

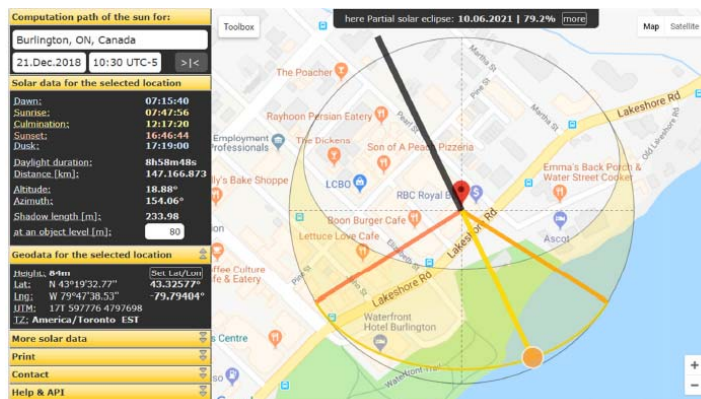
DELEGATION

Official Plan- Policy Versus Reality
April, 24 2018

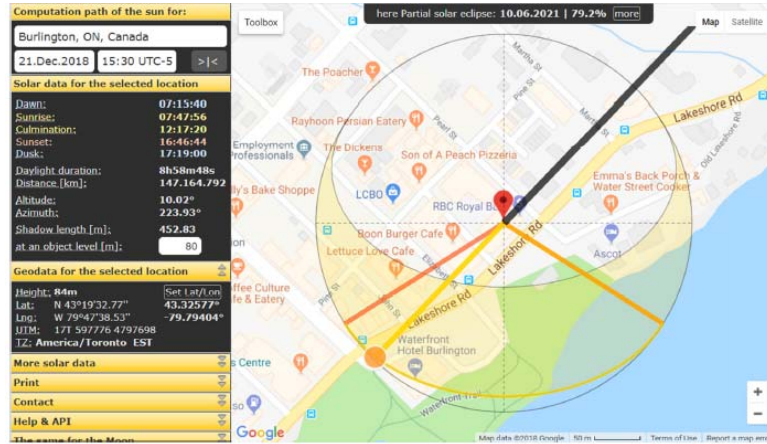
Joseph A. Gaetan B.G.S

Cumulative Shadowing of Pearl, Pine and Martha St Area

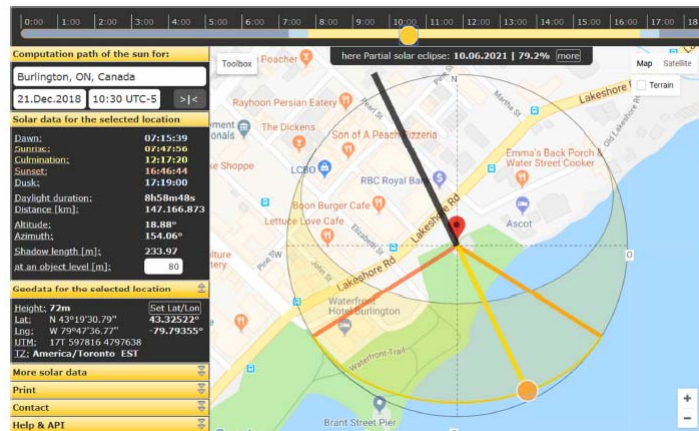
360 Pearl Building cast shadows on this area starting at 10:30 am Dec 21(Solstice)



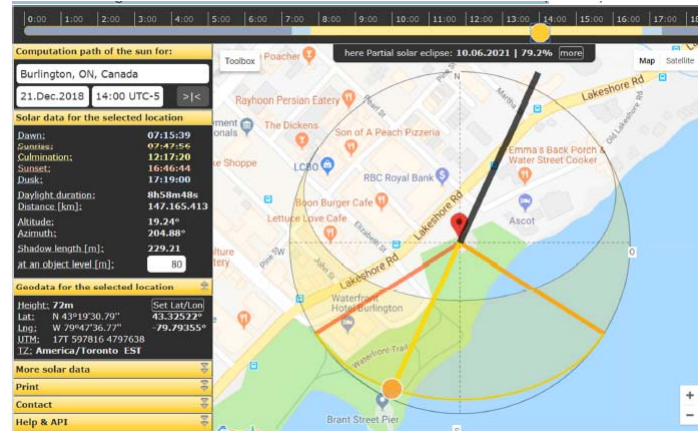
360 Pearl Buildings shadows covering area end at 15:30, Dec 21 (Solstice)



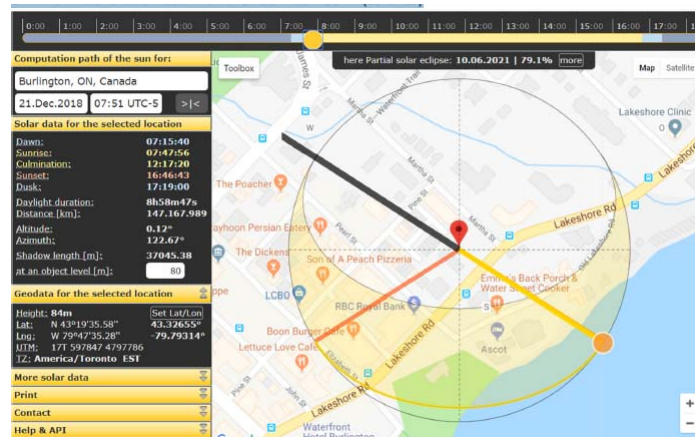
2042 Lakeshore Rd Bridgewater Building cast shadows starting at 10:30 on Pearl and Pine Dec 21



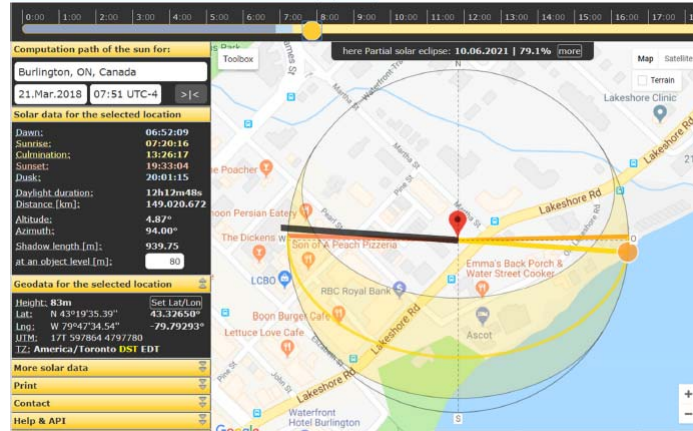
2042 Ls Rd Bridgewater shadows cast on Pearl and Pine area until 14:00 Dec 21 (Solstice)



374 Martha St shadows start at 0751 Sunrise Dec 21 (Solstice)



374 Martha shadow starts at 07:51 March 21 (Equinox)



Tall Building Guidelines (TBG) Burlington

S.1.3: The objective of the guideline is to provide best practices related to building height, massing, transitions, sun / shadowing, and building articulation to promote and encourage high-quality tall building proposals.

Tall Building Guidelines (TBG) (Toronto)

- Rationale:
- Access to direct sunlight improves the usability and enjoyment of outdoor spaces and allows trees and vegetation to thrive. Tall buildings can adversely affect the environmental quality of surrounding areas through the loss of sky view and by the overshadowing of adjacent streets, parks, and public or private open spaces.

T.B.G Toronto Cont'd

- Rationale (cont'd):
Loss of sky view reduces access to light, which affects the comfort, quality, and use of the public realm. humid summers, and cold, grey, winters. In summer, shade from trees and light breezes make the public realm more comfortable.
In the shoulder seasons, spring and fall, access to direct sunlight and shelter from the wind become very important to improve the comfort, usability, and enjoyment of outdoor spaces.

T.B.G Toronto Cont'd

- Rationale (cont'd):
- Required Sun/Shadow studies focus on the importance of access to sunlight during these seasons. The review of other times of day and other seasons may be required depending on the type and shadow sensitivity of adjacent uses.
- For tall buildings, protecting sky view and access to sunlight is generally achieved through good street proportion, overall massing, generous tower setbacks and separation distances.

CONTEXT

- Additional Photographs and Data Slides to follow

Sunshine Average Dec. to March

<u>Month</u>	<u>% Sun</u>	<u># Hours</u>	<u># Days</u>
Dec	25	71	19
Jan	30	87	21
Feb	43	113	21
March	41	152	24
Total/Average	34.75%	105.75	21.25

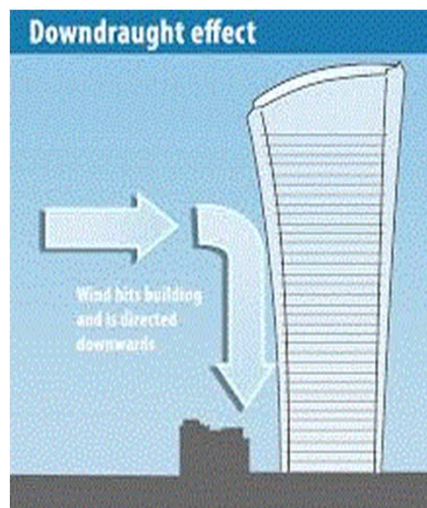
Mist Effect



Cloud Effect vs Sunshine



Wind Downdraft Effect



Wind Effect (Tall Building)



Wind Chill Nov. to March

<u>Month</u>	<u>-20 C</u>	<u>-30 C</u>	<u>-40 C</u>	<u>Total</u>
Nov	2			2
Dec	4			4
Jan	9	2		11
Feb	8	1		9
March	2			2
Total	25	3		28



Policy Tall Building and Shadow Effect COB

- 2.3 Shadows/Sky Views
 - a) The height and massing of the podium (not including the tower) should ensure a minimum of five consecutive hours of sunlight on the opposite side of the street at the equinoxes (March 21 and September 21) except where existing conditions preclude.
 - b) The height and massing of the podium shall ensure a minimum of five consecutive hours of sunlight over more than 60% of a park or playground area or a public open space at the equinoxes (March 21 and September 21).

