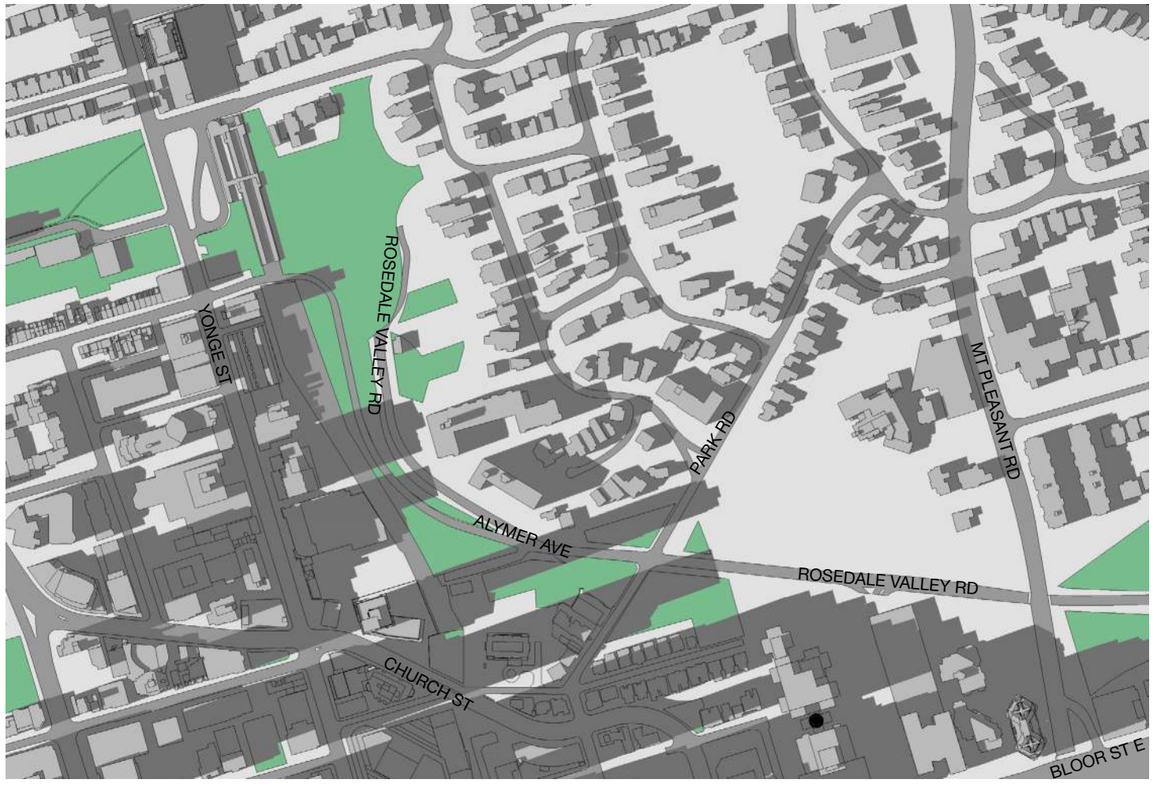
Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

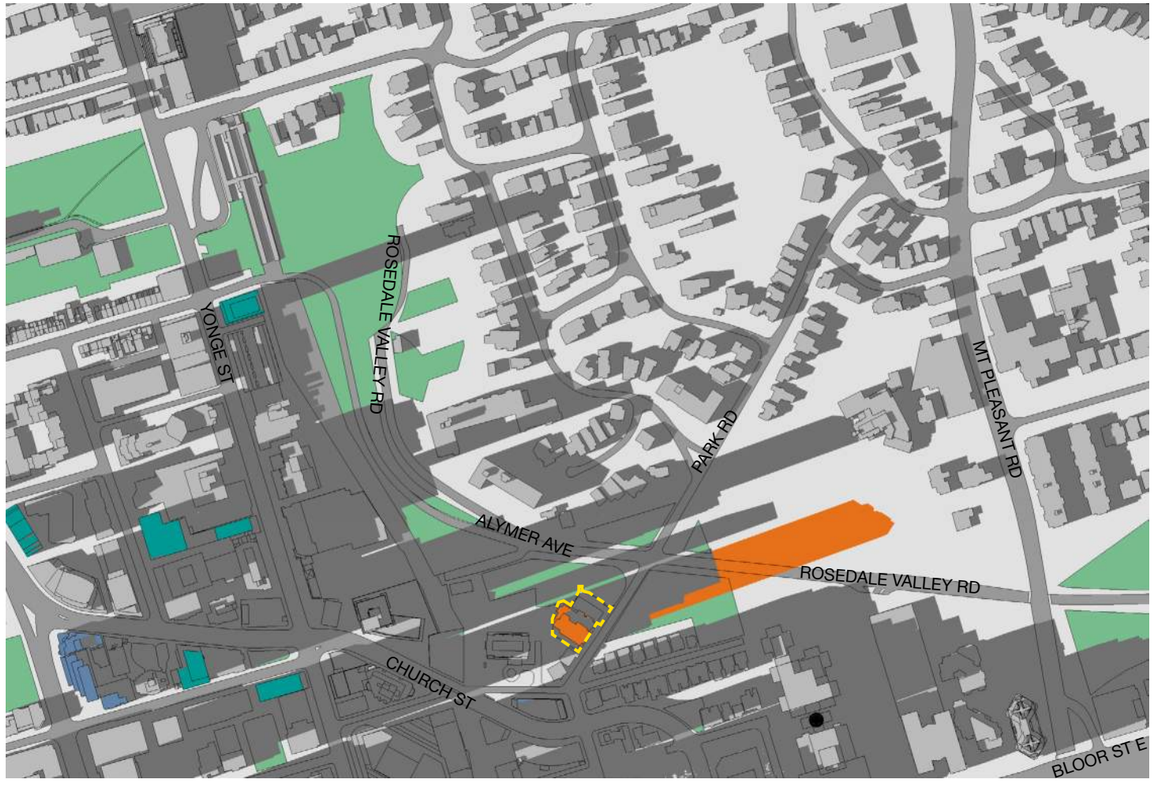
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 5:18 pm

Proposed



September 21 | 5:18 pm

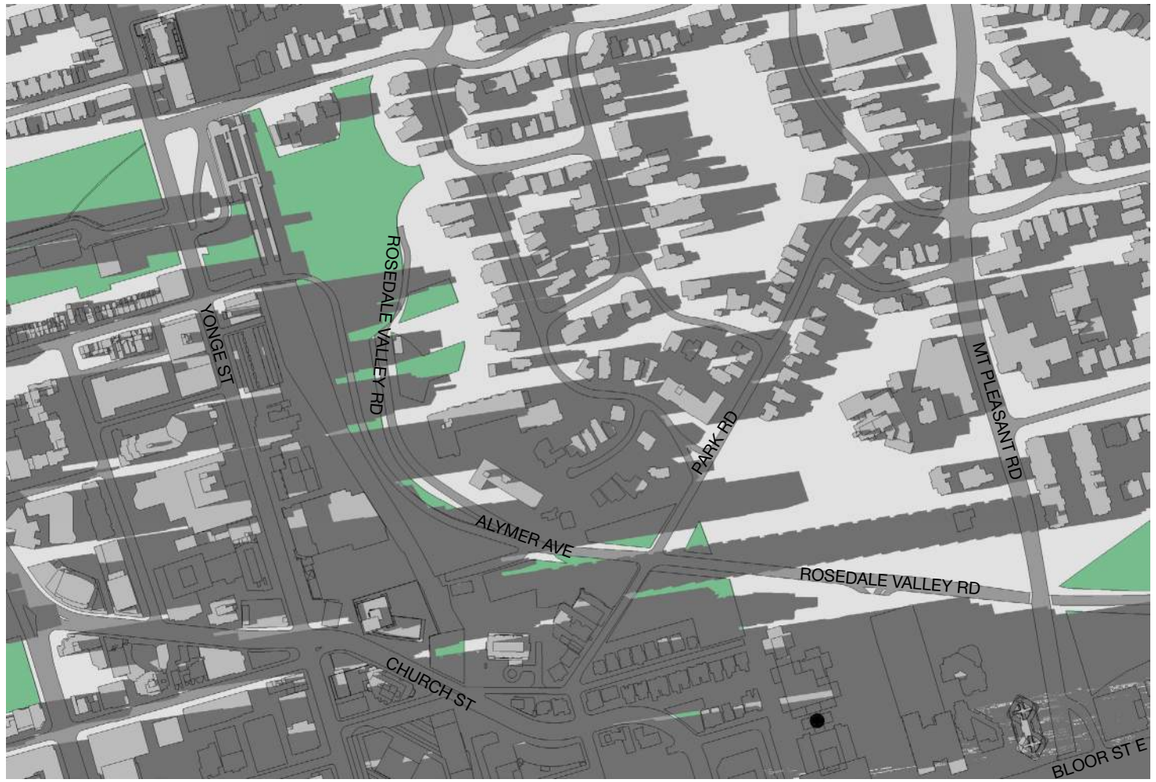
Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

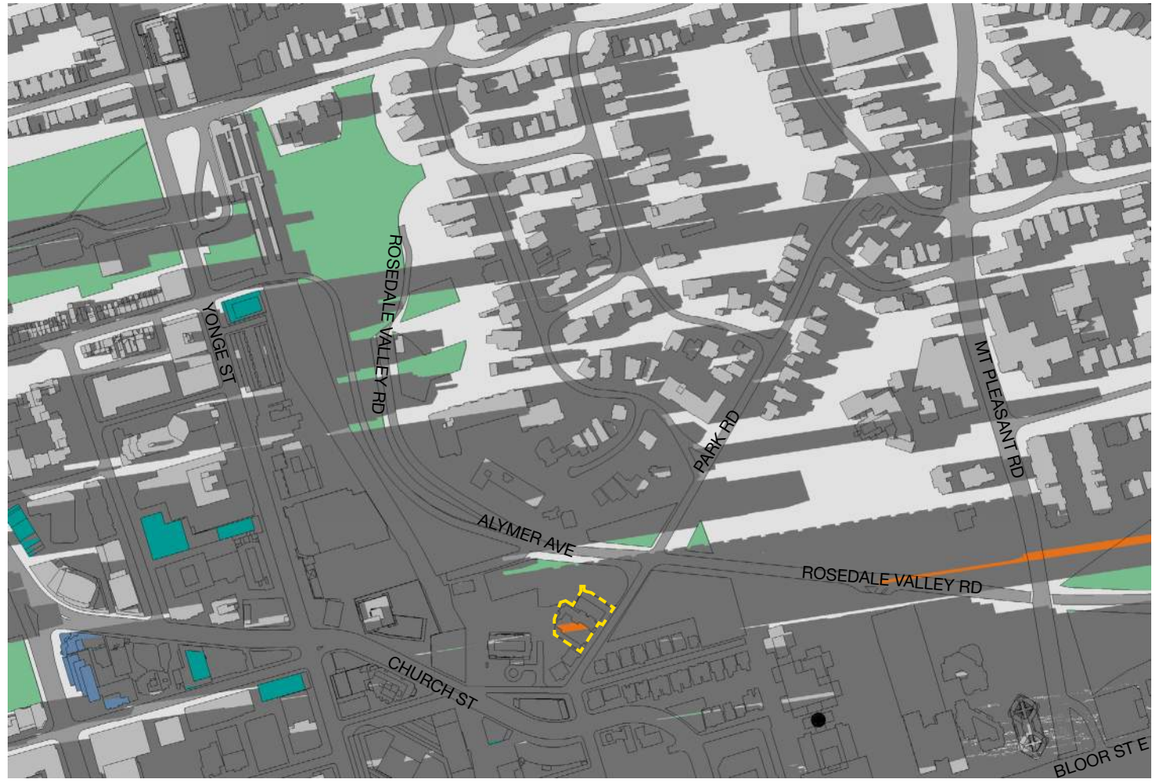
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



September 21 | 6:18 pm

Proposed



September 21 | 6:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

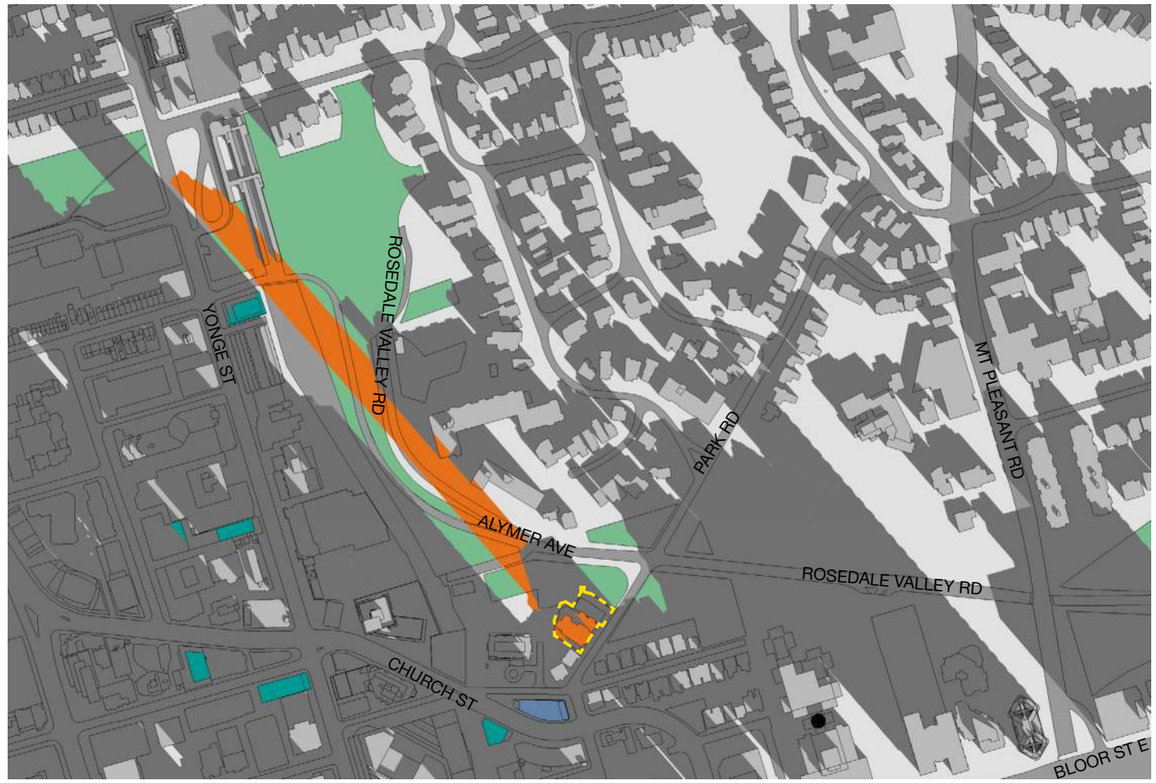
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 9:18 am

Proposed



December 21 | 9:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

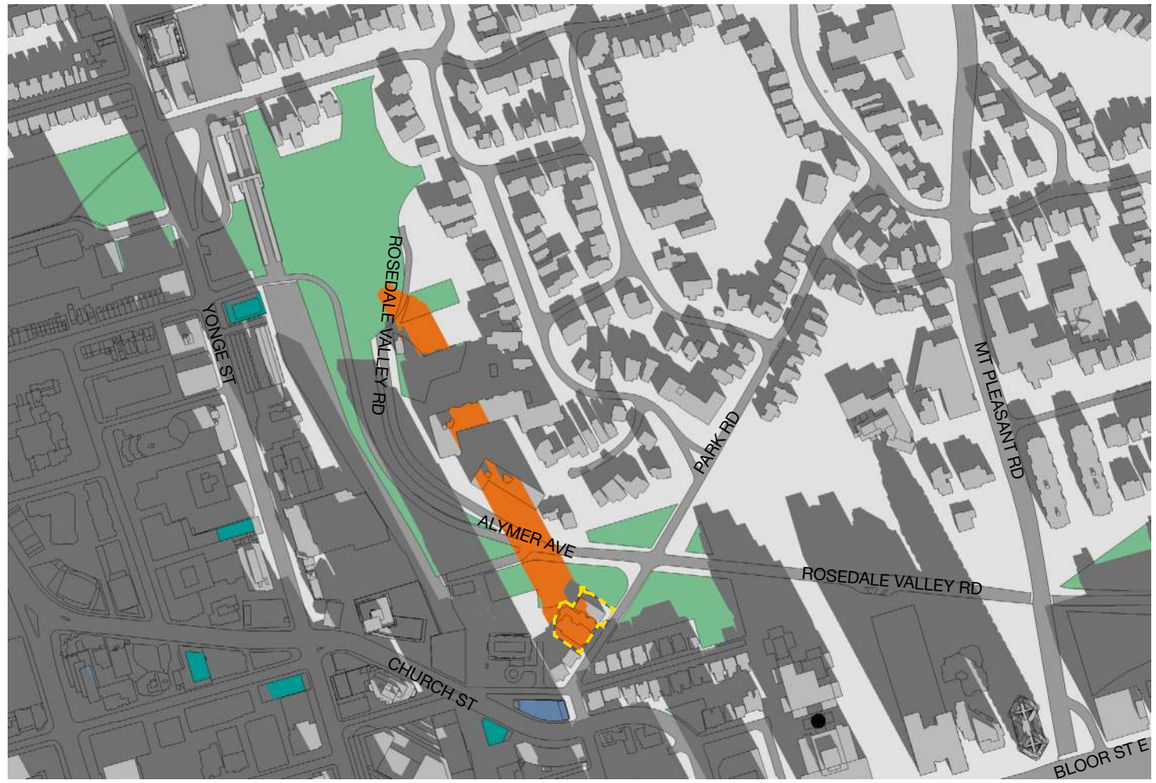
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 10:18 am

Proposed



December 21 | 10:18 am

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 11:18 am

Proposed



December 21 | 11:18 am

Applicant Proposal

Development Site Boundary

Under Construction

Approved / Not Yet Constructed

Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 12:18 pm

Proposed



December 21 | 12:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 1:18 pm

Proposed



December 21 | 1:18 pm

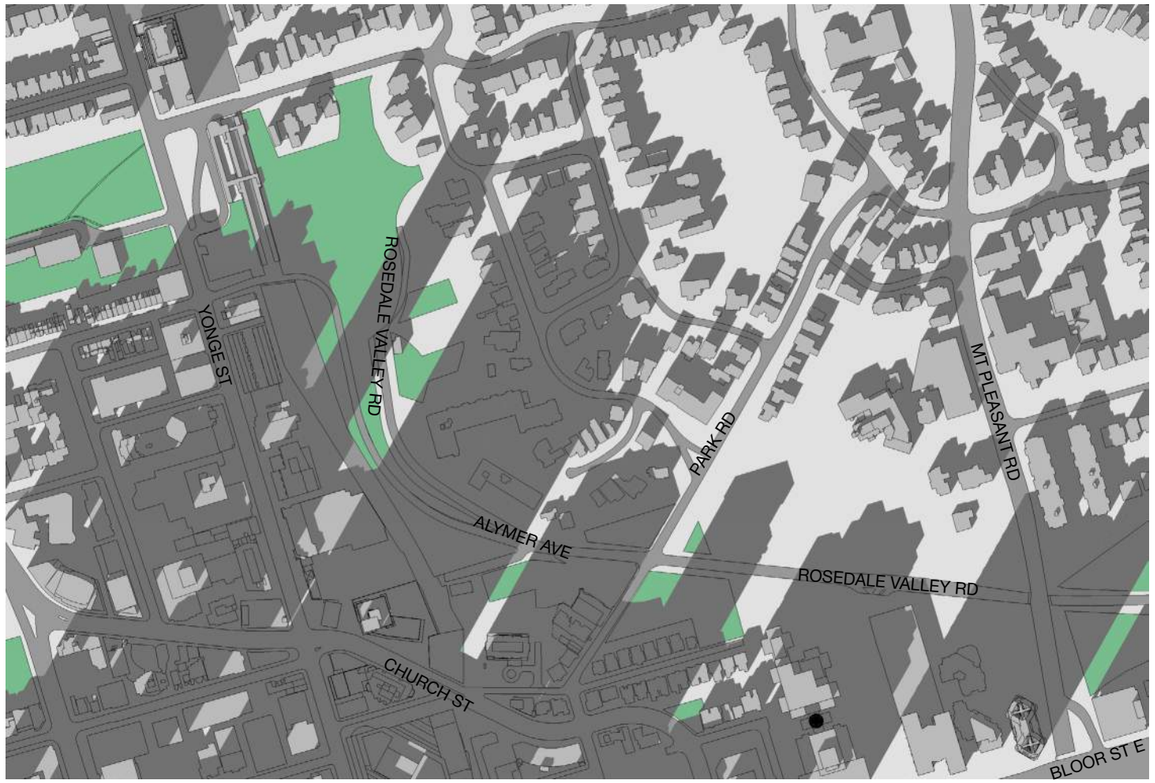
Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

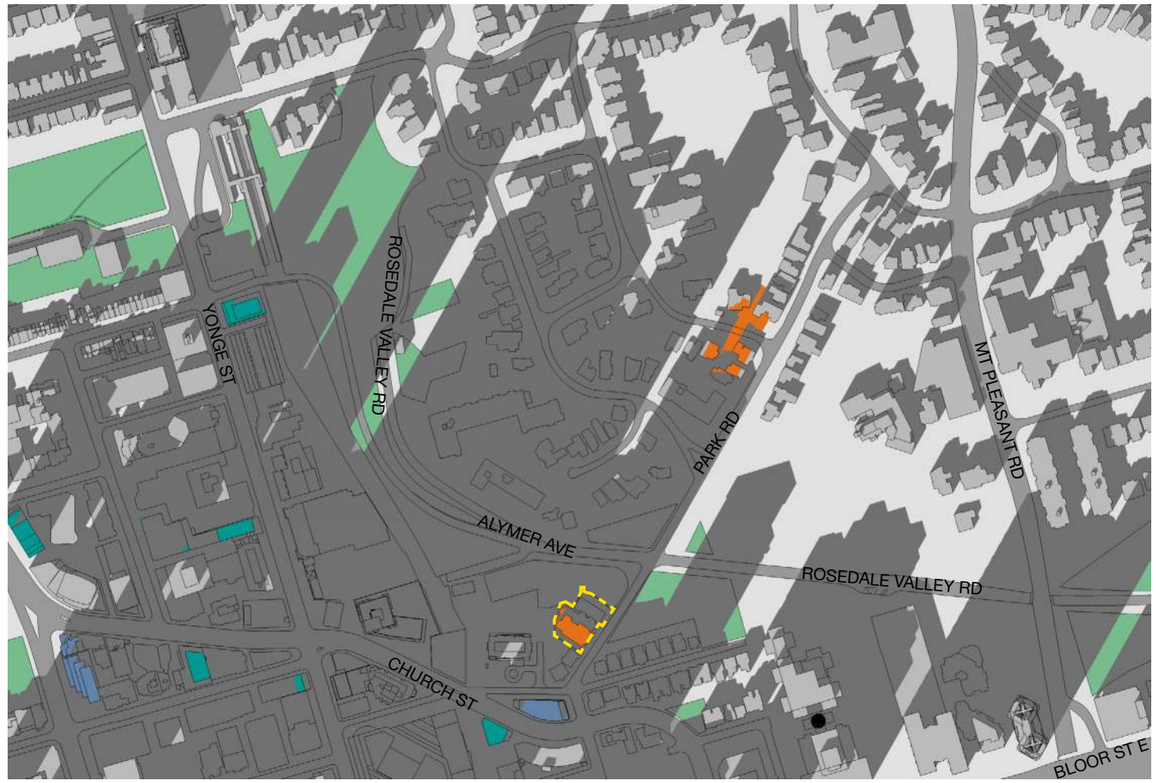
*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 2:18 pm

Proposed



December 21 | 2:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 3:18 pm

Proposed



December 21 | 3:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.

Existing Conditions



December 21 | 4:18 pm

Proposed



December 21 | 4:18 pm

Applicant Proposal
Development Site Boundary
Under Construction
Approved / Not Yet Constructed
Existing / Under Construction / Approved / Not Yet Constructed Shadows

5 20 200
10 100

Plans, dimensions, and calculations are preliminary and approximate.
Conceptual design as shown is subject to municipal approvals.

*This document is the property of Quadrangle Architects Limited.
Copying or distributing this document or any parts contained within the document to any other parties is not authorized.