Appendix E – Staff Report PL-08-20

Overview of Proposed Policy & Guideline Amendments

Current Official Plan

Reference	Theme	Current OP Policies	Proposed Policies (Text additions and ~~deletions~~)	Summary of Changes
Part III – Land Use Policies – Urban Planning Area				
Part III – Section 2.5 Housing Intensification				
2.5.2 a) (vii)	Evaluation Criteria	(vii) significant sun-shadowing for extended periods on adjacent properties, particularly outdoor amenity areas, is at an acceptable level;	(vii) significant sun-shadowing or pedestrian level wind impacts ~~for extended periods~~ on adjacent properties, particularly outdoor amenity areas, is at an acceptable level in compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References;	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
Part III – Section 2.8 Day Care Centres				
2.8.2 b) (iii)	Zoning regulations	(iii) the impacts on the neighbourhood are acceptable in terms of noise, lighting, odours, security, removal of vegetation, sun-shadowing and privacy, or will be brought to acceptable levels; and	(iii) the impacts on the neighbourhood are acceptable in terms of noise, lighting, odours, security, removal of vegetation, sun-shadowing (in compliance with the Shadow Study Guidelines and Terms of Reference) and privacy, or will be brought to acceptable levels; and	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
Part III – Section 4.6 Neighbourhood Commercial Designation				
4.6.2 c) (ii)	Evaluation criteria	(ii) the impacts of the proposal on adjacent residential development are acceptable with respect to noise, dust, vibration, lighting, odours, security, sun-shadowing, removal of vegetation and privacy, or the proposed development has the capability to mitigate any impacts to acceptable levels;	(ii) the impacts of the proposal on adjacent residential development are acceptable with respect to noise, dust, vibration, lighting, odours, security, sun-shadowing, pedestrian level wind impacts, removal of vegetation and privacy, or the proposed development has the capability to mitigate any impacts to acceptable levels;	Additional text to include the consideration of pedestrian-level wind impacts for new or expanded neighborhood commercial sites.

Part III – Section 5.5.7 Old Lakeshore Road Mixed Use Precinct				
5.5.7.2 c) (viii)	West Sector – special consideration	(viii) submission of an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how such impacts can be mitigated to acceptable levels.	(viii) submission of an angular plane study, ~~identifying visual, sun shadowing and wind impacts, and demonstrating how such impacts can be mitigated to acceptable levels.~~ Shadow Study, and Pedestrian Level Wind Study demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
5.5.7.2 d) (iii)	East Sector – special consideration	(iii) submission of an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how such impacts can be mitigated to acceptable levels.	(iii) submission of an angular plane study, ~~identifying visual, sun shadowing and wind impacts, and demonstrating how such impacts can be mitigated to acceptable levels.~~ Shadow Study, and Pedestrian Level Wind Study demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
Part III – Section 5.5.8 Downtown Core Precinct				
5.5.8.2 i)	Angular plane studies	i) Applications for increased building heights for mid to high rise buildings in the Downtown Core Precinct may be required to provide an angular plane study, identifying visual, sun shadowing and wind impacts, and	i) Applications for increased building heights for mid to high rise buildings in the Downtown Core Precinct may be required to ~~provide an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how such impacts can~~	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.

		demonstrating how such impacts can be mitigated to acceptable levels.	~~be mitigated to acceptable levels.~~ submit an angular plane study, Shadow Study, and Pedestrian Level Wind Study demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	
Part III – Section 5.5.9 Wellington Square Mixed-Use Precinct				
5.5.9.2 h)	Downtown Waterfront East	h) Notwithstanding the provisions of Part III, Subsection 5.5.9.2 b), within the property located south of Lakeshore Road, between Elizabeth Street and Pearl Street, one taller building may be permitted, provided the floor area of a typical floor in the building is not greater than 600 sq. m. and a study of the wind, shadow and sun impacts is completed.	h) Notwithstanding the provisions of Part III, Subsection 5.5.9.2 b), within the property located south of Lakeshore Road, between Elizabeth Street and Pearl Street, one taller building may be permitted, provided the floor area of a typical floor in the building is not greater than 600 sq. m. and a ~~study of the wind, shadow and sun impacts is completed.~~ Shadow Study and Pedestrian Level Wind Study is submitted. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
5.5.9.2 j)	Angular plane studies	j) Applications for increased building heights for mid to high rise buildings in the Wellington Square Mixed-Use Precinct may be required to provide an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how such	j) Applications for increased building heights for mid to high rise buildings in the Downtown Core Precinct may be required to ~~provide an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how such impacts can be mitigated to acceptable levels.~~ submit an angular plane study,	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.

		impacts can be mitigated to acceptable levels.	Shadow Study, and Pedestrian Level Wind Study demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	
Part VI Implementation				
Part VI – Section 1.3 General Policies				
1.3 f) (xiv)	Additional Information	(xiv) shadow analysis plan	(xiv) shadow analysis plan (Shadow Study)	Additional text for clarity.
1.3 f) (xiv)	Additional Information	n/a	(xv) pedestrian level wind study [re-numbering remaining subsections accordingly]	Additional text to expressly include the requirement to request a pedestrian-level wind study as supporting information or material in the full consideration of a development application.
Part VIII Definitions				
Compatible		Development or re-development that is capable of co-existing in harmony with, and that will not have an undue physical (including form) or functional adverse impact on, existing or proposed development in the area or pose an unacceptable risk to environmental and/or human health. Compatibility should be evaluated in accordance with measurable/objective standards where they exist, based on criteria such as aesthetics, noise, vibration, dust, odours, traffic, safety and sun-shadowing, and the potential	Development or re-development that is capable of co-existing in harmony with, and that will not have an undue physical (including form) or functional adverse impact on, existing or proposed development in the area or pose an unacceptable risk to environmental and/or human health. Compatibility should be evaluated in accordance with measurable/objective standards where they exist, based on criteria such as aesthetics, noise, vibration, dust, odours, traffic, safety, ~~and~~ sun-shadowing and pedestrian	Definition updated to include the consideration of pedestrian-level wind impacts as a measure of compatibility.

		for serious adverse health impacts on humans or animals.	level wind impacts, and the potential for serious adverse health impacts on humans or animals.	

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Overview of Proposed Policy & Guideline Amendments

Adopted Official Plan

Reference	Theme	Current OP Policies	Proposed Policies (Text additions and ~~deletions~~)	Summary of Changes
Chapter 7 – Design Excellence				
Chapter 7 – Section 7.1 General				
7.1.1 n)	Objectives	n/a	n) To ensure adverse shadow and pedestrian level wind impacts are mitigated, in compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
Chapter 7 – Section 7.3 Urban Design and Built Form				
7.3.2 a) (viii)	Existing Community Areas	(viii) implementing measures that adequately limit any resulting shadowing, and uncomfortable wind conditions on the streetscape, neighbouring properties, parks and open spaces and natural areas;	(viii) implementing measures that adequately limit any resulting shadowing, and uncomfortable wind conditions on the streetscape, neighbouring properties, parks and open spaces ~~and~~, natural areas and other areas or locations in compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References;	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
Chapter 8 – Land Use Policies – Urban Area				
Chapter 8 – Section 8.1 Mixed Use Intensification Areas				
8.1.1 (1) k)	General Objectives	n/a	k) To mitigate adverse impacts from new development through compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
8.1.1(3.1) s)	General Objectives	n/a	s) To mitigate adverse impacts from new development through compliance with the Shadow and Pedestrian Level	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.

			Wind Study Guidelines and Terms of Reference	
8.1.1(3.10.1) c) (ii) h.	Old Lakeshore Road Precinct Policies	h. submission of an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how any adverse impacts can be mitigated to acceptable levels; and	h. submission of an angular plane study, ~~identifying visual, sun shadowing and wind impacts~~ Shadow Study, and Pedestrian Level Wind Study, and demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of Reference; and	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
8.1.1(3.10.1) d) (ii) c.	Old Lakeshore Road Precinct Policies	c. submission of an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how any adverse impacts can be mitigated to acceptable levels; and	c. submission of an angular plane study, ~~identifying visual, sun shadowing and wind impacts~~ Shadow Study, and Pedestrian Level Wind Study, and demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of Reference; and	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
8.1.1(3.10.1) d) (iii) c.	Old Lakeshore Road Precinct Policies	c. submission of an angular plane study, identifying visual, sun shadowing and wind impacts, and demonstrating how any adverse impacts can be mitigated to acceptable levels; and	c. submission of an angular plane study, ~~identifying visual, sun shadowing and wind impacts~~ Shadow Study, and Pedestrian Level Wind Study, and demonstrating how any adverse impacts can be mitigated to acceptable levels. Shadow and Pedestrian Level Wind Studies should comply with the principles stated in the Shadow and Pedestrian Level	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.

			Wind Study Guidelines and Terms of Reference; and	
8.1.1 (4.1) p)	General Objectives	n/a	p) To mitigate adverse impacts from new development through compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
8.1.2 (1) t)	General Objectives	n/a	p) To mitigate adverse impacts from new development through compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
8.1.3 (1) k)	General Objectives	n/a	p) To mitigate adverse impacts from new development through compliance with the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated policy language to reference compliance with the new Study Guidelines and Terms of References.
Chapter 8 – Section 8.3 Residential Neighbourhood Areas				
8.3.10 a) (ii) d.	Day Care Centres	d. the adverse impacts on the neighbourhood in terms of considerations such as traffic, noise, lighting, odours, security, removal of trees, sun shadowing and privacy, are minimized;	d. the adverse impacts on the neighbourhood in terms of considerations such as traffic, noise, lighting, odours, security, removal of trees, sun shadowing, pedestrian level wind impacts and privacy, are minimized;	Additional text to include the consideration of pedestrian-level wind impacts for day care centres in Residential Neighbourhood Areas.
Chapter 12 – Implementation and Interpretation				
Chapter 12 – Section 12.1.2 Planning Process: Development Applications				
12.1.2(1.2) c) (xx)	Policies	(xx) shadow analysis plan, in accordance with Subsection 7.3.2 of this Plan;	(xx) shadow study analysis plan, in accordance with Subsection 7.3.2 of this Plan;	Additional text for clarity.
12.1.2(1.2) c) (xxi)	Policies	(xxi) wind impact study, in accordance with Subsection 7.3.2 of this Plan;	(xxi) pedestrian level wind impact study, in accordance with Subsection 7.3.2 of this Plan;	Additional text for clarity.

Tall Building Guidelines (May 20017)

Reference	Theme	Current Guideline	Proposed Guideline (Text additions and ~~deletions~~)	Summary of Changes
Section 1.0 Introduction & Overview				
1.2	Where are the Tall Buildings Guidelines Applicable?	The Tall Building Guidelines are applicable across the City, wherever tall buildings are permitted by the Official Plan and Zoning By-law. Within these areas, the suitability of a property to accommodate tall buildings, should be considered on a site-by-site basis, to ensure the intent of these guidelines can be met. Sites that are too small to permit the setbacks outlined in these guidelines, or transitions to adjacent uses, may not be appropriate for tall buildings as permitting towers on 'small sites' creates shadowing and privacy concerns, and limits the development potential of adjacent properties.	The Tall Building Guidelines are applicable across the City, wherever tall buildings are permitted by the Official Plan and Zoning By-law. Within these areas, the suitability of a property to accommodate tall buildings, should be considered on a site-by-site basis, to ensure the intent of these guidelines can be met. Sites that are too small to permit the setbacks outlined in these guidelines, or transitions to adjacent uses, may not be appropriate for tall buildings as permitting towers on 'small sites' creates shadowing, pedestrian level wind, and privacy concerns, and limits the development potential of adjacent properties.	Additional text to include the consideration of pedestrian-level wind impacts.
1.3	How to Use the Guidelines	The Tall Building Guidelines provide guidance for developers and architects designing tall buildings in the City of Burlington, and will be used by City staff as one tool in evaluating development applications and mobility hub planning. Other tools include but are not limited to: the Strategic Plan, Official Plan, and Zoning By-law. 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.	The Tall Building Guidelines provide guidance for developers and architects designing tall buildings in the City of Burlington, and will be used by City staff as one tool in evaluating development applications and mobility hub planning. Other tools include but are not limited to: the Strategic Plan, Official Plan, and Zoning By-law. The objective of the guideline is to provide best practices related to building height, massing, transitions, sun / shadowing, pedestrian level wind impacts, and building articulation to	Additional text to include the consideration of pedestrian-level wind impacts.

			promote and encourage high-quality tall building proposals.	
Section 2.0 Building Base (Podium)				
2.3 a)	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.	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.~~ Height and massing of buildings should ensure adequate access to sunlight in surrounding areas in compliance with the Shadow Study Guidelines and Terms of Reference.	Updated guideline language to reference compliance with the new Study Guidelines and Terms of References.
2.3 b)	Shadows/Sky Views	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).	~~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).~~	Deletion of text for clarity and update to guidelines to reference compliance with the new Study Guidelines and Terms of References.
3.0 Building Middle (Tower)				
3.1 b)	Tower Location	b) A minimum separation distance of 25 metres should be provided between towers to maximize privacy and sky views, and to minimize the cumulative shadow of multiple tall buildings. Balconies may be provided within this separation distance provided they do not excessively contribute to a building's massing.	b) A minimum separation distance of 25 metres should be provided between towers to maximize privacy and sky views, and to minimize the cumulative shadow and pedestrian level wind impacts of multiple tall buildings. Balconies may be provided within this separation distance provided they do not excessively contribute to a building's massing.	Additional text to include the consideration of pedestrian-level wind impacts.

3.3 b)	Shadows/Sky Views	b) The design, height, and placement of the tower shall be compatible with adjacent established residential neighbourhoods, parks, open spaces, or natural areas.	b) The design, height, and placement of the tower shall be compatible with adjacent established residential neighbourhoods, parks, open spaces, or natural areas; or those stated in the Shadow and Pedestrian Level Wind Study Guidelines and Terms of References.	Updated guideline language to reference compliance with the new Study Guidelines and Terms of References.
3.3 d)	Shadows/Sky Views	d) A shadow study shall be provided with tall building applications to demonstrate the impacts at the equinoxes (March 21 and September 21).	d) A shadow study shall be provided with tall building applications ~~to demonstrate the impacts at the equinoxes (March 21 and September 21)~~ in compliance with the Shadow Study Guidelines and Terms of Reference.	Updated guideline language to reference compliance with the new Study Guidelines and Terms of References.

Appendix E – Staff Report PL-08-20

Overview of Proposed Policy & Guideline Amendments

Design Guidelines for Mixed-Use and Residential Mid-Rise Buildings (March 2019)

Reference	Theme	Current Guideline	Proposed Guideline (Text additions and ~~deletions~~)	Summary of Changes
Section 1. Introduction & Overview				
1.2	Where are the Mid-Rise Building Guidelines Apply?	The Mid-rise Building Guidelines are applicable across the City, wherever mid-rise building forms are permitted by the Official Plan and Zoning By-law (with the exception of Employment Lands). This, generally, includes lands designated Mixed Use and Residential - High Density, including mixed-use and stand-alone multi-residential buildings, but does not apply to lands within an Employment Area land use designation. Where permitted, the suitability of a property to accommodate this building type should be considered on a site-by-site basis, to ensure the intent of these guidelines can be met. Sites that are too small to permit the setbacks outlined in these guidelines, or transitions to adjacent uses, may not be appropriate for mid-rise buildings as permitting this building type on 'small sites' creates shadowing and privacy concerns, and limits the development potential of adjacent properties. Where a conflict arises between the guidelines of this document and any area specific policies and/or design guidelines with respect to mid-rise building design, the area specific policies and/or design guidelines take precedent.	The Mid-rise Building Guidelines are applicable across the City, wherever mid-rise building forms are permitted by the Official Plan and Zoning By-law (with the exception of Employment Lands). This, generally, includes lands designated Mixed Use and Residential - High Density, including mixed-use and stand-alone multi-residential buildings, but does not apply to lands within an Employment Area land use designation. Where permitted, the suitability of a property to accommodate this building type should be considered on a site-by-site basis, to ensure the intent of these guidelines can be met. Sites that are too small to permit the setbacks outlined in these guidelines, or transitions to adjacent uses, may not be appropriate for mid-rise buildings as permitting this building type on 'small sites' creates shadowing, pedestrian level wind, and privacy concerns, and limits the development potential of adjacent properties. Where a conflict arises between the guidelines of this document and any area specific policies and/or design guidelines with respect to mid-rise building design, the area specific policies and/or design guidelines take precedent.	Additional text to include the consideration of pedestrian-level wind impacts.

Section 2. Lower Building				
2.2 5)	Building Separation & Spacing	5) Where there is a transition between a mid-rise development and a tall building, a minimum separation distance of 20.0 metres should be provided between the tower component of a tall building and the nearest part of the mid-rise building to minimize overlook and shadowing.	5) Where there is a transition between a mid-rise development and a tall building, a minimum separation distance of 20.0 metres should be provided between the tower component of a tall building and the nearest part of the mid-rise building to minimize overlook, and shadowing and pedestrian level wind impacts.	Additional text to include the consideration of pedestrian-level wind impacts.
2.3 1) [bullet 5]	Built Form: Height & Massing	1) [bullet 5] The micro-climate (particularly impacts created by wind); and	1) [bullet 5] The micro-climate (particularly pedestrian level wind impacts created by wind); and	Additional text to include the consideration of pedestrian-level wind impacts.
Section 3. Upper Building				
3.1 Objective statement	Built Form: Transitions	Like the lower building form, the upper building form should respond to its context to ensure high-quality design outcomes. Transitions should be used to reduce potential impacts related to a change in building height and massing such as shadowing and overlook on neighbouring properties. Appropriate transitions are managed through upper massing step-backs, angular planes, and setbacks (in addition to building placement and separation).	Like the lower building form, the upper building form should respond to its context to ensure high-quality design outcomes. Transitions should be used to reduce potential impacts related to a change in building height and massing such as shadowing, pedestrian level wind impacts, and overlook on neighbouring properties. Appropriate transitions are managed through upper massing step-backs, angular planes, and setbacks (in addition to building placement and separation).	Additional text to include the consideration of pedestrian-level wind impacts.
3.1 1) [bullet 3]	Built Form: Transitions	1) [bullet 3] the potential shadowing impacts on neighbouring properties and private and public open spaces – taller elements should be arranged accordingly.	1) [bullet 3] the potential shadowing and pedestrian level wind impacts on neighbouring properties and private and public open spaces – taller elements should be arranged accordingly.	Additional text to include the consideration of pedestrian-level wind impacts.

3.1 3)	Built Form: Transitions	3) Where the building is on a site that is transitioning to a low-rise residential neighbourhood area (including properties designated Residential – Low Density and – Medium Density, Natural Heritage System, Parks and Open Space) a 45-degree angular plane should be applied from the shared property line (Fig. 3.1). The building form should fit entirely within this angular plane and utilize setbacks and step-backs to ensure any impacts related to the change in height, overlook, and shadowing are mitigated. In cases where a Natural Heritage System requires an additional buffer, the angular plane should be measured from the original boundary of the identified natural heritage feature or area unless otherwise specified in an Environmental Impact Assessment.	3) Where the building is on a site that is transitioning to a low-rise residential neighbourhood area (including properties designated Residential – Low Density and – Medium Density, Natural Heritage System, Parks and Open Space) a 45-degree angular plane should be applied from the shared property line (Fig. 3.1). The building form should fit entirely within this angular plane and utilize setbacks and step-backs to ensure any impacts related to the change in height, overlook, ~~and~~ shadowing, and pedestrian level wind impacts are mitigated. In cases where a Natural Heritage System requires an additional buffer, the angular plane should be measured from the original boundary of the identified natural heritage feature or area unless otherwise specified in an Environmental Impact Assessment.	Additional text to include the consideration of pedestrian-level wind impacts.
3.1 7)	Built Form: Transitions	The design and placement of upper storeys should be carefully considered to minimize the size of shadows on neighbouring properties. A shadow study should be provided with mid-rise building applications to demonstrate the impacts at the spring and fall equinoxes (approximately March 21 and September 21, respectively).	The design and placement of upper storeys should be carefully considered to minimize the size of shadows on neighbouring properties. A shadow study should be provided with mid-rise building applications ~~to demonstrate the impacts at the spring and fall equinoxes (approximately March 21 and September 21, respectively)~~ in compliance with the Shadow Study Guidelines and Terms of Reference.	Updated guideline language to reference compliance with the new Study Guidelines and Terms of Reference.