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Item No. 9.1.2
Design Review Committee
October 20, 2021

TO: Chair and Members of Design Review Committee

SUBMITTED BY: **-Original Signed-**

Kelly Denty, Executive Director of Planning and Development

DATE: September 23, 2021

SUBJECT: **Case 23663: Substantive Site Plan Approval for 1138-1146 Barrington Street, Halifax**

ORIGIN

Application by Kassner Goodspeed Architects

LEGISLATIVE AUTHORITY

Halifax Regional Municipality (HRM) Charter; Part VIII, Planning & Development

RECOMMENDATION

It is recommended that the Design Review Committee:

1. Approve the qualitative elements of the substantive site plan approval application for an eight storey mixed use building as shown in Attachment A;

2. Approve the two variances to the Land Use By-law requirements regarding minimum streetwall height and minimum interior lot line setback, as contained in Attachment B;

3. Accept the findings of the qualitative Wind Impact Assessment, as contained in Attachment C; and

4. Recommend that the Development Officer accept the restoration of the existing heritage building as the post-bonus height public benefit for the development.

BACKGROUND

Kassner Goodspeed Architects, on behalf of the property owner, has applied for substantive site plan approval to develop an 8 storey multi-unit building and complete reconstruction work to a heritage property. The property is located on Barrington Street, near the Peace and Friendship Park in Downtown Halifax (Map 1, Attachment A). To allow the development, the Design Review Committee must consider the application relative to the Design Manual within the Downtown Halifax Land Use By-law (LUB).

This report addresses relevant regulation held within both the Land Use By-law and Design Manual in order to assist the Committee in their decision.

Subject Site	1138-1146 Barrington Street
Location	Northwest corner of Barrington and Kent Streets
Zoning (Map 1)	DH-1 (Downtown Halifax) Zone
Lot Size	980.8 square metres (10557 square feet)
Current Land Use(s)	Heritage building with approx. 3 units
Surrounding Land Use(s)	A mix of low density residential on Kent Street, and a large grocery store, multi unit buildings and a mix of small scale retail on Barrington Street.

Project Description
The applicant wishes to develop an 8 storey multi-unit building and complete reconstruction work to a heritage property. The property, located at 1138 Barrington Street, has been identified as a contributing heritage resource under the Old South Suburb Heritage Conservation District, but is not a registered heritage property. The new construction will be joined to the heritage building underground, effectively creating one contiguous building that appears as two separate buildings when seen from the street. The restored heritage building will also have a 2-storey addition attached to the rear, replacing a single storey addition that has minimal heritage value. The details of the proposal are as follows (refer to Attachments A and D):

- 8 storeys and 25.5 m tall plus a 2.6 m mechanical penthouse;
- 41 residential units containing 3 bachelor, 22 1-bedroom and 16 2-bedroom units;
- 11 parking spaces;
- 143 square metres (1,540 sq ft) of commercial space; and
- restoration of a 2 storey contributing heritage resource building which will contain 4 bachelor units and 2 1-bedroom units.

Information about the approach to the design of the building has been provided by the project's architect in Attachment D of this report.

Regulatory Context - Municipal Planning Documents
With regard to the Downtown Halifax Secondary Municipal Planning Strategy (DHSMPS) and the Downtown Halifax LUB, the following are relevant to the proposed development from a regulatory context:

- Zone: DH-1 Zone
- Precinct: 2: Old South Suburb Heritage Conservation District
- Building Height (Pre and Post-Bonus): Pre-bonus FAR of 2, Post bonus FAR of 4
- Streetwall Setback: 0-1.5m
- Streetwall Height: 11 m

The Design Review Committee (DRC) should note that the proposal was reviewed by the Development Officer and determined to be in compliance with the LUB regulations, with the exception of two requested variances. In addition to the above regulations, the Design Manual of the Downtown Halifax LUB contains guidance regarding the appropriate appearance and design of buildings (Attachment E).

Site Plan Approval Process
Under the site plan approval process, development proposals within Downtown Halifax Plan area must meet the land use and building envelope requirements of the Land Use By-law (LUB), as well as the requirements of the By-law's Design Manual. The process requires approvals by both the Development Officer and the DRC as follows:

Role of the Development Officer:
In accordance with the Substantive Site Plan Approval process, as set out in the Downtown Halifax LUB, the Development Officer is responsible for determining if a proposal meets the land use and built form requirements contained in the LUB. The Development Officer has reviewed the application and determined that the following elements do not conform to the Downtown Halifax LUB:

- minimum streetwall height; and
- minimum interior lot line setback.

The applicant has requested that these two items be considered through the variance approval process under the Downtown Halifax LUB (see Attachment B).

Role of the Design Review Committee:
The Design Review Committee, established under the LUB, is the body responsible for making decisions relative to a proposal's compliance with the requirements of the Design Manual.

The role of the Design Review Committee in this case is to:

1. Determine if the project is in keeping with the design guidelines contained within the Design Manual (Attachment E);
2. Consider the variance requests that have been made pursuant to variance criteria in the Design Manual (Attachment B);
3. Provide a recommendation to the Development Officer if the proposal is suitable in terms of the expected wind conditions on pedestrian comfort (Attachment C); and
4. Advise the Development Officer on the suitability of the post-bonus height public benefit being proposed by the applicant (Attachment F).

Notice and Appeal
Where a proposal is approved by the Design Review Committee, notice is given to all assessed property owners within the DHSMPS Plan Area boundary plus 30 meters. Any assessed property owner within the area of notice may then appeal the decision of the Design Review Committee to Regional Council. If no appeal is filed, the Development Officer may then issue the Development Permit for the proposal. If an appeal is filed, Regional Council must hold a hearing and make a decision on the application. A decision to uphold an approval will result in the approval of the project while a decision to overturn an approval will result in the refusal of the site plan approval application.

Role of the Heritage Officer
The Heritage Conservation District (Old South Suburb) Bylaw H-800 requires that a Certificate of Appropriateness be obtained for exterior alteration of buildings and structures, including additions, façades, roofs, windows, doors, storefronts, signs, awnings, exterior materials, exterior steps and stairs; the demolition or removal of buildings and structures that are part of a contributing heritage resource; and the construction of new buildings. The Heritage Officer certifies that a proposed development conforms with the requirements of the Bylaw H-800 and will issue the Certificate accordingly. The approval or denial of the Certificate of Appropriateness may be appealed to the Nova Scotia Utility and Review Board pursuant to the Heritage Property Act.

COMMUNITY ENGAGEMENT

The community engagement process has been consistent with the intent of the HRM Community Engagement Strategy and the requirements of the Downtown Halifax LUB regarding substantive site plan

approvals. The level of engagement was information sharing, achieved through the developer's website, public kiosks at HRM Customer Service Centres, and a Public Open House held on May 17, 2021.

DISCUSSION

Design Manual Guidelines

As noted above, the Design Manual contains a variety of building design conditions that are to be met in the development of new buildings and modifications to existing buildings as follows:

- Section 2.2 of the Design Manual contains design guidelines that are to be considered specifically for properties within Precinct 2; and
- Section 3.6 of the Design Manual specifies conditions by which variances to certain Land Use By-law requirements may be considered.

An evaluation of the general guidelines and the relevant conditions as they relate to the project are found in a table format in Attachment E of this report. The table indicates staff's analysis and advice as to whether the project complies with the applicable guidelines. In addition, it identifies circumstances where there are different possible interpretations of how the project relates to a guideline, where additional explanation is warranted, or where the Design Review Committee will need to give attention in their assessment of conformance to the Design Manual. Staff have undertaken a detailed review of the proposal, and have identified the following items that require further consideration by the Design Review Committee:

Precinct 2: Old South Suburb Heritage Conservation District and New Development in Heritage Contexts (2.2 and 4)

This proposal is located within the Old South Suburb Heritage Conservation District and includes a building identified as a contributing heritage resource under the Plan. A different development proposal (Case 22511[1]) was previously considered on this site and refused at that time by the DRC. The DRC indicated a concern for the heritage context, where that earlier application was submitted prior to the adoption of the Heritage Conservation District. Staff advise that the building contained within this new proposal meets the requirements for development within a heritage context and that the building contributes to a coherent design that is sympathetic to the heritage context.

Canopies and Awnings (2.5 l, 3.1.1 d, 3.2.3 b and 3.3.3 b)

The proposal includes awnings over the doorways and canopy over the storefront. The windows and balconies of the upper floor provides weather protection over the other areas. Staff are satisfied that this design will provide adequate weather protection and meets the intent of the design manual.

Variances

The applicant is requesting two variances to the quantitative requirements of the Downtown Halifax LUB: the minimum streetwall height requirement and the upper storey side yard stepback. The applicant has outlined each of the variance requests on the plans (Attachment B) and has provided a rationale pursuant to the Design Manual criteria (Attachment D). The staff review of each variance request is provided in this section as outlined below.

Variance 1: Streetwall Height

Section 9(3) of the LUB requires a minimum streetwall height of 11 m, which can be varied in Section 9(8) of the LUB. The streetwall for the portion of the building that fronts on Barrington St has a height of 7.9m, which is 3.1 m lower than the required minimum.

Section 3.6.3 of the Design Manual allows for the relaxation of the streetwall height where the height of abutting buildings is such that the streetwall height would be inconsistent with the character of the street. There are four criteria that apply to a request to vary this section of the by-law. The request must be

[1] https://www.halifax.ca/sites/default/files/documents/city-hall/boards-committees-commissions/191114drc911.pdf

consistent with the objectives and guidelines of the Design Manual and then must fall into one of the three other categories. In this case, the applicant has provided rationale indicating the height of abutting buildings is such that the streetwall height would be inconsistent with the character of the street. The applicant is requesting to match the roof lines of the contributing heritage resource to ensure consistency with the character of this area. This request is consistent with the intent of the Design Manual and staff recommend approval of this variance.

Variance 2: Upper Storey Side Yard Stepback

Section 11(2.4) of the LUB requires that the mid-rise portion of the building be setback 3m from interior lot lines. Section 11(2.4) then allows this to be varied in accordance with the requirements of the LUB. Section 3.6.6 of the Design Manual provides the criteria that we use to evaluate this request. On the north façade, portions of the 6th and 7th floor are set back 1.4m from the interior lot line.

Section 3.6.6 of the Design Manual allows for the consideration of a variance to the upper storey interior lot lines and provides the criteria that are used to evaluate this request. There are three criteria that apply to a request to vary this section of the by-law. The request must be consistent with the objectives and guidelines of the Design Manual and then must fall into one of the two other categories. In this case, the applicant is proposing that 3.6.6(b) applies "where the height of the building is substantially lower than the maximum permitted building height and the setback reduction is proportional to that lower height". Staff advise that the maximum permitted height under the view plane legislation is approximately 10 stories (approx. 30m), well above the proposed building height. The building is 1.6m closer to the property line for the midrise portion of the building that is permitted, and this is proportional to the lower overall building height. This request is consistent with the intent of the Design Manual and staff recommend approval of this variance.

Post-Bonus Height Public Benefit

The Downtown Halifax LUB specifies a maximum pre-bonus height and a maximum post-bonus height. Projects that propose to exceed the maximum pre-bonus height are required to provide a public benefit. The LUB lists the required public benefit categories, and establishes a value specific to Precinct 2, that is the equivalent of $258 for every square metre of gross floor area that exceeds the pre-bonus height. This number is then multiplied by a factor of 0.2 to create the total required benefit. The applicant is requesting an additional 1,727 m2 of FAR for a total required public benefit of $89,149.32. In this case, the applicant is requesting to use the costs associated with restoring the contributing heritage resource as their post-bonus benefit. The applicant is proposing to spend $93,500 to rehabilitate the contributing heritage resource.

The Design Review Committee's role is to review and recommend to the Development Officer whether the proposed public benefit should be accepted by the Municipality. With this, the final cost estimates of providing the public benefit will be determined and an agreement with the Municipality will be prepared for Regional Council's consideration at the permit approval stage however a rationale and preliminary cost estimate have been provided in Attachment F.

Wind Assessment

A Qualitative Wind Impact Assessment was prepared by the applicant for the project and is included in Attachment C. The need for the assessment results from the building height. Its purpose is to determine whether the site and its surroundings will be safe and comfortable for pedestrians once the new building is constructed. The assessment submitted for this proposal anticipates that the development will result in no change in comfort levels for persons sitting, standing, or walking at the sidewalk level and for the buildings public amenities. Therefore, no specific design treatments to mitigate wind impacts are necessary.

Conclusion

Staff advise that the proposed development meets the objectives and guidelines of the Design Manual. It is, therefore, recommended that the substantive site plan approval application be approved.

FINANCIAL IMPLICATIONS

There are no financial implications. The HRM costs associated with processing this planning application can be accommodated within the approved 2021-2022 operating budget for C310 Urban & Rural Planning Applications.

RISK CONSIDERATION

There are no significant risks associated with the recommendations contained within this report.

ENVIRONMENTAL IMPLICATIONS

No environmental implications are identified.

ALTERNATIVES

1. The Design Review Committee may choose to approve the application with conditions. This may necessitate further submissions by the applicant, as well as a supplementary report from staff.

2. The Design Review Committee may choose to deny the application. The Committee must provide reasons for this refusal based on the specific guidelines of the Design Manual. An appeal of the Design Review Committee's decision can be made to Regional Council.

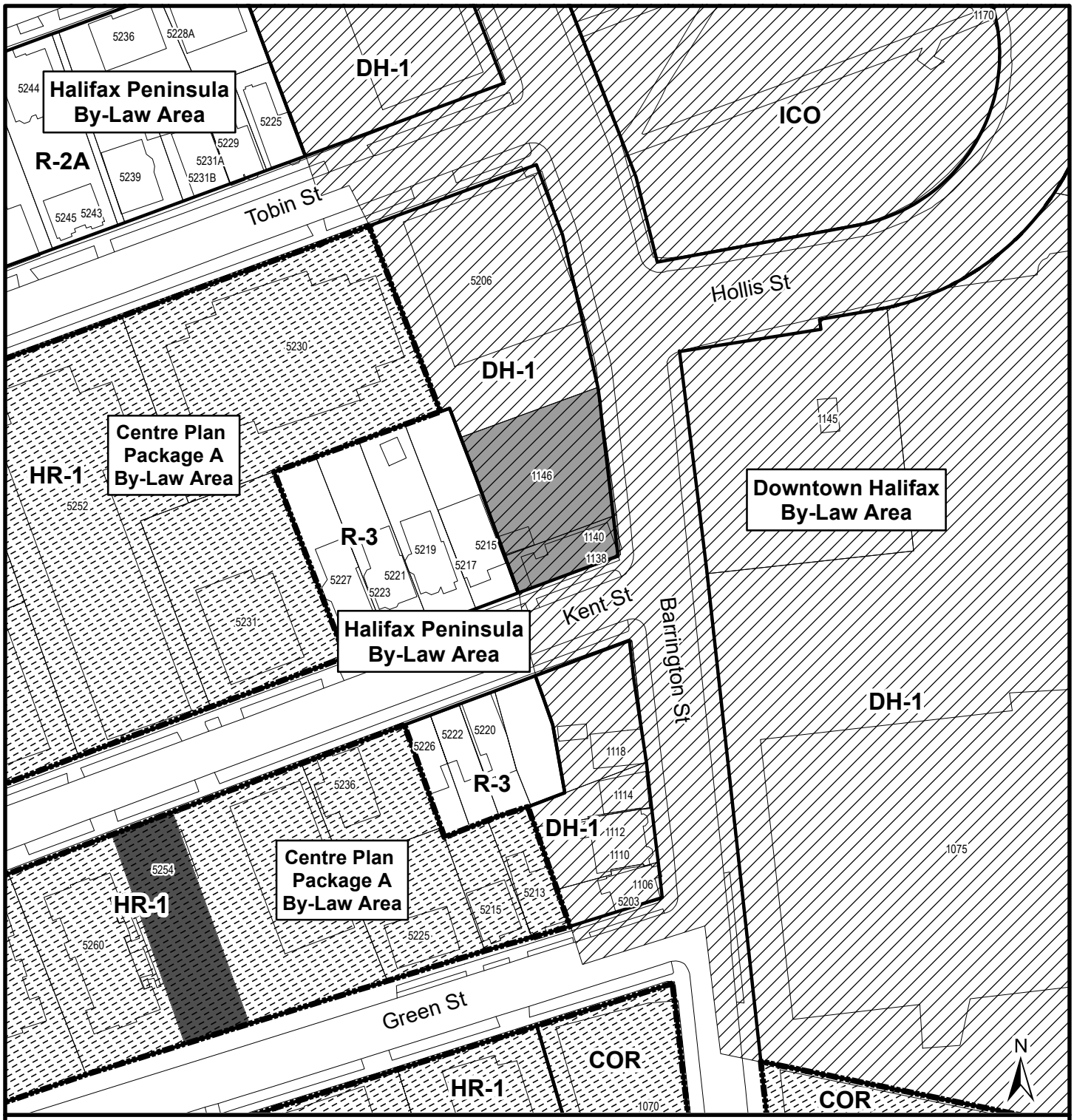
ATTACHMENTS

Map 1 Location and Zoning

Attachment A Site Plan Approval Plans
Attachment B Variances
Attachment C Wind Impact Assessment
Attachment D Design Rationale
Attachment E Design Manual Checklist
Attachment F Public Benefit Rationale and Cost Estimate

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Jennifer Chapman, Planner III, 902.225.6742



Map1 - Zoning and Location

1138-1146 Barrington St., Halifax

Subject Area of Existing Development Agreement

Registered Heritage Properties

Old South Suburb Heritage Conservation District

Downtown Halifax By-Law Area
Halifax Peninsula By-Law
Regional Centre Package A By-Law Area

Downtown Halifax By-Law

DH-1 Downtown Halifax
ICO Institutional, Cultural and Open Space

Halifax Peninsula By-Law

R-2A General Residential Conversion
R-3 Multiple Dwelling

Regional Centre Plan Package A By-Law

COR Corridor
HR-1 High-Order Residential 1

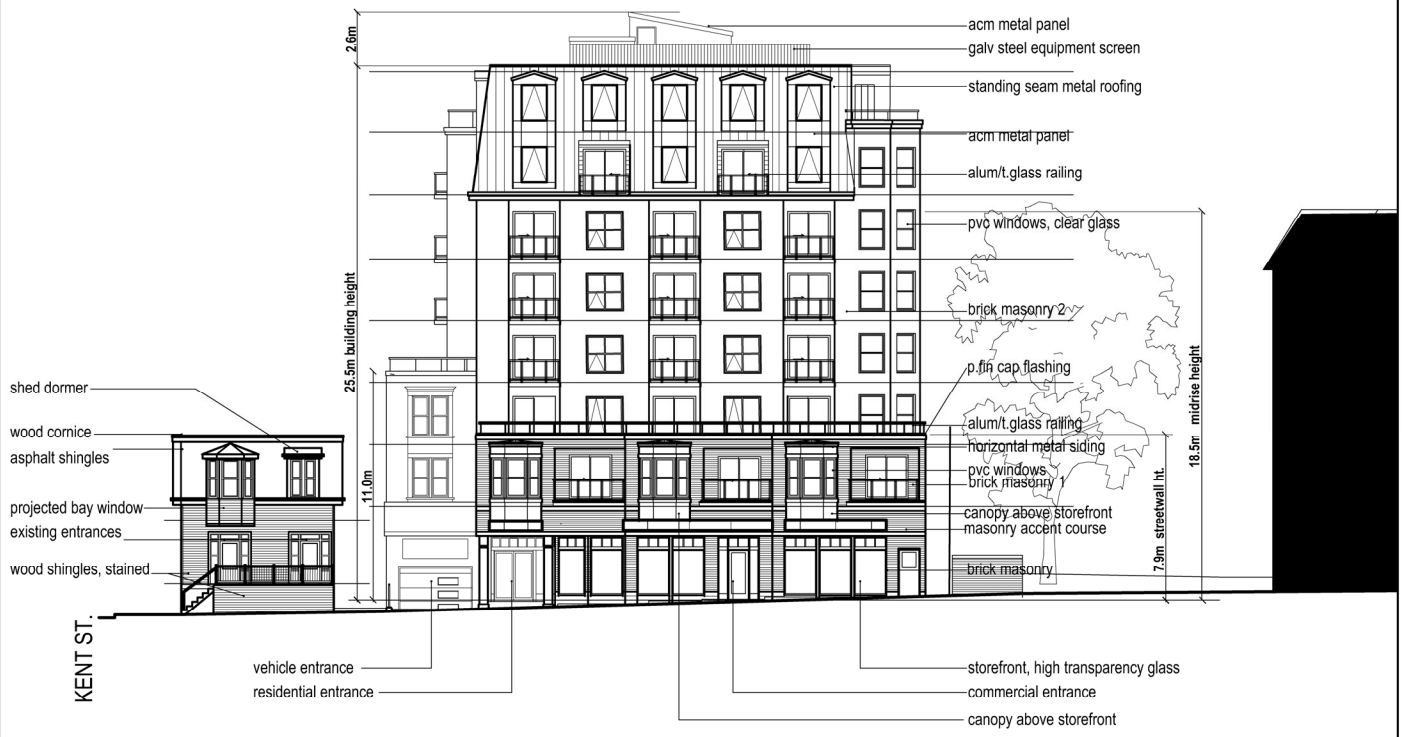
HALIFAX

0 10 20 30 40 m

This map is an unofficial reproduction of a portion of the Zoning Map for the plan area indicated.

The accuracy of any representation on this plan is not guaranteed.

Attachment A: Site Plan Approval Plans



EAST ELEVATION - BARRINGTON ST

SOUTH ELEVATION - KENT ST.

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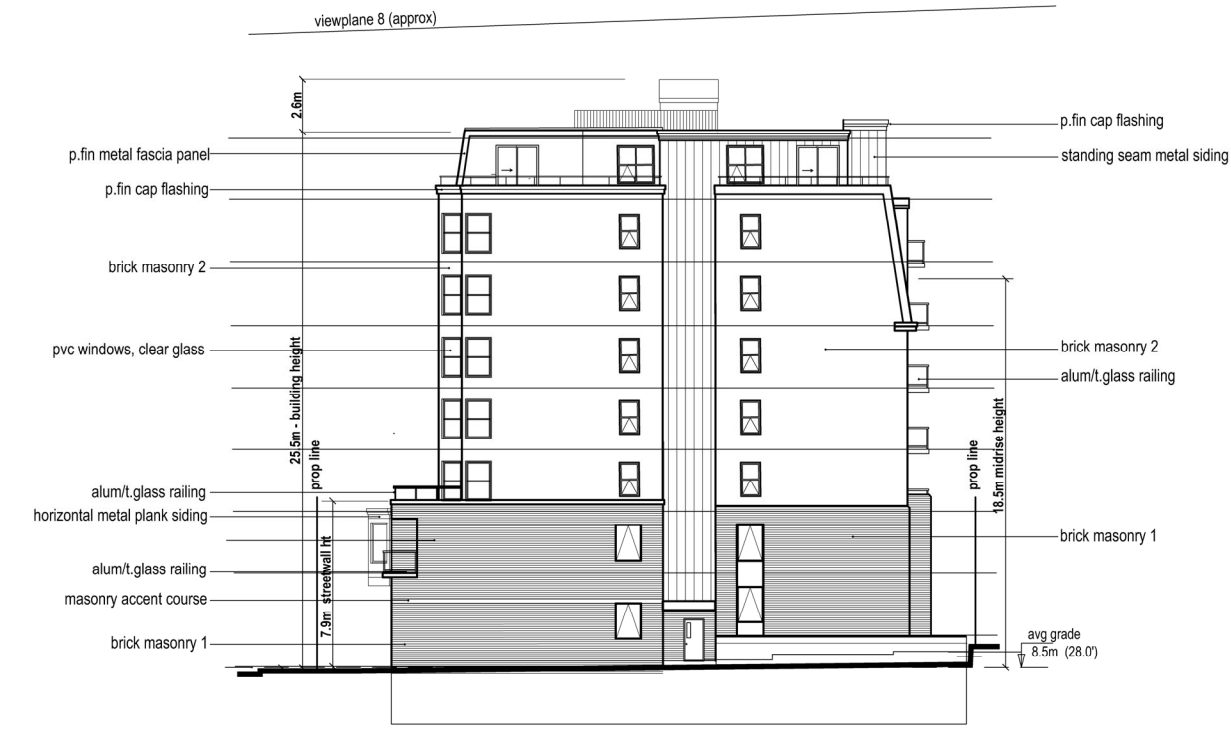
THE OLYMPIC

1138-1150 BARRINGTON ST.

WEST ELEVATION



NORTH ELEVATION

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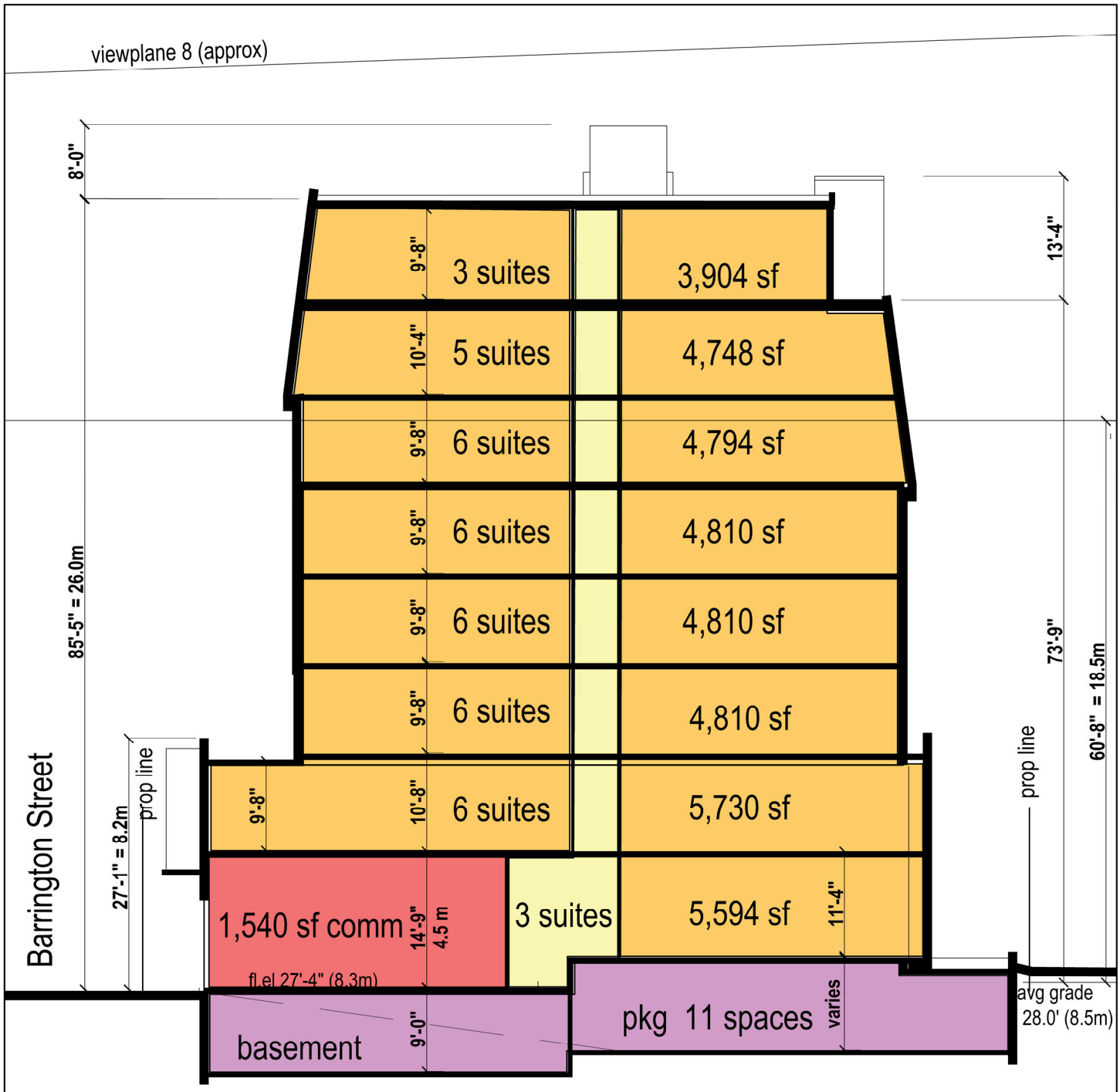
THE OLYMPIC

1138-1150 BARRINGTON ST.



original lot area	8,335 sf
corner lot area	2,430 sf +/-
lot area	10,765 sf
FAR	x 4
max GFA	43,060 sf
Total GFA	40,120 sf
GFAR	3.73

level	S	1Br	1Br+d	2Br
8	-	-	-	3
7	-	1	1	3
6	1	3	1	1
5	1	3	1	1
4	1	3	1	1
3	1	3	1	1
2	-	2	1	3
G	-	1	-	2
41 suites	4	16	6	15

SECTION 1" =16'

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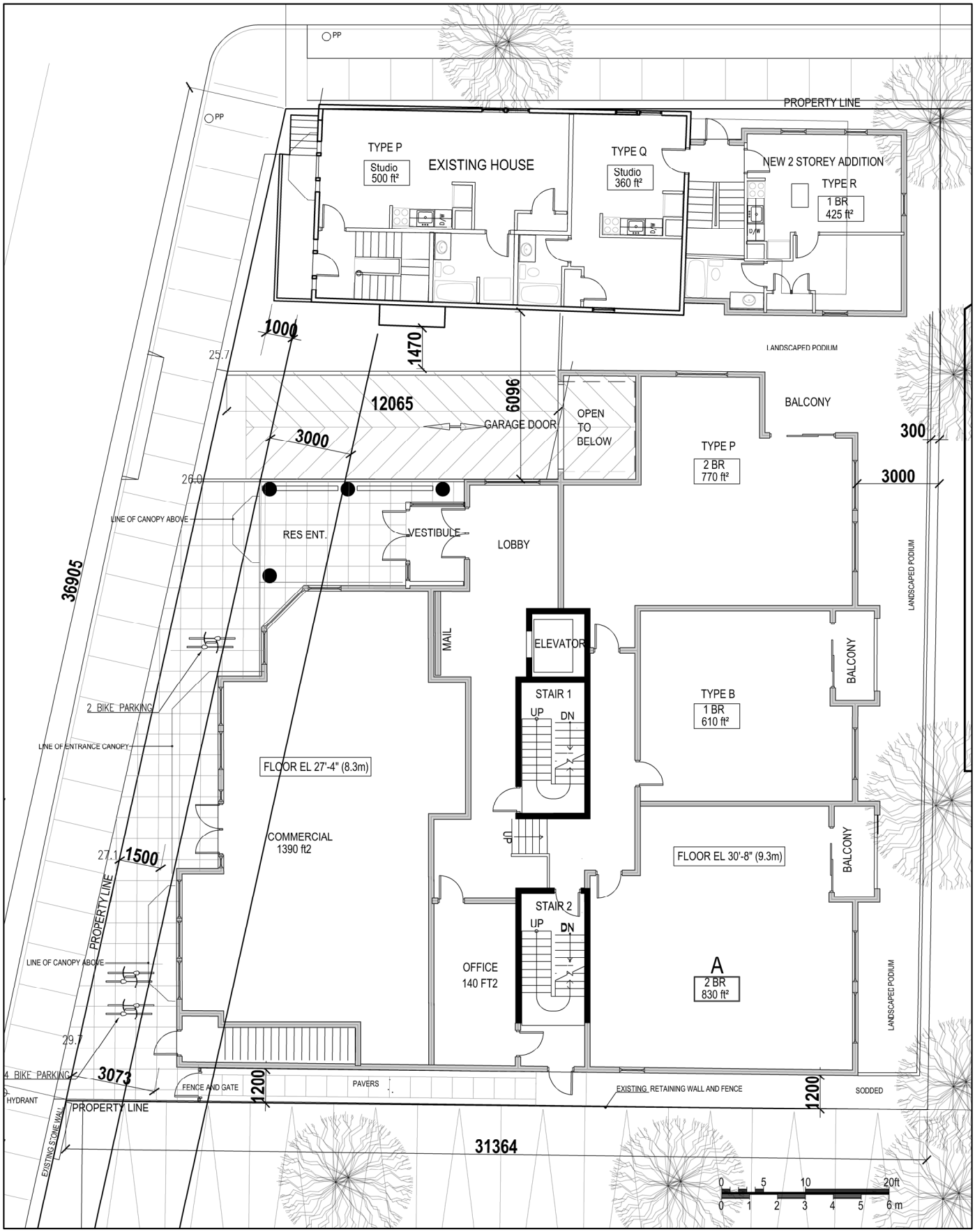

PLAN GROUND FLOOR 1" =16'

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THE OLYMPIC

1140-1150 BARRINGTON ST.

Kassner Goodspeed Architects Ltd.

The Olympic
1138-1150 Barrington Street, Halifax

Site Plan Approval - Requested Variances

In general terms, we believe the proposed design is wholly derived from the fundamental concepts embodied in the Downtown Plan for the Old South Suburb precinct and respects the formal requirements of the Land Use Bylaw.

Two minor variances to the quantitative elements of the LUB are requested.

1) *Minimum Streetwall Height.* Downtown Halifax LUB s9(3) requires a minimum streetwall height of 11m.

Non Compliance; The streetwall facing Barrington Street has a height of 8m

Rationale: Sentence 9(8) permits a variance to the Minimum Streetwall Height where the relaxation is consistent with the Design Manual.. The Design Manual specifically references integrated developments and Section 4.4.2 a stresses the importance of extending existing cornice lines. In this case the streetwall height has been reduced to extend the roof line of the adjacent heritage asset.

2) *Minimum Interior Lot Line Stepback:* Downtown Halifax LUB: s 11(2.4) requires that upper floors of mid rise buildings above 18.5 m be set back 3 m from interior lot lines.

Non Compliance: There is one area of non-compliance. On North façade, portions of the the 7th floor and smaller portions of the 6th floor are set back 1.4m from the interior lot line.

Rationale: Sentence 11(2.4) permits variances to the streetwall setback when consistent with the criteria specified in Section 3.6.6 of the Design Manual. On the north elevation, the modest site dimensions combined with an efficient configuration of the service core results in the intrusion into the required setback of level 7 and the top portion of level 6. Level 8 conforms to the required setback.

3.6.6 (a) Generally the Design Manual requires upper storey setbacks to ensure adequate separation distances are maintained to abutting structures, As there is an open parking lot abutting the north property line, the reduced setback dimension on the north wall has minimal impact on the already substantial separation distance.

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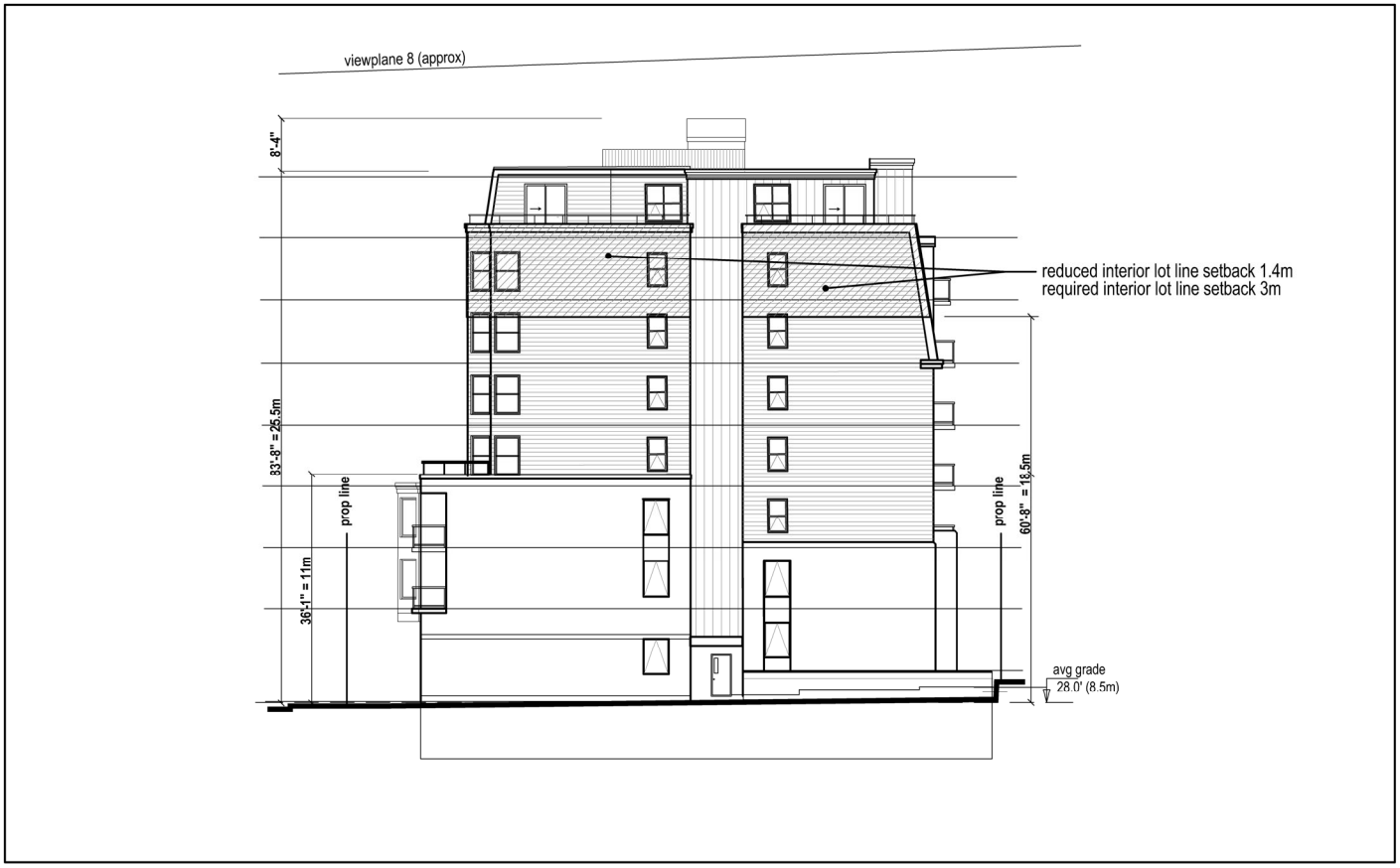
Richard M Kassner FRAIC MNSAA MAAPEI MAANB MCSC
Daniel B Goodspeed FRAIC MNSAA MAAPEI MAANB

3.6.6 (b) At 8 floors, the height of the building is approximately 2 storeys lower than the maximum building height possible under the view plane legislation. The variance is requested only for that mid rise portion that includes approximately 1.25 storeys of the building. The entire north façade has a set back of 1.2 m or more from the interior lot line. The impact of the reduced setback is mitigated by the fact that the building on the adjacent site is set back approximately 12m from the common lot line and the adjacent side yard is used for surface parking.

dbg
27 May 2021

VARIANCE- EAST ELEVATION



VARIANCE -NORTH ELEVATION

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THE OLYMPIC

1138-1150 BARRINGTON ST.

Attachment C: Wind Impact Assessment

#21-074

1138 BARRINGTON STREET

WIND STUDY

2021

MAY 29, 2021

submitted by:

fathom

fathom

1138 BARRIGTON STREET
WIND STUDY

Fig. 1. 1138 Barrington Street from Barrington Street looking west

THE PROPOSAL

The proposed 8-storey multi-unit development will replace a 3 @ 2.5 storey buildings fronting on to Barrington Street (see Figure 2). The site lies just south of an existing 6-storey (including 1-storey mansard roof) building and amongst a range of different building heights around It. Just to the north of this site, is the Cornwallis Park (See Fig 2).

The following qualitative wind assessment analyzes the probable qualitative wind impacts on surrounding properties and public spaces as a result of the removal of the 3 buildings and replacement with a single 8-storey building. This assessment follows the protocols outlined in the Centre Plan Land Use Bylaw (Appendix 1).

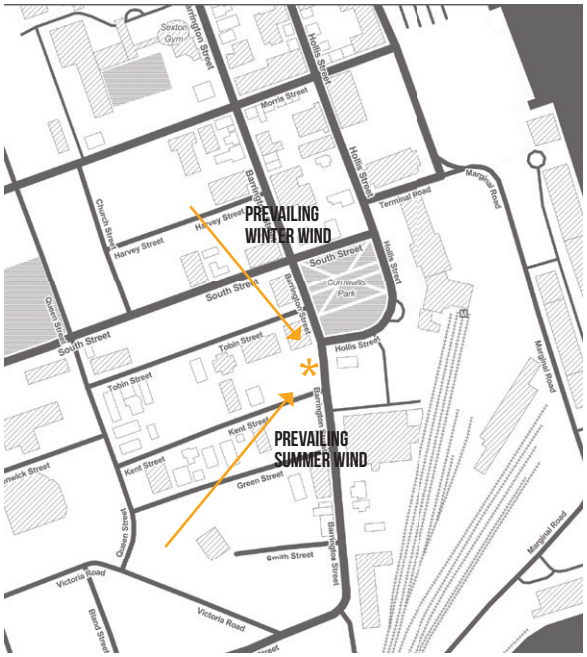
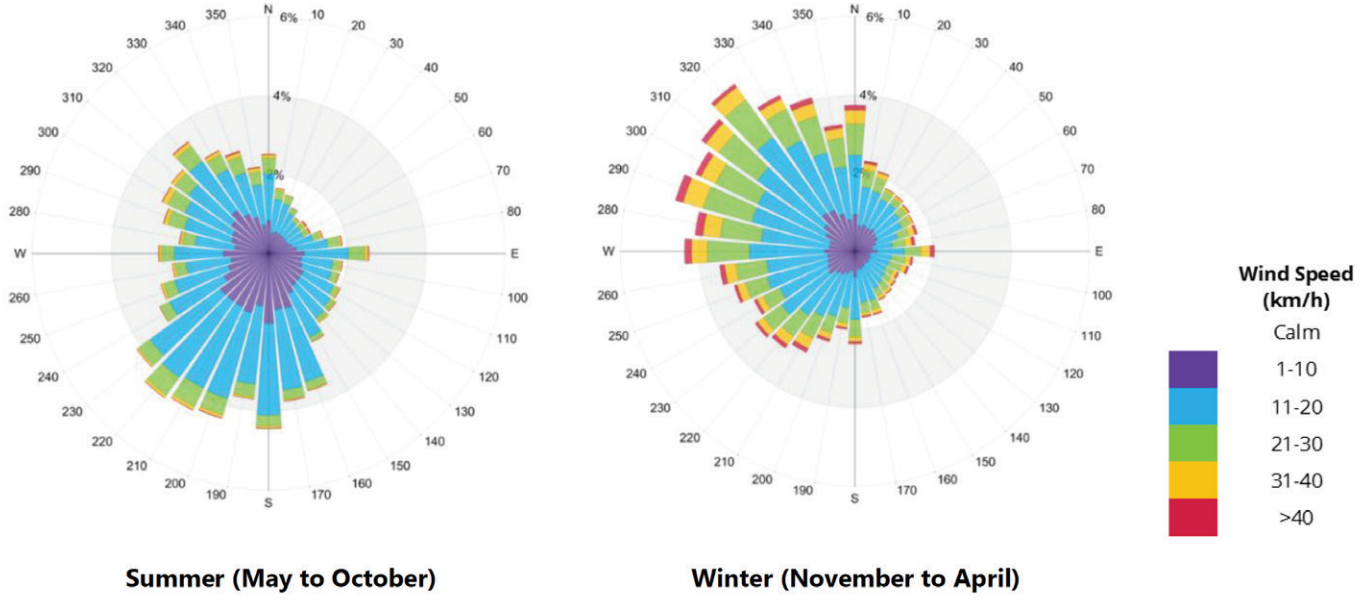


Fig. 2. Site Map

Fig. 3. Surrounding Building Heights looking North

Fig. 4. Seasonal distribution of winds approaching Shearwater Airport (1988–2017)



fathom

METHODOLOGY

This microclimate study was designed to estimate human thermal comfort changes resulting from changes to wind conditions and solar conditions surrounding the new development. For this assessment a series of computer simulations were prepared using a 3D solar modelling application and a computational fluid dynamic (CFD) model to assess changes at the ground level for a variety of pedestrian activity types.

WIND DATA

Wind data was gathered from the local Shearwater Airport between 1988 and 2017 to understand the intensity, frequency, and direction of winds near the proposed site. The resulting diagrams (Fig. 4) were taken from the Centre Plan Land Use Bylaw for the key study periods (May to October and Nov to April). These charts show that the highest and most frequent wind speeds annually and then monthly during the summer and winter. The coastal conditions in Halifax bring winds from many different directions throughout the year resulting in prevailing winds mostly from south and southwest in the summer and from the northwest in the winter. For most of the year, winds rarely come from the north-east or south-east quadrant. The wind simulations therefore focus on winds from the north-west and south-west quadrants mainly. In this location, wind speeds rarely exceed 30km/hr in the summer (May to Oct), while in the winter (Nov-Apr) wind speeds over 30km/hr can occur as frequently as 9% of the time. This means that winter wind conditions are much more likely to impact human thermal comfort around the new building, and most of these winds come from the prevailing north-western quadrant. In the summer months, wind speeds between 11-30 km/hr occur about 65% of the time from the south-western quadrant so in the summer the prevailing wind direction is from the south-west.

PEDESTRIAN COMFORT:

Pedestrian comfort and safety is an important consideration in the design of new developments in downtowns. Building height and massing can have considerable impacts on human thermal comfort at the street-level impacting the livability and walkability of neighbourhoods, snow loading on adjacent roofs and the general environmental conditions in neighbourhoods.

The Beaufort scale is an empirical measure that relates wind speed to observed conditions on land and sea. The attached Beaufort scale (Figure 5) is a general summary of how wind affects people and different activities, and distinguishes at what points wind speeds can become uncomfortable or dangerous. Wind speed is only one variable of human thermal comfort as described below.

Fig. 5. Beaufort Scale

	2-5 mph	3-8 km/hr	calm	Direction shown by smoke drift but not by wind vanes
	5-7 mph	8-11 km/hr	light breeze	Wind felt on face; leaves rustle; wind vane moved by wind
	7-10 mph	11-16 km/hr	gentle breeze	Leaves and small twigs in constant motion; light flags extended
	10-15 mph	16-24 km/hr	moderate breeze	Raises dust and loose paper; small branches moved.
	15-20 mph	24-32 km/hr	fresh breeze	Small trees in leaf begin to sway; crested wavelets form on inland waters.
	+20 mph	> 32 km/hr	strong breeze	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty.

URBAN WINDBREAK IMPACTS

Wake zones for zero porosity structures can extend 8-30 times the height of a structure. A 8-storey building (26m) can generate increased wind speeds between 0.18-0.6 km on the downwind side (see Fig. 6 and 7). Beyond the wake zone, there is typically more turbulence and eddies as a result of more turbulent air. This can be characterized as being slightly more gusty winds with quiet periods interspersed with gusts of wind. Directly behind the windbreak, the quiet zone can extend from 0 to 8 times the height on the downwind side. In this quiet zone, wind speeds can be reduced causing a 'wind shadow'. Around the edges of the building, wind speeds can increase as wind flows around and down the structure.

WIND IMPACTS FROM TALL BUILDINGS

There will be a number of aerodynamic impacts from a new tall building including:

1. **Downwash**: Wind speed increases with the surface area of the building (i.e. height and width) so when a tower is exposed to wind, the pressure differential between the top and the bottom of tower forces the high pressure at the top down the windward face increasing pedestrian wind speeds. The taller the exposed face is, the higher the wind speed will be at the base. The stepback surrounding the proposed tower at the third storeys will receive the bulk of this downwash instead of the streets and surrounding properties.
2. **The corner effect:** at the windward corners of buildings there can be unexpected increases in wind speeds as wind forces around the windward corners from high pressure on the windward face to low pressure on the lee side. Some of the ways to decrease this impact is to create pyramidal steps which increases the surface area of the edges.
3. **The Wake Effect:** Wake is generally caused by both the downwash and corner effect. The greatest impact area occurs within an area of direct proportion to the tower height and width on the lee side of the wind. Impacts are minimized by creating a stepback base on the building.
4. **Building Groups:** The effects that occur individually around buildings cannot be applied directly to groups of buildings. The cumulative effect of many clustered tall buildings, like in this situation, can create a wide range of different wind scenarios that must be modelled as a group to understand the cumulative impacts.

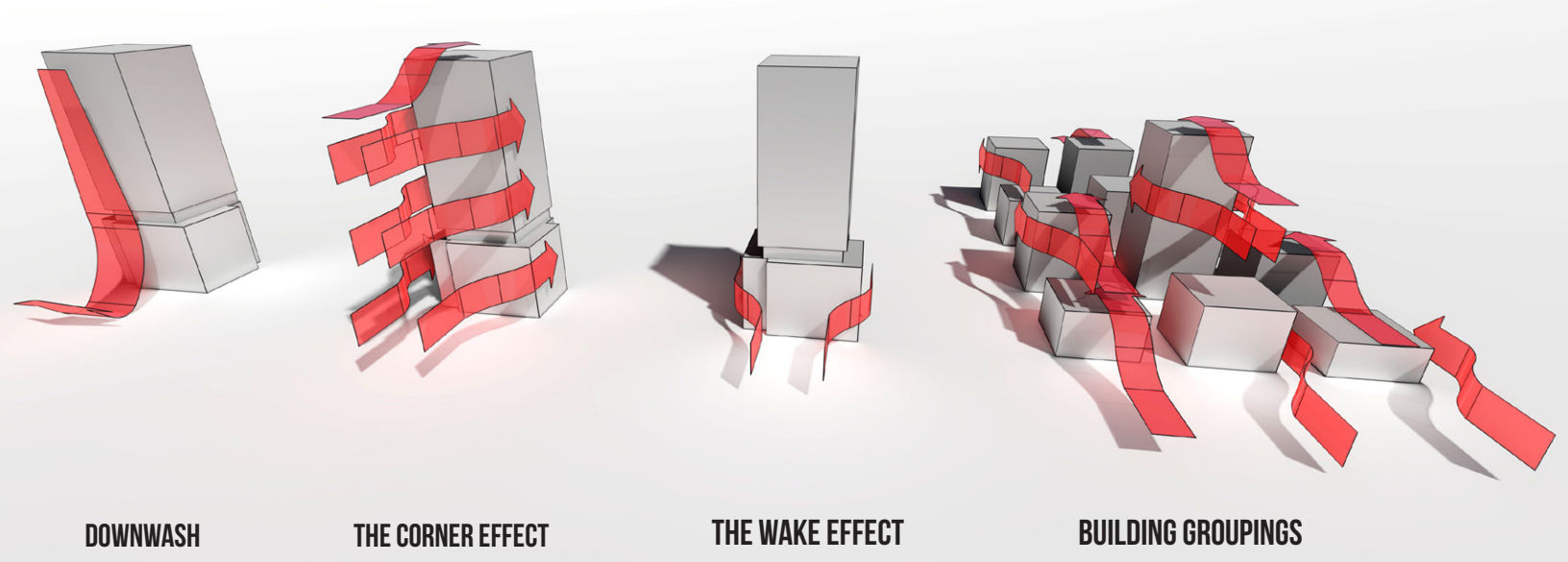
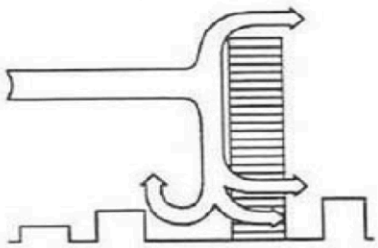
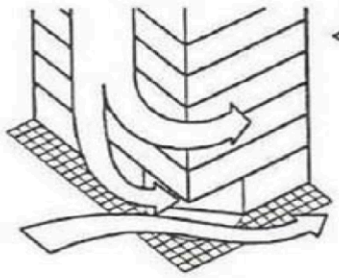
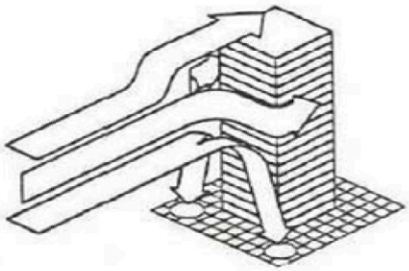


Fig. 6. Wind impacts on and from buildings in downtowns



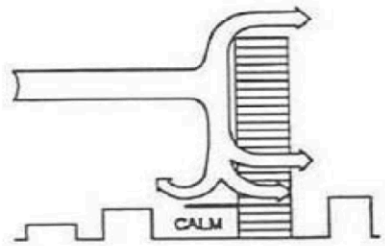
A building taller than its surroundings can concentrate pedestrian level winds at ground level.



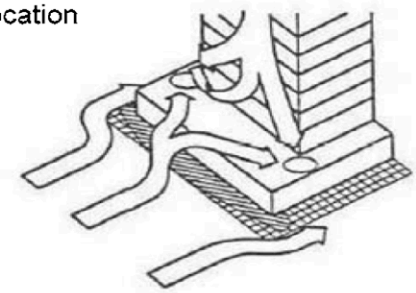


A tall building concentrates wind at its base, particularly at the corners where the downwash is accelerated into horizontal motion.

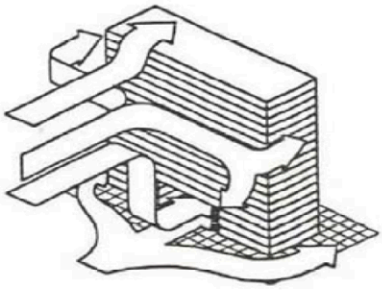
Undercut corners can aggravate the wind conditions at a building corner. Typically this is not a good location for an entrance.



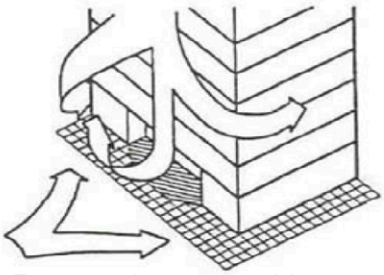
Downwash can be deflected by a large canopy at the base of a building, producing a pleasant entrance area.



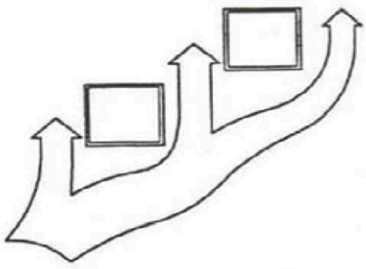
A podium/tower combination concentrates winds at the podium roof (▨) not at the base (□).



Openings through a building at the base induce high velocities due to pressure differential from the front to the back.



Recessed entry provides low winds at door locations.



Adjacent building placement can cause a compression of the mean streamlines, resulting in horizontally accelerated flows at ground level.

Fig. 7. Typical Wind conditions near tall buildings

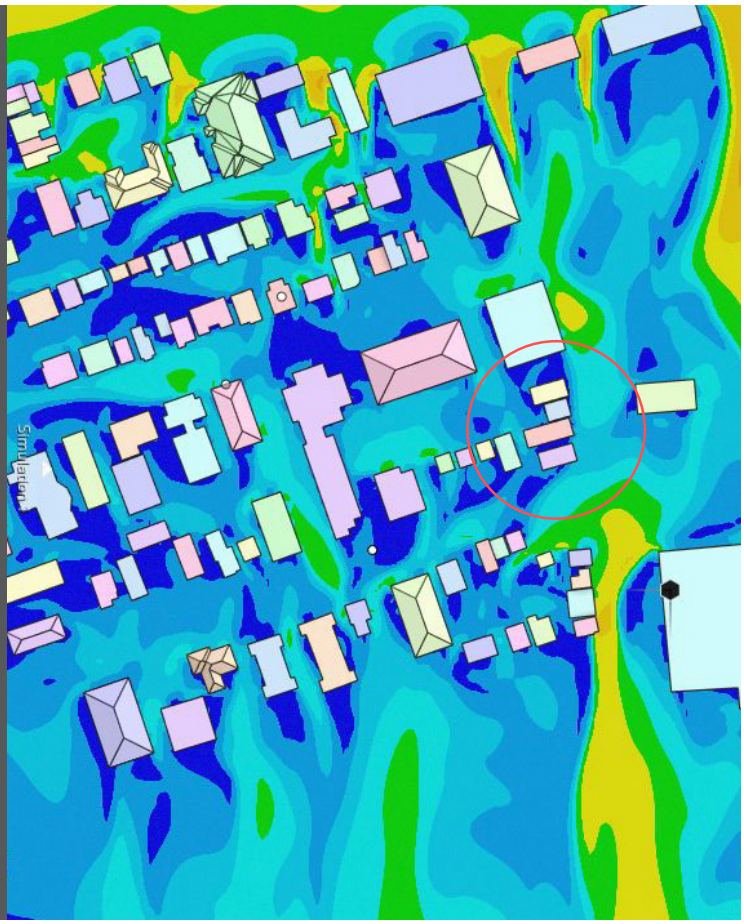
WIND IMPACTS FROM THE NEW BUILD

To simulate the impacts of different wind conditions and directions resulting from the building, Fathom employed a CFD simulation (Computational Fluid Dynamics) to model the wind impacts at different times of the year. The CFD was constructed using Ansys Discovery 2021 which is a platform commonly used for steady state wind simulations. CFD simulations are now being widely used for the prediction and assessment of pedestrian wind comfort environments and high-rise building aerodynamics. There are various types of wind analysis that can be carried out using a CFD and they provide a high predictive qualitative assessment but more detailed quantitative assessments still employ wind tunnels to measure actual wind speeds. Wind tunnels require the construction of scaled physical models and are still time consuming and expensive. Results from CFD wind simulation are considered to be a reliable sources of quantitative and qualitative data and are frequently used to make important design decisions. For this wind assessment, a CFD model was employed using the 3D model of the existing version of the building (simplified to reduce modelling complexity) and a the proposed future building. The simulation was set at a starting wind velocity of 15 m/s or 54 km/hr (yellow) to match the frequency analysis of the Shearwater wind data, and the simulation was allowed to run until steady state was achieved. Both existing conditions and future conditions were simulated to show the difference between the anticipated wind conditions today and the changes resulting from the new tower behind Victoria Hall.

As noted previously, the western semi-circle (360 degrees to 180 degrees counterclockwise), accounts for most of the high wind conditions that would create uncomfortable

Fig. 8. North Wind Existing

EXISTING CONDITIONS



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conditions for pedestrians. For this reason, our analysis focuses on this semi-circle at 45 degree intervals. Generally speaking, the area around the proposed building is mixed height with a range of low rise, mid rise and high rise towers within a few blocks of the site. The Barrington neighbourhood in and around the site is also blessed with a mature urban forest which reduces windspeeds at the ground level most of the year (more pronounced in the summer with full canopy). Trees were not considered in the simulation due to the complexity of modelling, but they would have a further dampening effect on wind speeds.

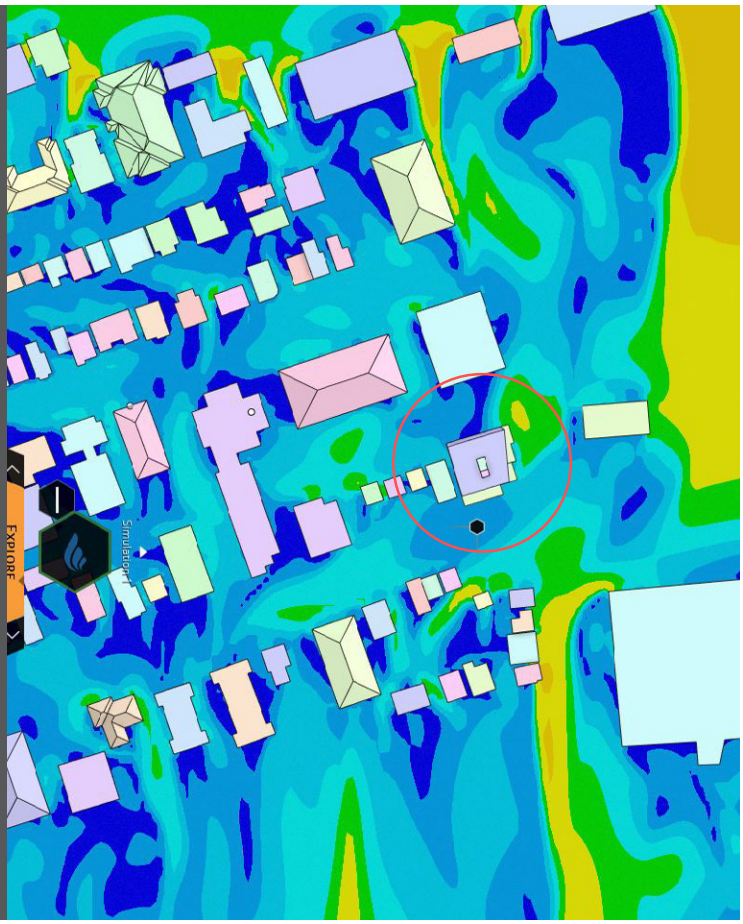
DESIGN CONSIDERATIONS

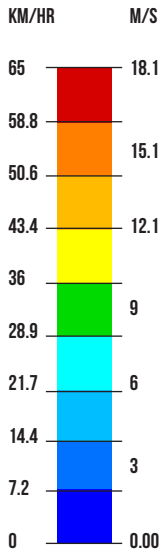
The proposed building has been designed to reduce wind impacts with a 2-storey streetwall employing a 3-5m stepback on the Barrington side of the building and a partial 2m stepback on the Kent Street side bordering the existing 2 storey building. These stepbacks reduce wind sheer travelling down the building, instead focusing it on the third storey terraces. The new building also provides a canopy wind break for wind sheer for the main lobby entrance providing additional wind protection from downdrafts and wake effects near the entry. Additional articulation of the streetwall creates building complexity designed to reduce wind effects at the street while providing architectural articulation of the ground floors from the street. The parapets added to the top floor, the 7th floor stepbacks and the 2nd floor stepbacks will also capture much of the downdraft wind, reducing street level impacts.

All of these architectural features have been purposely designed by the architects (and as required in the Land Use bylaw) to reduce wind and provide architectural articulation and visual interest to the building. The wind impacts vary around the building depending on the prevailing direction of the wind, and the wind speeds. In some places

Fig. 9. North Wind Future

FUTURE CONDITIONS





wind speeds will increase, but in many areas, the higher building will create a greater wind shadow than exists today.

To keep the model simple (CFD's are notoriously computationally intensive simulations), we did not model trees which can further reduce wind speeds at the ground by creating additional surface roughness. The simulations were run approximately 6' (2m) off the ground. We modelled existing conditions and future conditions from all directions to contrast the differences that result from the new building.

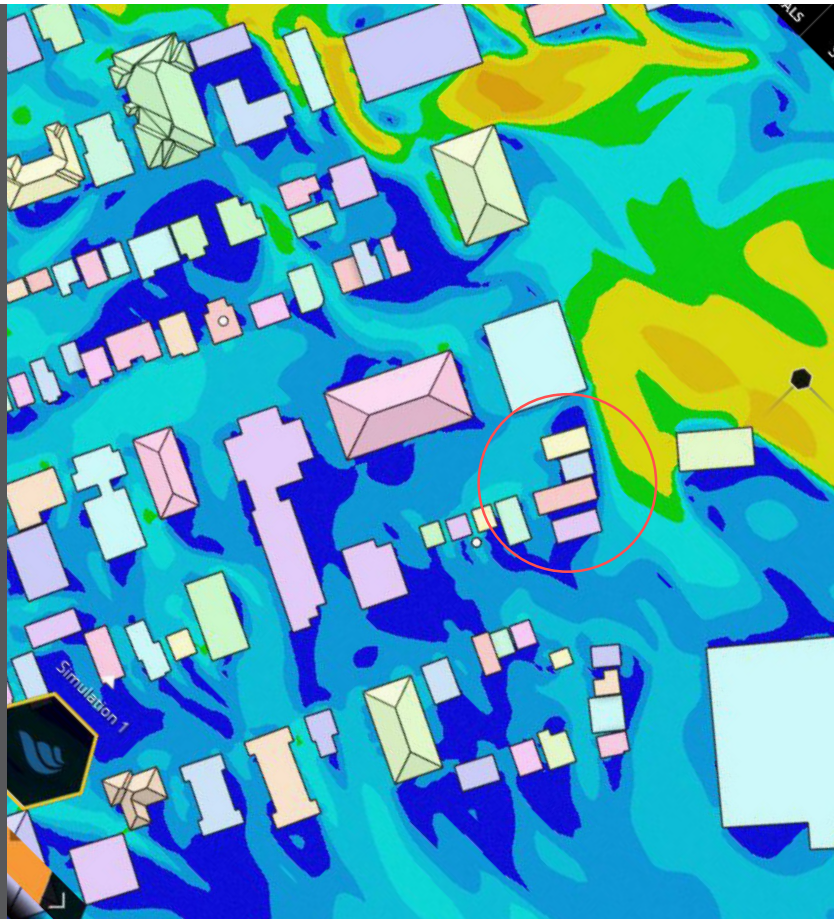
NORTH WIND IMPACTS (FIG 8 & 9)

Winds from the north are not overly frequent in the summer, but are a little more frequent in the winter. For example, wind speeds over 30 km/hr only happen about 1-2% of the time in the winter and less than .5% of the time in the summer. The CFD simulation was set to start in the windiest conditions starting at 14m/s (Yellow) in order to model a worst case scenario for pedestrian comfort. Areas in orange and red are areas where wind speeds will be accelerated at a higher wind speed than the starting wind speed (15 m/s to > 18 m/s).

Looking at the existing and future conditions, the wind shadow is slightly more pronounced (see purple and blue areas) in the future condition and there are very little changes to wind speed on Barrington and in Cornwallis Park. Overall, there is very little change when comparing the 3 2-storey buildings to the single 8-storey building when winds come from the north.

Fig. 10. Northwest Wind Existing

EXISTING CONDITIONS



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NORTH-WEST WIND IMPACTS (FIG 10 & 11)

Winds from the northwest are the most frequent prevailing wind direction in the winter and is fairly frequent in the Summer. Even though this direction is prevailing, wind speeds over 30 km/hr only occur about 1% of the time from the northwest.

The CFD simulation was set to start in the windiest conditions starting at 14m/s (Yellow) in order to model a worst case scenario for pedestrian comfort. Areas in orange and red are areas where wind speeds will be accelerated at a higher wind speed than the starting wind speed (15 m/s to > 18 m/s

Looking at the existing and future conditions, there is is a much larger wind shadow from the new building and a marked reduction of wind speeds all around Barrington Street in the vicinity of the new build. There is also a noticeable reduction in wind speeds on the south corner of Cornwallis Park.

WEST WIND IMPACTS (FIG 12 & 13)

Winds from the west are the fairly frequent in the winter and relatively infrequent in the summer. Even though this direction is prevailing, wind speeds over 30 km/hr only occur about 1% of the time from the northwest.

The CFD simulation was set to start in the windiest conditions starting at 14m/s (Yellow) in order to model a worst case scenario for pedestrian comfort. Areas in orange and red are areas where wind speeds will be accelerated at a higher wind speed than the starting wind speed (15 m/s to > 18 m/s

Looking at the existing and future conditions, winds from the west direction result in very little change from existing conditions to future conditions. Wind is slightly reduced on the corner of the Superstore but the changes are minimal for the new building.

Fig. 11. Northwest Wind Future

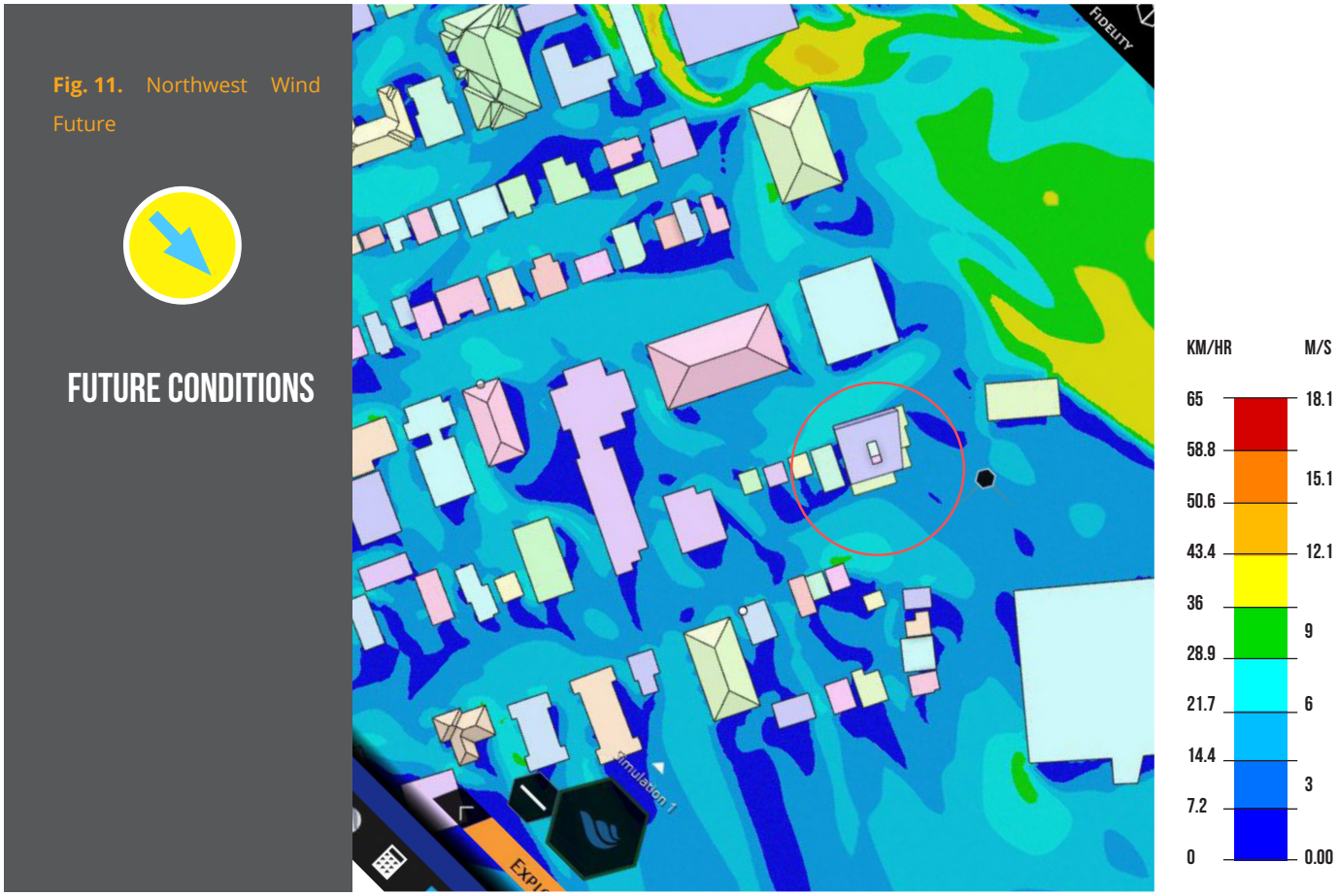
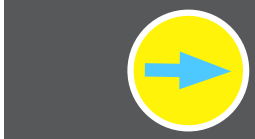


Fig. 12. West Wind Existing



EXISTING CONDITIONS

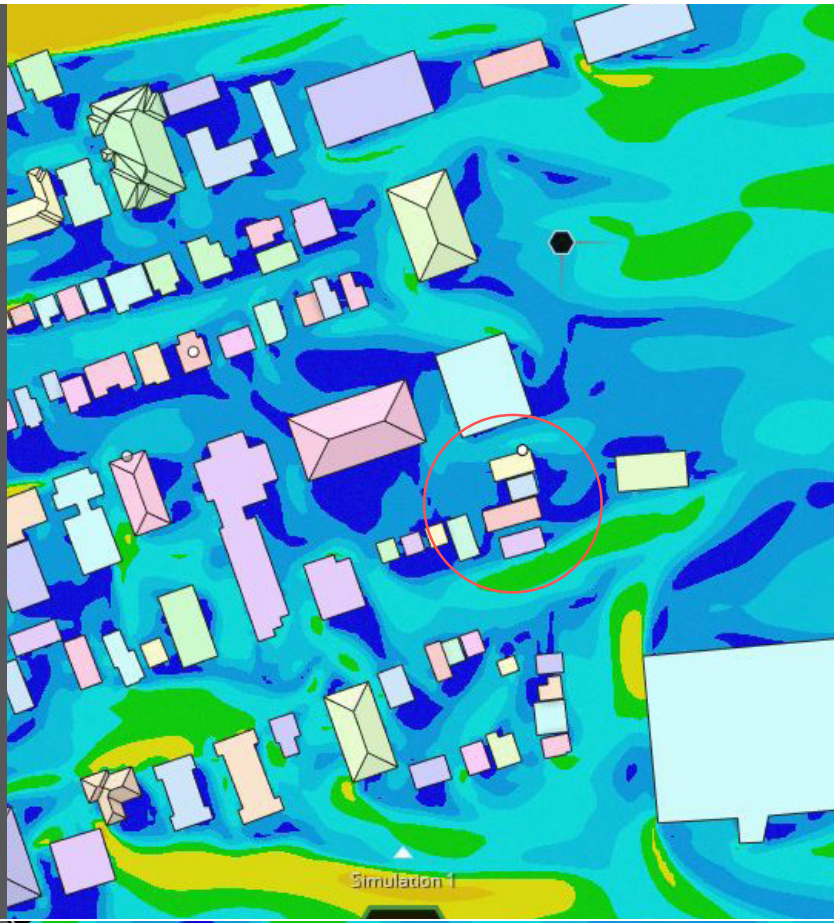


Fig. 13. Southwest Wind Existing

EXISTING CONDITIONS

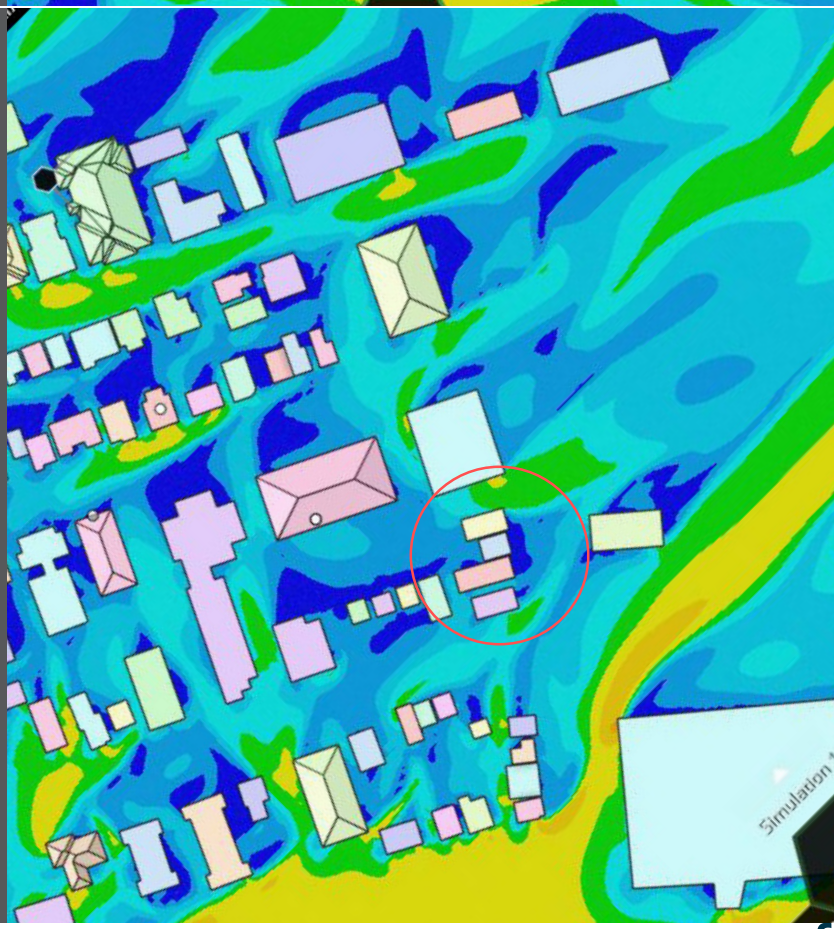


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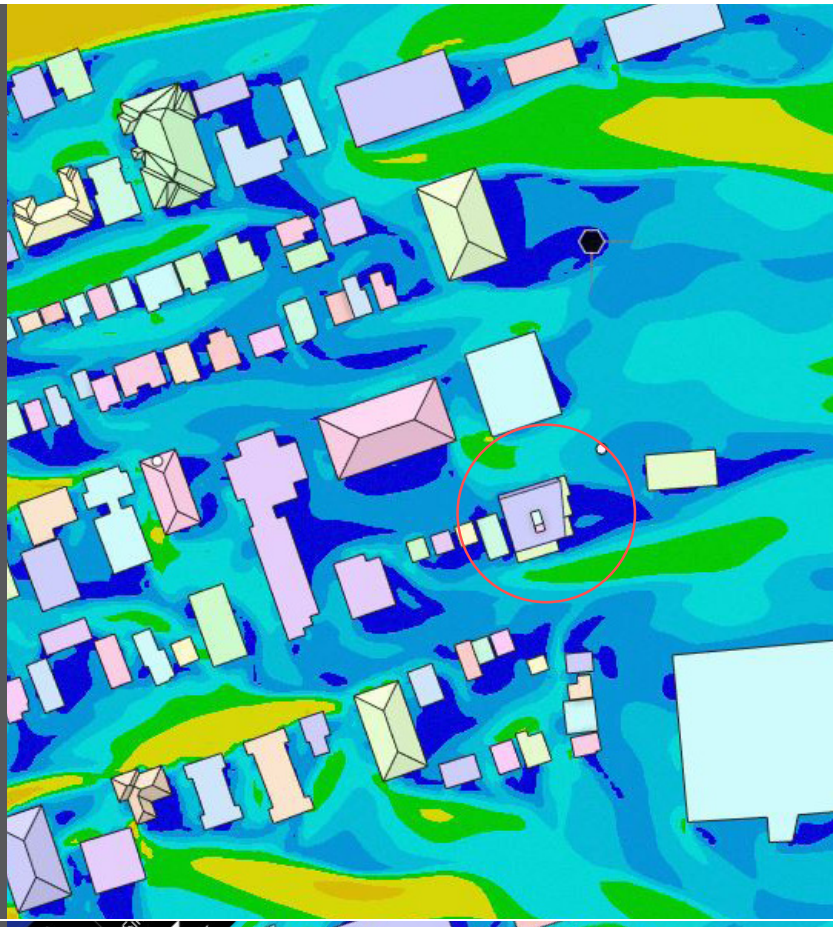
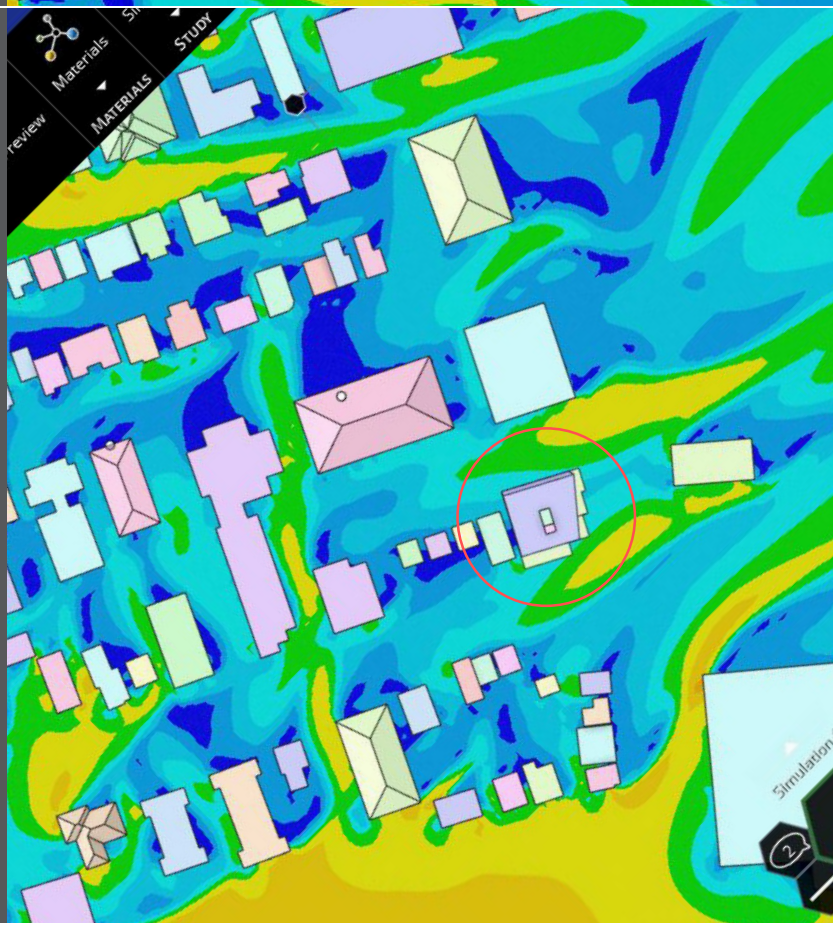
Fig. 14. West Wind Future



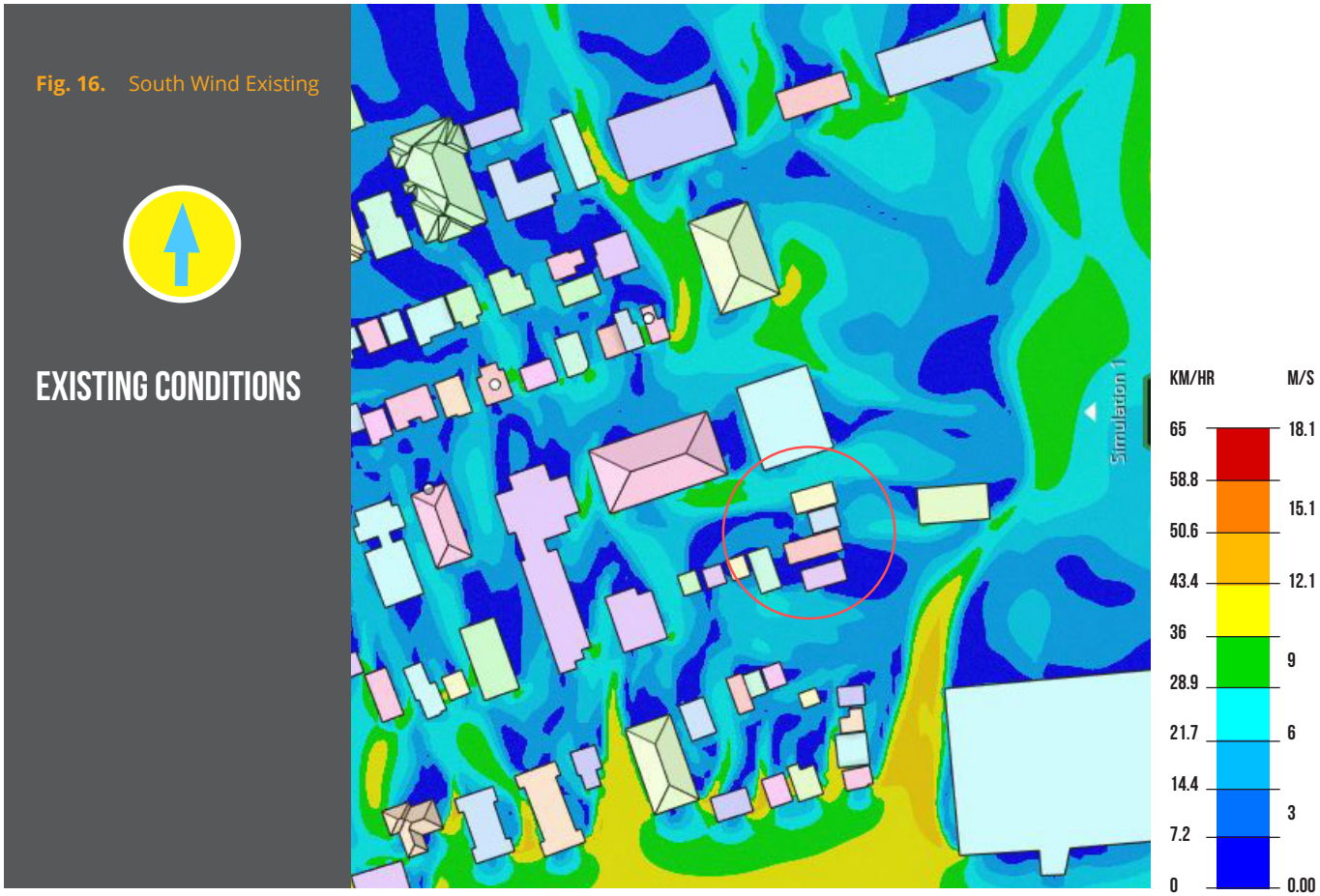
FUTURE CONDITIONS

Fig. 15. Southwest Wind Future



FUTURE CONDITIONS

Fig. 16. South Wind Existing



SOUTH-WEST WIND IMPACTS (FIG 14 & 153)

South-west winds are frequent in the summer months but fairly infrequent in the winter months. Even though this direction is prevailing in the summer, wind speeds over 30 km/hr only occur less than 1% of the time from the south-west. In the winter, this direction occurs less than 2% of the time.

The CFD simulation was set to start in the windiest conditions starting at 14m/s (Yellow) in order to model a worst case scenario for pedestrian comfort. Areas in orange and red are areas where wind speeds will be accelerated at a higher wind speed than the starting wind speed (15 m/s to > 18 m/s

Comparing the existing and future wind condition maps, the new building increases wind speeds on Barrington Street on both sides of the building when the winds come from the Southwest. The corner of Hollis and Barrington Street will be slightly windier than today but some of the Superstore parking lot will be less windy than it is Today.

SOUTH WIND IMPACTS (FIG 16 & 17)

South winds are one of the most frequent wind direction in the summer in Halifax, but are fairly rare in the winter. Winds rarely exceed 30 km/hr from the south in the summer and winter.

The CFD simulation was set to start in the windiest conditions starting at 14m/s (Yellow) in order to model a worst case scenario for pedestrian comfort. Areas in orange and red are areas where wind speeds will be accelerated at a higher wind speed than the starting wind speed (15 m/s to > 18 m/s

Looking at the existing and future conditions, winds from the south direction generally show very little impact on wind speeds after the new building. North of this site, there will be slightly lower wind speeds after the new building is built.

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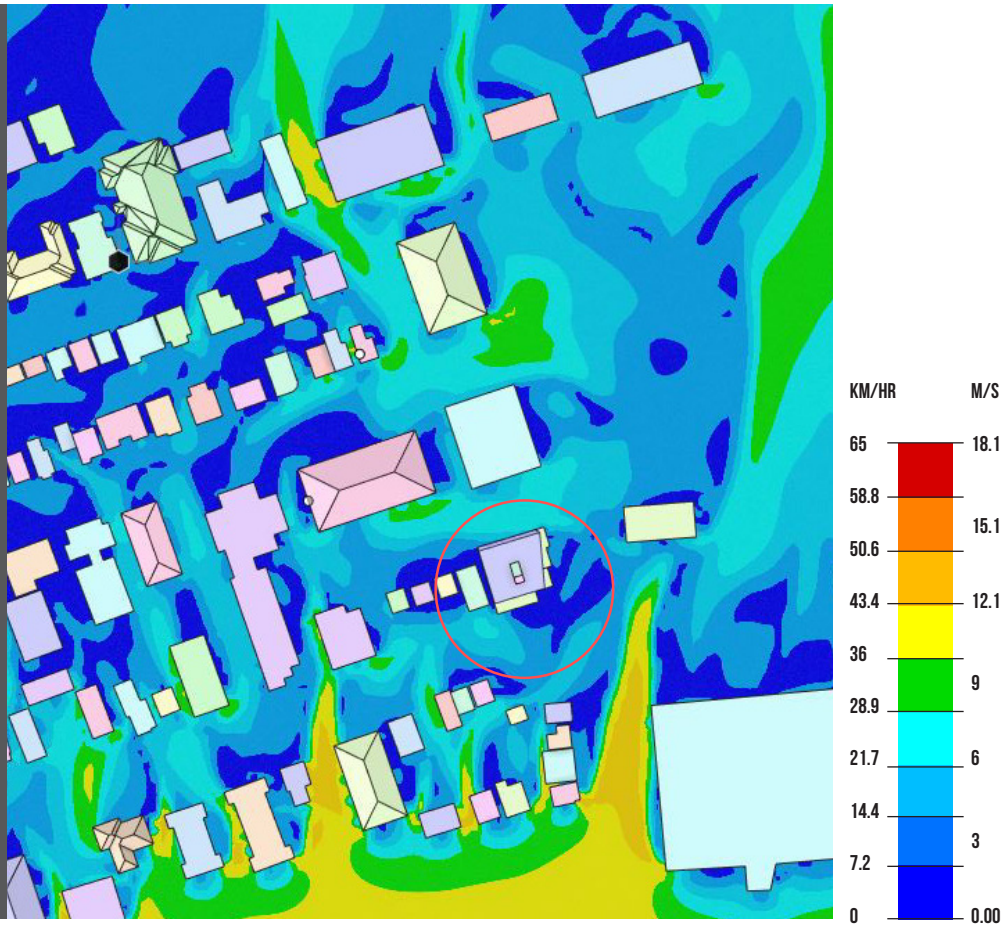
Fig. 17. South Wind Future



FUTURE CONDITIONS

WIND IMPACTS: OTHER DIRECTIONS

The other wind directions are infrequent enough that winds from other directions (10-170 degrees) will have very little impact as a result of the new building. For the purpose of wind studies in HRM, these directions have been disregarded for modelling due to their infrequent nature.

OTHER DESIGN CONSIDERATIONS

The models show there are very little changes in wind speed except when winds come from the southwest direction where wind speeds are slightly increased. More often than not, this building will cause additional wind shadows (less windy conditions) surrounding the development which improves the human thermal comfort from wind gusts, but this in turn, creates some additional snow loading on surrounding properties and streets as wind speeds are reduced causing snow to deposit faster. In the winter, there could be some additional snow loading on the roofs and properties of the properties to the south of the new development due to reduced wind speeds.

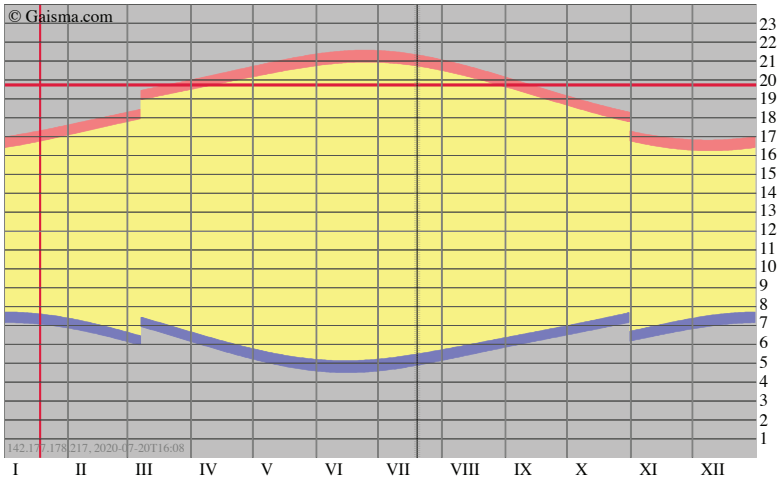
HUMAN THERMAL COMFORT

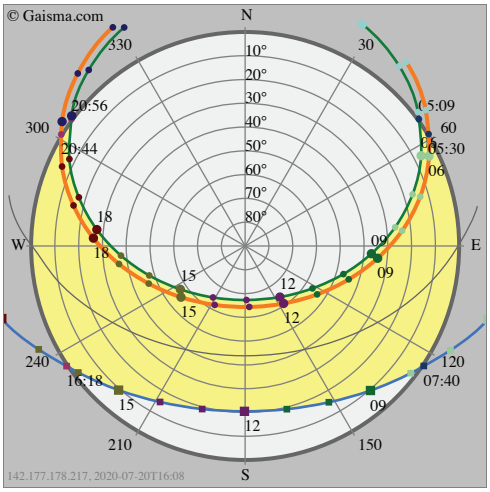
Human comfort in an outdoor space is dependant on a number of variables including wind speed, activity level (sitting, walking, running), long-wave radiation (sunlight emitted from the sun), temperature, shortwave radiation (heat emitted from surrounding buildings and site features), clothing level (partially to fully clothed), and relative humidity. The combination of variables can be very complex on any site leading to a wide range of human thermal comfort outcomes. But many cities have developed criteria of comfort based on wind alone to determine relative comfort levels in different wind conditions.

LAWSON WIND CRITERIA.

Lawson criteria, are a series of comfort criteria categories that quantify the worst wind conditions that most passers-by will consider acceptable. Levels of pedestrian comfort strongly depend on individual activity when they are sitting, standing, walking or running. Someone sitting is uncomfortable in lower wind speeds than someone running or jogging. The comfort level also depends on the amount of time that the person experiences the windy conditions. Generally, the Lawson model assumes that the wind speeds are exceeded less than 5% of the time (3 minutes per hour). The Lawson criteria can be divided into a range of activity criteria comfort levels depending on wind speed.

In our wind simulations, wind speeds which do not exceed 4 m/s (Purple our wind plots) are generally comfortable for sitting. Once the color changes to blue (6m/s) the areas are comfortable for standing but a little uncomfortable for sitting. Once the colour reaches light blue in our plots (8 m/s), the area is comfortable for strolling but a little uncomfortable for sitting or standing. Once wind speeds reach green in our plots (10 m/s), the areas are comfortable for brisk walking. If the 10 m/s wind speed is sustained for more than 3-5 minutes it could start to get uncomfortable even brisk walking. At wind speeds over 15 m/s for more than a minute (orange in our plots), it is unsafe for elderly frail people. Once wind speeds exceed 20 m/s (red in our plots) for more than a minute, it is unsafe for many people.





Sun path
- Today
- June solstice
- December solstice
- Annual variation
- Equinox (March and Septemt

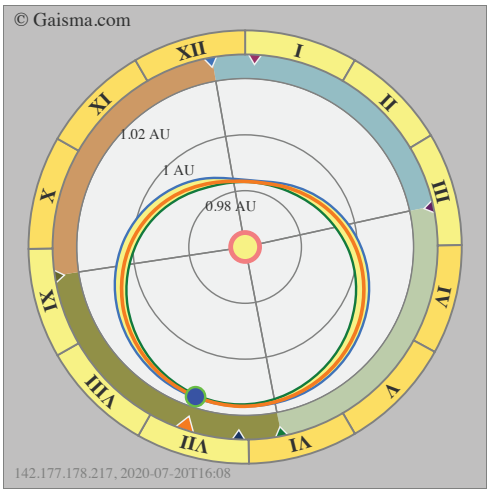
Sunrise/sunset
- Sunrise
- Sunset

Time
- 00-02
- 03-05
- 06-08
- 09-11
- 12-14
- 15-17
- 18-20
- 21-23

Notes: • = Daylight saving time, * = Next day. How to read this graph? Change preferences.

Size: + - Reset

:y, Canada - Seasons graph and Earth's orbit



Events
- Today
- December solstice
- March equinox
- June solstice
- September equinox
- Perihelion [?]
- Aphelion [?]

Earth's orbit
- This year
- Min, years 1600–2600 [?]
- Max, years 1600–2600 [?]
- Variation, years 1600–2600

Seasons
- Winter
- Spring
- Summer
- Fall

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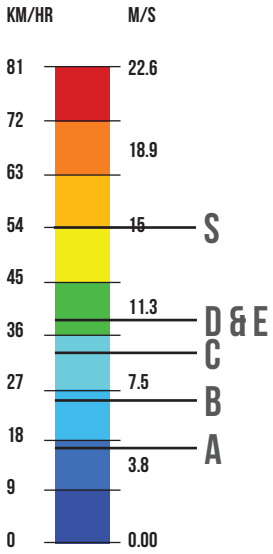

A	4 m/s	< 5%	Sitting
B	6 m/s	< 5%	Standing
C	8 m/s	< 5%	Strolling
D	10 m/s	< 5%	Business Walking
E	10 m/s	> 5%	Uncomfortable
S	15 m/s	> 0.023%	Unsafe frail
S	20 m/s	> 0.023%	Unsafe all

BUILDING AND SPACE CONSIDERATIONS

The following is a summary of key microclimatic issues that will need to be addressed by the design team relating to reducing impacts from the new building:

1. The stepback at the 2nd storey surrounding the front of the building is important for reducing downdrafts on the surrounding neighbourhoods and streets.
2. The extended cantilevered patios create surface friction which helps to break up wind speeds from the north-west direction (prevailing winter).
3. The building articulation shown in the building design further reduces wind speeds at and near the street.
4. The setback and covered main entry canopy on Barrington Street will successfully reduce downdrafts near the entrance of the building.
5. There will be some additional snow drifting to the south of the new building due to the wind shadow created by the building. This could impact deposition of snow on the roof of the neighbouring 2-storey building.
6. The lack of a stepback on the north wall of the new building could cause windier conditions in the parking lot to the north when winds come from the northwest and west.
7. Adding new street trees on Barrington Street could further reduce wind speeds on the Street if it could be accommdated under the existing powerlines.

Attachment D: Design Rationale

Kassner Goodspeed Architects Ltd.

Project No 1809

1138-40 Barrington St PID 00103614
1146 Barrington St PID 00103606

The Olympic - Statement of Design Rationale

General Description

Our client owns a vacant property on the west side of Barrington Street, mid-block between Tobin and Kent Streets in the Old South Suburb neighborhood. There is an agreement in place to purchase the adjacent property to the south. The resulting development parcel will have frontage on Barrington Street to the east and Kent Street to the south. The property at the corner of Barrington and Kent includes a two storey wood frame residential structure that is identified as a contributing heritage structure under the proposed Old South Suburb Land Use Plan.

The proposed development includes both an 8 storey mixed use building to be constructed on the vacant land and a restoration of the existing residential structure on the corner. The restored house will contain two dwelling units. The new structure features a 3 storey streetwall with sidewalk level commercial space, and additional residential units stepped back on the 5 upper floors. A total of 41 residential suites, along with 1,500sf of sidewalk related commercial space are provided. The residential mix comprises 3 studios, 22 one bedroom suites and 16 two bedroom suites.

Location

The four properties combined have a total area of approximately 10,765 sf (1,000sm, 0.247 Ac). The development parcel has approximately 121 ft (36.8m) of frontage on Barrington Street and 78 ft (23.7m) of frontage on Kent St. The Barrington frontage runs at an angle, so the parcel varies in depth, from a maximum of 103 ft (31.4m) at the north end to a minimum 78 ft (23.7m) abutting Kent St.to the south. The parcel is on the west side of Barrington, immediately across from the Superstore parking lot. Immediately to the north on Barrington is a five storey masonry clad apartment building flanking Tobin Street. Across Kent Street to the south is a vacant parcel of land. Uphill to the west is a predominantly low to mid rise residential neighborhood, with tree lined streets. The Barrington Street frontage slopes gently, falling approximately 3 feet from north to south. The site is a transition point between the higher intensity used on Barrington Street around Cornwallis Park and the lower intensity district to the south.

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Richard M Kassner FRAIC MNSAA MCSC
Daniel B Goodspeed FRAIC MNSAA

Planning Context

The parcel lies within the bounds of the Old South Suburb Heritage District. The municipality has recently adopted the Plan and Land Use By-law for this district. This project has been designed in accordance with Old South Suburb regulations.

Land Use Requirements

Development on this parcel is controlled under the Downtown Halifax Land Use Bylaw. The lands are zoned DH-1 and are located in Precinct 2, The Old South Suburb. The proposed bylaw restoration of the existing heritage asset, building volume above grade is limited to a maximum floor area ratio (FAR) of 4. The lands are completely within the bounds of Viewplane 8, which imposes an absolute building height restriction of approximately 32m (105ft) measured at the intersection of Barrington and Kent Streets. The bylaw specifies a minimum stepback above the streetwall of 3m, increased to 12m on frontages less than 30m. Minimum setbacks from interior lot lines above streetwall height is 3m. There are no specified requirements for landscaped open space in this precinct..

Pedestrian Streetscapes

Barrington Street is identified as a Pedestrian Oriented Commercial Street in the Bylaw. In response, the design places approximately 140m2 of commercial space addressing the Barrington sidewalk. The stepped configuration and increased setback of the streetwall provides areas for expansion of the sidewalk, extending the public realm onto the site. The stepped façade creates the impression of multiple small shops organized along the angled frontage. Separate residential, vehicle and service entrances are grouped on the southern end of the street frontage. The ground floor slab is stepped along the Barrington face to generate ground floor levels that respond to the varying entrance conditions on the sloping street frontage.

Building Design

The ground floor commercial space and the two residential floors above create a street wall mass approximately 11m high, meeting the bylaw requirement to reflect height of the many historic buildings in the Old South Suburb. The street wall is expressed as an assemblage of smaller volumes, stepped in response to the angled frontage. Along the angled frontage, the stepped streetwall is placed at an average setback of 1m greater than the nearest corner of the existing house. The stepped volumes reflect the proportions of the adjacent house, generating a fine-grained appearance of numerous smaller volumes with distinctly vertical proportions as well as providing opportunities for expanded sidewalk area. The streetwall is designed to complement and reinforce the scale and rhythm of the smaller historic structures in the neighborhood.

The streetwall design features a series of projected angle bays. This reflects the projected bay that is a prominent feature of the adjacent historic house. The base of the projected bays carries the line of the base of the bay on the adjacent house. The upper two floors of the streetwall volume adjacent to the existing house are stepped back approximately 6 meters to give prominence to the historic building

.

In contrast to the streetwall mass, the upper residential floors are expressed a simple block, three levels capped with a double height mansard storey, stepped back 5m parallel to the angled street line. The mansard roof form is a common element in the Old South Suburb and is a prominent feature of the adjacent historic house. The mansard form wraps around the southeast corner of the upper block, stepped back 12 m from the Kent Street property line. This is intended to acknowledge the existing house, providing an appropriate backdrop when viewed from the street intersection and define the transition to the lower intensity development to the south. The base of the mansard element carried the line established by the roof of the existing building to the north.

Materials

Materials to be used on the building are selected to complement the older buildings in the Old South Suburb. Brick masonry used for the lower floors relates to the numerous masonry buildings in the vicinity. The projected bays and the upper floors are to be clad in a narrow horizontal siding, recalling the shingle finish on many of the smaller buildings in the suburb. Trim details on the projected bays will recall the detailing of the historic structures in the precinct. A prefinished metal cladding is to be used on the mansard roof to provide a contemporary feel to the classic roof form. All glazing is to be clear glass, with high transparency glass used for the commercial storefronts. Balconies are to be fitted with prefinished aluminum and tempered glass railings.

Civic Character

Because of the numerous historic structures located within its bounds, the Old South Suburb is to be designated as a historic district. Although there are no registered historic structures in the immediate vicinity of the site, the existing house at the south end of the parcel is designated as a contributing heritage asset. The stepped streetwall façade with projected bays compliments the scale of the existing house and captures the varying setbacks typical of smaller structures addressing an angled street frontage. The streetwall volumes are vertically proportioned and appropriately scaled and detailed to respect the heritage context. A stepback is provided at the level 4 to provide a transition to the 3 storey height typical of older structures in the southern portion of the Old South Suburb.

Parking, Services and Utilities

Long term parking for bicycles and a few vehicles is provided in the parkade, accessed from Barrington Street. Short term parking for the commercial space is accommodated by on-street metered parking readily available in the neighborhood. A separate entrance is provided for service to the residential uses. The project is to be connected to the existing downtown utility networks. All utility connections will be below grade.

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
2	**DOWNTOWN PRECINCT GUIDELINES** *(refer to Map 2 of the LUB)*			
2.2	**Precinct 2: Old South Suburb Heritage Conservation District**			
	The design guidelines shall support the heritage conservation district goals of the Old South Suburb Heritage Conservation District (HCD) Plan. The purpose of the HCD Plan is to encourage the preservation, rehabilitation, and restoration of the Old South Suburb's historic buildings, streetscapes, and public spaces. The Plan seeks to promote the District as a unique destination by securing existing heritage resources and by encouraging appropriate development, especially in the large empty spaces of the District. The following three heritage conservation goals are mutually supportive:			
2.2(a)	To promote the District as a heritage and cultural destination for residents and visitors capitalizing on a unique community identity;		✓	
2.2(b)	To secure and encourage public and private investments in heritage resources protecting and conserving the traditional character of the District; and	Yes		
2.2(c)	To encourage cohesive development that supports a setting consistent with the traditional character of the District.	Yes		
3.1	**THE STREETWALL**			
3.1.1	**Pedestrian-Oriented Commercial** *(refer to Map 3 of the LUB)*			
3.1.1(a)	The articulation of narrow shop fronts, characterized by close placement to the sidewalk.	Yes		
3.1.1(b)	High levels of transparency (non-reflective and non-tinted glazing on a minimum of 75% of the first floor elevation).	yes		Glazing is provided on 76% of first floor elevation
3.1.1(c)	Frequent entries.	yes		
3.1.1(d)	Protection of pedestrians from the elements with awnings and canopies is required along the pedestrian-oriented commercial frontages shown on Map 3 and is encouraged elsewhere throughout the downtown.	Partial		Windows above will provide weather protection
3.1.1(e)	Patios and other spill-out activity is permitted and encouraged where adequate width for pedestrian passage is maintained.		✓	
3.1.1(f)	Where non-commercial uses are proposed at grade in those areas where permitted, they should be designed such that future conversion to retail or commercial uses is possible.		✓	
3.1.2	**Streetwall Setback** *(refer to Map 6 of the LUB)*			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	To reinforce existing and desired streetscape and land use characteristics, streetwall placements are therefore categorized according to the following setback standards (see Map 6 of the Land Use By-law):			
	• Minimal to no Setback (0-1.5m): Corresponds to the traditional retail streets and business core of the downtown. Except at corners or where an entire block length is being redeveloped, new buildings should be consistent with the setback of the adjacent existing buildings.	yes		
	• Setbacks vary (0-4m): Corresponds to streets where setbacks are not consistent and often associated with non-commercial and residential uses or house-form building types. New buildings should provide a setback that is no greater or lesser than the adjacent existing buildings.			
	• Institutional and Parkfront Setbacks (4m+): Corresponds to the generous landscaped setbacks generally associated with civic landmarks and institutional uses. Similar setbacks designed as landscaped or hardscaped public amenity areas may be considered where new public uses or cultural attractions are proposed along any downtown street. Also corresponds to building frontages on key urban parks and squares where an opportunity exists to provide a broader sidewalk to enable special streetscape treatments and spill out activity such as sidewalk patios.			
3.1.3	**Streetwall Height** *(refer to Map 7 of the LUB)*			
	To ensure a comfortable human-scaled street enclosure, streetwall height should generally be no less than 11 metres and generally no greater than a height proportional (1:1) to the width of the street as measured from building face to building face. Accordingly, maximum streetwall heights are defined and correspond to the varying widths of downtown streets – generally 15.5m, 17m or 18.5m. Consistent with the principle of creating strong edges to major public open spaces, a streetwall height of 21.5m is permitted around the perimeter of Cornwallis Park. Maximum Streetwall Heights are shown on Map 7 of the Land Use By-law.	No		Streetwall height is 7.9 m (hard to read on drawings), to make it consistent with the streetwall height of the attached heritage building. A variance has been requested for this.
3.2	**PEDESTRIAN STREETSCAPES**			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
3.2.1	**Design of the Streetwall**			
3.2.1(a)	The streetwall should contribute to the fine grained character of the streetscape by articulating the façade in a vertical rhythm that is consistent with the prevailing character of narrow buildings and storefronts.	yes		
3.2.1(b)	The streetwall should generally be built to occupy 100% of a property's frontage along streets.	yes		
3.2.1(c)	Generally, streetwall heights should be proportional to the width of the right of way, a 1:1 ratio between streetwall height and right of way width. Above the maximum streetwall height, further building heights are subject to upper storey stepbacks.	yes		
3.2.1(d)	In areas of contiguous heritage resources, streetwall height should be consistent with heritage buildings.	yes		
3.2.1(e)	Streetwalls should be designed to have the highest possible material quality and detail.	yes		Streetwall utilizes brick masonry, metal siding and masonry as an accent
3.2.1(f)	Streetwalls should have many windows and doors to provide eyes on the street and a sense of animation and engagement.	yes		
3.2.1(g)	Along pedestrian frontages at grade level, blank walls shall not be permitted, nor shall any mechanical or utility functions (vents, trash vestibules, propane vestibules, etc.) be permitted.	yes		
3.2.2	**Building Orientation and Placement** *(refer to Maps 8 and 9 of the LUB)*			
3.2.2(a)	All buildings should orient to, and be placed at, the street edge with clearly defined primary entry points that directly access the sidewalk.	Yes		
3.2.2(b)	Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space. Such treatments are also appropriate for Prominent Visual Terminus sites identified on Map 9 of the Land Use By-law.		✓ ✓	
3.2.2(c)	Sideyard setbacks are not permitted in the Central Blocks defined on Map 8 of the Land Use Bylaw, except where required for through-block pedestrian connections or vehicular access.		✓	Not a Central Block

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
3.2.3	**Retail Uses** *(refer to Map 3 of the LUB)*			
3.2.3(a)	All mandatory retail frontages (Map 3 of Land Use By-law) should have retail uses at-grade with a minimum 75% glazing to achieve maximum visual transparency and animation.	yes		76% glazing
3.2.3(b)	Weather protection for pedestrians through the use of well-designed awnings and canopies is required along mandatory retail frontages (Map 3) and is strongly encouraged in all other areas.	partial		Canopy proposed over retail entrance and windows overhead provide additional weather protection
3.2.3(c)	Where retail uses are not currently viable, the grade-level condition should be designed to easily accommodate conversion to retail at a later date.		✓	
3.2.3(d)	Minimize the transition zone between retail and the public realm. Locate retail immediately adjacent to, and accessible from, the sidewalk.	✓		
3.2.3(e)	Avoid deep columns or large building projections that hide retail display and signage from view.	✓		
3.2.3(f)	Ensure retail entrances are located at or near grade. Avoid split level, raised or sunken retail entrances. Where a changing grade along a building frontage may result in exceedingly raised or sunken entries it may be necessary to step the elevation of the main floor slab to meet the grade changes.	✓		
3.2.3(g)	Commercial signage should be well designed and of high material quality to add diversity and interest to retail streets, while not being overwhelming.		✓	Signage reviewed at permit stage
3.2.4	**Residential Uses**			
3.2.4(a)	Individually accessed residential units (i.e. town homes) should have front doors on the street, with appropriate front yard privacy measures such as setbacks and landscaping. Front entrances and first floor slabs should be raised above grade level for privacy, and should be accessed through means such as steps, stoops and porches.		✓	
3.2.4(b)	Residential units accessed by a common entrance and lobby may have the entrance and lobby elevated or located at grade-level, and the entrance should be clearly	yes		

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	recognizable from the exterior through appropriate architectural treatment.			
3.2.4(c)	Projects that feature a combination of individually accessed units in the building base with common entrance or lobby-accessed units in the upper building, are encouraged.		✓	
3.2.4(d)	Units with multiple bedrooms (2 and 3 bedroom units) should be provided that have immediately accessible outdoor amenity space. The amenity space may be at-grade or on the landscaped roof of a podium.	✓		
3.2.4(e)	Units provided to meet housing affordability requirements shall be uniformly distributed throughout the development and shall be visually indistinguishable from market-rate units through the use of identical levels of design and material quality.		✓	
3.2.4(f)	Residential uses introduced adjacent to pre-existing or concurrently developed eating and drinking establishments should incorporate acoustic dampening building materials to mitigate unwanted sound transmission.		✓	
3.2.5	**Sloping Conditions**			
3.2.5(a)	Maintain active uses at-grade, related to the sidewalk, stepping with the slope. Avoid levels that are distant from grade.		✓	
3.2.5(b)	a. Maintain active uses at-grade, related to the sidewalk, stepping with the slope. Avoid levels that are distant from grade.		✓	
3.2.5(c)	Provide windows, doors and other design articulation along facades; blank walls are not permitted.		✓	
3.2.5(d)	Articulate the façade to express internal floor or ceiling lines; blank walls are not permitted.		✓	
3.2.5(e)	Wrap retail display windows a minimum of 4.5 metres around the corner along sloping streets, where retail is present on the sloping street.		✓	
3.2.5(f)	Wherever possible, provide pedestrian entrances on sloping streets. If buildings are fully accessible at other entrances, consider small flights of steps or ramps up or down internally to facilitate entrances on the slope.		✓	
3.2.5(g)	Flexibility in streetwall heights is required in order to transition from facades at a lower elevation to facades at		✓	

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	higher elevations on the intersecting streets. Vertical corner elements (corner towers) can facilitate such transitions, as can offset or “broken” cornice lines at the top of streetwalls on sloping streets.			
3.2.6	**Elevated Pedestrian Walkways**			
3.2.6(a)	Not be constructed in a north-south direction such that they block views up and down the east-west streets in the downtown.		✓	
3.2.6(b)	Not be more than a single storey in height.		✓	
3.2.6(c)	Strive to have as low a profile as possible.		✓	
3.2.6(d)	Be constructed of highly transparent materials.		✓	
3.2.6(e)	Be of exceptionally high design and material quality.		✓	
3.2.7	**Other Uses**			
3.2.7(a)	Non-commercial uses at-grade should animate the street with frequent entries and windows.		✓	
3.3	**BUILDING DESIGN**			
3.3.1	**Building Articulation**			
3.3.1(a)	To encourage continuity in the streetscape and to ensure vertical breaks in the façade, buildings shall be designed to reinforce the following key elements through the use of setbacks, extrusions, textures, materials, detailing, etc.: • **Base**: Within the first four storeys, a base should be clearly defined and positively contribute to the quality of the pedestrian environment through animation, transparency, articulation and material quality. • **Middle**: The body of the building above the base should contribute to the physical and visual quality of the overall streetscape. • **Top**: The roof condition should be distinguished from the rest of the building and designed to contribute to the visual quality of the skyline.	Yes		The building has three clearly designed sections with a roof that is distinguished from the rest of the building and contributes to the visual quality of the skyline
3.3.1(b)	Buildings should seek to contribute to a mix and variety of high quality architecture while remaining respectful of downtown’s context and tradition.	yes		
3.3.1(c)	To provide architectural variety and visual interest, other opportunities to articulate the massing should be encouraged, including vertical and horizontal recesses or	**yes**		

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	projections, datum lines, and changes in material, texture or colour.			
3.3.1(d)	Street facing facades should have the highest design quality, however, all publicly viewed facades at the side and rear should have a consistent design expression.	yes		
3.3.2	**Materials**			
3.3.2(a)	Building materials should be chosen for their functional and aesthetic quality, and exterior finishes should exhibit quality of workmanship, sustainability and ease of maintenance.	yes		
3.3.2(b)	Too varied a range of building materials is discouraged in favour of achieving a unified building image.	yes		
3.3.2(c)	Materials used for the front façade should be carried around the building where any facades are exposed to public view at the side or rear.	Yes		
3.3.2(d)	Changes in material should generally not occur at building corners.	yes		
3.3.2(e)	Building materials recommended for new construction include brick, stone, wood, glass, in-situ concrete and pre-cast concrete.	yes		
3.3.2(f)	In general, the appearance of building materials should be true to their nature and should not mimic other materials.	yes		
3.3.2(g)	Stucco and stucco-like finishes shall not be used as a principle exterior wall material.	yes		
3.3.2(h)	Vinyl siding, plastic, plywood, concrete block, EIFS (exterior insulation and finish systems where stucco is applied to rigid insulation), and metal siding utilizing exposed fasteners are prohibited.	yes		
3.3.2(i)	Darkly tinted or mirrored glass is prohibited. Clear glass is preferable to light tints. Glare reduction coatings are preferred.	yes		
3.3.2(j)	Unpainted or unstained wood, including pressure treated wood, is prohibited as a building material for permanent decks, balconies, patios, verandas, porches, railings and other similar architectural embellishments, except that these guidelines shall not apply to seasonal sidewalk cafes.	yes		
3.3.3	**Entrances**			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
3.3.3(a)	Emphasize entrances with such architectural expressions as height, massing, projection, shadow, punctuation, change in roof line, change in materials, etc.	Yes		
3.3.3(b)	Ensure main building entrances are covered with a canopy, awning, recess or similar device to provide pedestrian weather protection.	Yes		
3.3.3(c)	Modest exceptions to setback and stepback requirements are possible to achieve these goals.	yes		
3.3.4	**Roof Line and Roofscapes**			
3.3.4(a)	Buildings above six storeys (mid and high-rise) contribute more to the skyline of individual precincts and the entire downtown, so their roof massing and profile must include sculpting, towers, night lighting or other unique features.	Yes		
3.3.4(b)	The expression of the building top (see previous) and roof, while clearly distinguished from the building middle, should incorporate elements of the middle and base such as pilasters, materials, massing forms or datum lines.	yes		
3.3.4(c)	Landscaping treatment of all flat rooftops is required. Special attention shall be given to landscaping rooftops in precincts 3, 5, 6 and 9, which abut Citadel Hill and are therefore pre-eminently visible. The incorporation of living green roofs is strongly encouraged.	**yes**		
3.3.4(d)	Ensure all rooftop mechanical equipment is screened from view by integrating it into the architectural design of the building and the expression of the building top. Mechanical rooms and elevator and stairway head-houses should be incorporated into a single well-designed roof top structure. Sculptural and architectural elements are encouraged to add visual interest.	yes		
3.3.4(e)	Low-rise flat roofed buildings should provide screened mechanical equipment. Screening materials should be consistent with the main building design. Sculptural and architectural elements are encouraged for visual interest as the roofs of such structures have very high visibility.	yes		
3.3.4(f)	The street-side design treatment of a parapet should be carried over to the back-side of the parapet for a complete, finished look where they will be visible from other buildings and other high vantage points.	yes		
3.4	**CIVIC CHARACTER**			
3.4.1	**Prominent Frontages and View Termini** *(refer to Map 9 of the LUB and Map 1 in the DM)*			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
3.4.1(a)	***Prominent Visual Terminus Sites***: These sites identify existing or potential buildings and sites that terminate important view corridors and that can strengthen visual connectivity across downtown. On these sites distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways should be provided. Design elements (vertical elements, porticos, entries, etc.) should be aligned to the view axis. Prominent Visual Terminus Sites are shown on Map 9 in the Land Use By-law.		✓	
3.4.1(b)	***Prominent Civic Frontage:*** These frontages identify highly visible building sites that front onto important public open spaces such as the Citadel and Cornwallis Park, as well as important symbolic or ceremonial visual and physical connections such as the waterfront boardwalks, the proposed Grand Promenade linking the waterfront to the Town Clock, and other east-west streets that connect the downtown to the waterfront. Prominent Civic Frontages are shown on Map 1 in Appendix A of the Design Manual.	yes		
3.4.2	**Corner Sites**			
3.4.2(a)	Provision of a change in the building massing at the corner, in relation to the streetwall.		✓	While the site is on a corner, it involves renovating an existing heritage building that is located on the corner, with the majority of the new construction located in the interior block, fronting only on Barrington St
3.4.2(b)	Provision of distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways.			
3.4.2(c)	Developments on all corner sites must provide a frontal design to both street frontages.			
3.4.2(d)	Alternatively, buildings may be sited to define the edge of an on-site public open space, for example, plazas, promenades, or eroded building corners resulting in the creation of public space.			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
3.4.3	**Civic Buildings**			
3.4.3(a)	Civic buildings entail a greater public use and function, and therefore should be prominent and recognizable, and be designed to reflect the importance of their civic role.		✓	
3.4.3(b)	Provide distinctive architectural treatments such as spires, turrets, belvederes, porticos, arcades, or archways.			
3.4.6(c)	Ensure entrances are large and clearly visible. Provide a building name and other directional and wayfinding signage.			
3.4.6(d)	Very important public buildings should have unique landmark design. Such buildings include transit terminals, museums, libraries, court houses, performing arts venues, etc.			
3.5	**PARKING, SERVICES AND UTILITIES**			
3.5.1	**Vehicular Access, Circulation, Loading and Utilities**			
3.5.1(a)	Locate parking underground or internal to the building (preferred), or to the rear of buildings.	yes		
3.5.1(b)	Ensure vehicular and service access has a minimal impact on the streetscape, by minimizing the width of the frontage it occupies, and by designing integrated access portals and garages.	yes		
3.5.1(c)	Locate loading, storage, utilities, areas for delivery and trash pick-up out of view from public streets and spaces, and residential uses.	**yes**		
3.5.1(d)	Where access and service areas must be visible from or shared with public space, provide high quality materials and features that can include continuous paving treatments, landscaping and well-designed doors and entries.	**yes**		
3.5.1(e)	Coordinate and integrate utilities, mechanical equipment and meters with the design of the building, for example, using consolidated rooftop structures or internal utility rooms.	yes		
3.5.1(f)	Locate heating, venting and air conditioning vents away from public streets. Locate utility hook-ups and equipment (i.e. gas meters) away from public streets and to the sides and rear of buildings, or in underground vaults.	yes		
3.5.4	**Lighting**			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
3.5.4(a)	Attractive landscape and architectural features can be highlighted with spot-lighting or general lighting placement.			Information not provided
3.5.4(b)	Consider a variety of lighting opportunities inclusive of street lighting, pedestrian lighting, building up- or down-lighting, internal building lighting, internal and external signage illumination (including street addressing), and decorative or display lighting.			Downlighting being provided in bay window soffits
3.5.4(c)	Illuminate landmark buildings and elements, such as towers or distinctive roof profiles.		✓	
3.5.4(d)	Encourage subtle night-lighting of retail display windows.			Downlighting being provided in bay window soffits
3.5.4(e)	Ensure there is no 'light trespass' onto adjacent residential areas by the use of shielded "full cut-off" fixtures.			Downlighting being provided in bay window soffits
3.5.4(f)	Lighting shall not create glare for pedestrians or motorists by presenting unshielded lighting elements in view.			Downlighting being provided in bay window soffits
3.6	**SITE PLAN VARIANCES**			
	Where all other conditions are met, and subject to the conditions set out here, clearly specified variances of certain land use by-law requirements may be considered. The following types of variances may be considered throughout downtown Halifax by Site Plan Approval:			
3.6.3	**Streetwall Height Variances**			
	Streetwall heights may be varied by Site Plan Approval where:			
3.6.3(a)	the streetwall height is consistent with the objectives and guidelines of the Design Manual; and	yes		
3.6.3(b)	the modification is for a corner element that is used to join streetwalls of differing heights; or		✓	
3.6.3(c)	the streetwall height of abutting buildings is such that the streetwall height would be inconsistent with the character of the street; or	yes		
3.6.3(d)	where a landmark building element is called for pursuant to the Design Manual.		✓	
3.6.6	**Upper Storey Side Yard Stepback Variance**			

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	The setbacks requirements of this section may be varied by Site Plan Approval where:			
3.6.6(a)	the upper storey side yard stepback is consistent with the objectives and guidelines of the Design Manual; and	yes		
3.6.6(b)	where the height of the building is substantially lower than the maximum permitted building height and the setback reduction is proportional to that lower height; or	yes		At 8 floors, the height of the building is approximately 2 storeys lower than the maximum building height possible under the view plane legislation. This reduced interior setback is proportional to the overall lower building height. The variance is requested only for that mid rise portion that includes approximately 1.25 storeys of the building. The entire north façade has a set back of 1.2 m or more from the interior lot line. The impact of the reduced setback is mitigated by the fact that the building on the adjacent site is set back approximately 12m from the common lot line and the adjacent

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				side yard is used for surface parking.
3.6.6(c)	a reduction in setback results in the concealment of an existing blank wall with a new, well designed structure.		✓	
4	**NEW DEVELOPMENT IN HERITAGE CONTEXTS**			
	There are three conditions under which new buildings can be introduced into heritage contexts in downtown Halifax, and different design strategies apply to them with the same objective of ensuring that as the downtown evolves, it continuously becomes more and more coherent: 1. Infill – This type of development occurs on sites that do not contain a heritage resource, but rather occur on vacant or underutilized sites that are in between other heritage properties, abutting them on each side. Typically, a strong contiguous heritage context exists around them. 2. Abutting – This type of development occurs on sites that do not contain a heritage resource but that are directly abutting a heritage resource on one side. This type of development occurs in a less contiguous heritage environment than infill. 3. Integrated and Additions – This type of development occurs on the same site as a heritage resource. Integrated developments occur on sites where existing heritage structures are part of a larger consolidated site or significant development proposal, and where heritage buildings are to be integrated into a larger building or building grouping. Additions are to existing heritage properties to which new construction will be added, often on top of existing buildings, but can be to the sides or rear in manner that respects existing heritage attributes.			
4.1.1	**Replicas and Reconstructed Buildings**			
	On some sites the opportunity may exist to replicate a formerly existing structure with a new building, or as a part of a larger building proposal. This approach is possible where good documentary evidence exists. The replication of a historic building should proceed in a similar manner to the restoration of an existing but altered or deteriorated structure. Design of the building should be based on documentary evidence including photographs, maps, surveys and historic design and construction drawings. The interior space and basic structure of a replica building is not required to, but may, also use historic materials or details as long as the exterior presentation replicates the original structure.		✓	
4.1.2	**New Buildings in Heritage Contexts**			
	Entirely new buildings may be proposed where no previous buildings existed, where original buildings are missing, or where severely deteriorated or non-historic buildings are removed. The intention in designing such new buildings should not be to create a false or ersatz	Yes		

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	historic building, instead the objective must be to create a sensitive well designed new structure “of its time” that fits and is compatible with the character of the district or its immediate context. The design of new buildings should carefully consider requirements elsewhere in these guidelines for density, scale, height, setbacks, stepbacks, coverage, landscaped open space, view corridors, and shadowing. Design considerations include: contemporary design, material palette, proportions of parts, solidity vs. transparency and detailing.			
4.1.3	**Contemporary Design**			
	New work in heritage contexts should not be aggressively idiosyncratic but rather it should be neighbourly and respectful of its heritage context, while at the same time representing current design philosophy. Quoting the past can be appropriate, however, it should avoid blurring the line between real historic buildings, bridges and other structures. “Contemporary” as a design statement does not simply mean current. Current designs with borrowed detailing inappropriately, inconsistently, or incorrectly used, such as pseudo-Victorian detailing, should be avoided.	Yes		
4.1.4	**Material Palette**			
	As there is a very broad range of materials in today’s design palette, materials proposed for new buildings in a heritage context should include those historically in use. The use and placement of these materials in a contemporary composition and their incorporation with other modern materials is critical to the success of the fit of the proposed building in its context. The proportional use of materials, drawing lines out of the surrounding context, careful consideration of colour and texture all add to the success of a composition.	Yes		Historically-use materials (i.e., wood shingle siding, wood windows, etc.) will remain on the existing building. The existing building will be painted a prominent colour, while it’s new rear additional will use a less vibrant paint colour. The modern construction utilizes both modern and typical historical materials (i.e.,

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Section	**Guideline**	**Complies**	**N/A**	**Discussion**
				masonry). The modern construction will also feature neutral colours.
4.1.5	**Proportion of Parts**			
	Architectural composition has always had at its root the study of proportion. In the design of new buildings in a heritage context, work should take into account the proportions of buildings in the immediate context and consider a design solution with proportional relationships that make a good fit. An example of this might be windows. Nineteenth century buildings tended to use a vertical proportion system in the design and layout of windows including both overall windows singly or in built up groups and the layout of individual panes.	Yes		
4.1.6	**Solidity versus Transparency**			
	Similar to proportion, it is a characteristic of historic buildings of the 19th century to have more solid walls with punched window openings. This relationship of solid to void makes these buildings less transparent. It was a characteristic that was based upon technology, societal standards for privacy, and architectural tradition. In contrast buildings of many 20th century styles use large areas of glass and transparency as part of the design philosophy. The relationship of solidity to transparency is a characteristic of new buildings that should be carefully considered. It is an element of fit. The level of transparency in the new work should be set at a level that provides a good fit on street frontages with existing buildings that define the character of the street in a positive way.	Yes		
4.1.7	**Detailing**			
	For new buildings, detailing should refer to the heritage attributes of the immediate context. Detailing can be more contemporary yet with a deference to scale, repetition, lines and levels, beam and column, solid and transparent that relates to the immediate context. In past styles, structure was often unseen, hidden behind a veneer of other surfaces, and “de-tailing” was largely provided by the use of coloured, shaped, patterned or carved masonry or added traditional ornament, moldings, finials, cresting and so on. In contemporary buildings every element of a building can potentially add to the artistic	Yes		

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	composition of architectural, structural, mechanical and even electrical systems.			
4.1.8	**New Buildings in the Old South Suburb Heritage Conservation District (Precinct 2)**			
	To enhance the heritage context throughout the entirety of the Old South Suburb Heritage Conservation District, within Precinct 2, Section 4.1, the guidelines for new development in heritage contexts, shall apply to all new development.			
	• Within Precinct 2, Old South Suburb Heritage Conservation District, Section 4.4, the guidelines for integrated development, shall apply to all Old South Suburb Heritage Properties.		✓	
	• Within Precinct 2, Old South Suburb Heritage Conservation District, with the exception of Section 4.3.4, Height Transition, Section 4.3, the guidelines for abutting development, shall apply to each property. Where a property does not directly abut an Old South Suburb Heritage Property, the guidelines for abutting development shall apply to the property relative to its nearest adjacent Old South Suburb heritage property with frontage on the same street.		✓	
4.2	**GUIDELINES FOR INFILL**			
	These guidelines apply to sites that are in between heritage buildings in the downtown.			
4.2.1	**Cornice Line**			
4.2.1(a)	Maintain the same or similar cornice height established by existing heritage buildings for the podium (building base) to create a consistent streetwall height, reinforcing the 'frame' for public streets and spaces.		✓	
4.2.2	**Sidewalk Level Height and Articulation**			
4.2.2(a)	Maintain the same or similar height of the first storey of new buildings to the first storey datum line of heritage buildings (i.e. the height of intermediate cornice lines or frieze boards between the first and second storeys).		✓	
4.2.2(b)	Maintain other heights and proportions in the first storey such as: • sign band height and size; • window height, size and proportion, including transoms; • door height, position, and setback, and; • maintain the prevailing at-grade use (i.e. retail or residential) while considering the intended use and role of the street.		✓	

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.2.3	**Rhythm**			
4.2.3(a)	Maintain the rhythm of existing heritage buildings, generally at a fine scale, typically in 6m to 12m intervals (storefronts, individual buildings, etc.) in a vertical proportion.		✓	
4.2.3(b)	For larger or longer buildings, clearly articulate vertical divisions or bays in the façade at this rhythm.		✓	
4.2.3(c)	Where appropriate for consistency, provide retail bays or frontages at the same rhythm.		✓	
4.2.4	**Window Proportion**			
4.2.4(a)	Maintain the window proportions of existing heritage buildings (generally vertically oriented windows).		✓	
4.2.4(b)	Windows should be aligned above each other from storey to storey.		✓	
4.2.5	**Materials**			
4.2.5(a)	Provide similar materials to those in use in existing heritage buildings.		✓	
4.2.5(b)	Typical materials are masonry, usually brick or stone, in small modular units (bricks, cut stones).		✓	
4.2.5(c)	Where materials differ, for example concrete, provide fine scale articulation of the surface finish through score lines, modular units or other such means.		✓	
4.2.5(d)	Provide similar colour palettes, typically neutrals and earth tones, and textures.		✓	
4.2.5(e)	New materials should be high quality and durable, ensuring they age well.		✓	
4.2.6	**Upper Level Stepbacks**			
4.2.6(a)	Building elements that are taller than the podium or streetwall height should step back.		✓	
4.2.6(b)	Stepbacks should generally be a minimum of 3 metres in areas of contiguous heritage resources.		✓	
4.2.6(c)	In the upper setback levels greater freedom of material choice and design expression is permitted.		✓	
4.3	**GUIDELINES FOR ABUTTING DEVELOPMENT**			
	The following guidelines apply to sites that have no heritage buildings on them, but that share a property line with sites that do.			

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.3.1	**Cornice Line**			
4.3.1(a)	Maintain the same or similar cornice height established by existing heritage buildings for the podium (building base) to create a consistent streetwall height, reinforcing the 'frame' for public streets and spaces.		✓	
4.3.2				
4.3.1(a)	Maintain the rhythm of existing heritage buildings, generally at a fine scale, typically in 6m to 12m intervals (storefronts, individual buildings, etc.) in a vertical proportion.		✓	
4.3.1(b)	For larger or longer buildings, clearly articulate vertical divisions or bays in the façade at this rhythm.		✓	
4.3.1(c)	Where appropriate for consistency, provide retail bays or frontages at the same rhythm.		✓	
4.3.1(d)	Rhythm is of primary importance in the base of new buildings abutting heritage buildings, but some reference to the rhythm may be desirable above the cornice line as well.		✓	
4.3.3	**Grade Level Height and Articulation**			
4.3.3(a)	Maintain the same or similar height of the first storey of new buildings to the first storey datum line of heritage buildings.		✓	
4.3.3(b)	Maintain other heights and proportions in the first storey such as: • sign band height and size; • window height, size and proportion, including transoms; • door height, position, and setback, and • maintain the prevailing at-grade use (i.e. retail or residential) but consider the intended use and role of the street.		✓	
4.3.4	**Height Transition**			
4.3.4(a)	Step back the streetwall of new buildings that are taller than the heritage building to an approximate 45 degree angle plane. This angle plane affects the form of the new building only to the depth of the upper storey stepback plane (i.e. the front-most 3 metres of depth of the building). The angle plane originates at the outside edge of the heritage building and at a height equal to the highest point of the habitable portion of the heritage building as in the diagram.		✓	

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.3.4(b)	Above the cornice line established by the heritage building the streetwall plane of the new building abutting the heritage building must observe the approximately 45 degree angular plane. This angle plane affects the form of the new building only to the depth of the upper storey stepback plane.		✓	
4.4	**GUIDELINES FOR INTEGRATED DEVELOPMENTS AND ADDITIONS**			
	This section applies to development proposed for a site upon which a heritage resource exists.			
4.4.1	**Building Setback**			
4.4.1(a)	New buildings proposed to abut heritage buildings on the same site (integrated development) should generally transition to heritage buildings by introducing a building setback from the building line. This setback can be accomplished in several alternate ways, including: • new construction is entirely setback from the heritage building, resulting in a freestanding heritage structure. This is suitable where multiple façades have heritage value • new construction is setback from the street frontage of the heritage building, but only to a depth required to give the heritage structure visual prominence. • new construction is setback along its entire façade from the street line established by the heritage structure (see diagram for Option 3 at left).	Yes		
4.4.1(b)	Consideration should only be given to the construction of new buildings abutting, or as an addition to, a heritage resource, when the parts of the heritage building that will be enclosed or hidden from view by the new construction do not contain significant heritage attributes.	Yes		
4.4.2	**Corine Line & Upper Level Stepbacks**			
4.4.2(a)	Maintain the same or similar cornice height for the podium building (building base) to create a consistent streetwall height, reinforcing the 'frame' for public streets and spaces.	Yes		
4.4.2(b)	Stepback building elements that are taller than the podium or streetwall height. Stepbacks should generally be a minimum of 3 metres for flat-roofed streetwall buildings and increase significantly (up to 10 metres) for landmark buildings, and buildings with unique architectural features such as peaked roofs or towers.	Yes		
4.4.2(c)	Greater flexibility in the contemporary interpretation of historic materials and design elements is permitted.	Yes		

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.4.3	**Façade Articulation and Materials**			
	Similarity:			
4.4.3(a)	Maintain the same architectural order and rhythm of both horizontal and vertical divisions in the facade.	Yes		
4.4.3(b)	Provide similar materials to existing heritage buildings.	Yes		The existing building will continue to feature tradition materials. The modern construction will utilize a combination of modern and typical materials
4.4.3(c)	Typical materials are masonry, usually brick or stone, in small modular units (bricks, cut stones).	Yes		Masonry is incorporated at-grade and the building's horizontal mid-portion
4.4.3(d)	Where materials differ, for example concrete, provide fine scale articulation of the surface through score lines or modular units.	Yes		
4.4.3(e)	Provide similar colour palettes, typically neutrals and earth tones.	Yes		
	Contrast:			
4.4.3(f)	Consider existing architectural order and rhythm of both horizontal and vertical divisions in the façade in the articulation of the new building.	Yes		
4.4.3(g)	Provide contrasting materials and surface treatments that complement the heritage building. Use of glass can be effective both for its transparency and reflectivity.	Yes		
4.4.3(h)	Ensure materials and detailing are of the highest quality. In a downtown-wide context, use of contrast should result in the most exemplary buildings in the downtown	Partial		Standing seam metal materials are limited to the modern roof
4.5	**GUIDELINES FOR FAÇADE ALTERATIONS ON REGISTERED HERITAGE BUILDING AND BUILDINGS IN THE BARRINGTON STREET HERITAGE CONSERVATION DISTRICT**			
4.5.1	**Rhythm of Bays and Shopfronts**			

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.5.1(a)	The traditional architectural elements of historic building facades such as columns, pilasters, entries and shopfronts which establish a pedestrian scale and rhythm, should be retained.		✓	
4.5.1(b)	Consolidating two (or more) shopfronts into one is discouraged, since it reduces pedestrian interest. If such consolidation is proposed, the retention of original historic building features should not be compromised, even it this means retaining a redundant entry configuration.		✓	
4.5.2	**Lower Façade (Storefront)**			
4.5.2(a)	Existing traditional shopfronts should be retained.		✓	
4.5.2(b)	Historic photos and drawings should be used to support the restoration or replication of decorative elements of historic significance in the shopfront.		✓	
4.5.2(c)	The following features should be incorporated in the design of rehabilitated or restored shopfronts, as applicable: • restoration of cast iron or masonry elements; or • a high percent age of glazing, in the display window area, transom windows and in the entry door(s); or • a recessed entry with a rectangular or trapezoidal plan; or • transom window above the entry and display windows, often stretching the full width of the shopfront; or • base panels rich in detail and of durable materials; or • a shopfront cornice and signband which is generally a reduced version of the main cornice atop the building; or • access to upper floors should be in the original configuration.		✓	
4.5.3	**Contemporary Expression Within the Historic Shopfront Frame**			
	The objective is to allow and encourage contemporary shopfront design in historic commercial buildings to support and stimulate retail revitalization. The historic frame is the supporting structure for the upper facade, comprised of visible elements such as pilasters or columns which visually frame the shopfront.		✓	
4.5.4	**Upper Facade**			
4.5.4(a)	To maintain this upper floor pattern and texture, new window openings are encouraged to be repetitive, and organized in relationship to the vertical elements which frame and divide the facade.		✓	

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.5.4(b)	Vertical elements such as pilasters, columns, cornices, and projecting bays should be retained.		✓	
4.5.4(c)	Historic photos and drawings should be used to support the restoration or replication of decorative elements of historic significance on the upper facade.		✓	
4.5.4(d)	Existing projecting bays or other architectural elements, such as cornices that project over the public right-of-way, should be retained provided that Building By-law, life-safety and other pertinent concerns have been satisfactorily addressed.		✓	
4.5.4(e)	Existing fenestration patterns should be retained. Where new openings are proposed, they should be compatible with the existing architectural features of the building.		✓	
4.5.5	**Windows**			
4.5.5(a)	Where there are existing windows within historic window openings which are either original or more recent replacements in the historical form and material, every effort should be made to retain and repair them.		✓	
4.5.5(b)	Repair of existing wood windows should use wood sash and frames.		✓	
4.5.5(c)	Where existing appropriate windows are too deteriorated to repair, replacement windows should replicate either original windows, as documented by historical photographs or drawings or the existing windows.		✓	
4.5.5(d)	Replacement of wooden windows should be in wood, and should match the shape, proportion, type of operation, detail, colour and clarity of glass of the wood original when painted.		✓	
4.5.5(e)	Where they exist, lintels, sills, and other historic window surround elements should be retained.		✓	
4.5.5(f)	The original fenestration pattern should be retained. Where new openings are proposed, they should be compatible with the original composition in terms of alignment, proportion, surrounds, and ornamentation.		✓	
4.5.5(g)	In the event that the original windows have been replaced and the existing windows are inappropriate to the building, then new windows should be designed to replicate the original window's size, configuration and appearance as based on archival information. If such information is not available, the following criteria should be referenced:		✓	

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	• The dimensions of frames, sashes, muntins, etc., should be similar to traditional wood windows. • The window should be divided into a minimum of two sash or panes; more divisions are also possible. • Operable windows are encouraged and the method of opening should replicate that of traditional window types. • Horizontally sliding windows are discouraged as they are traditional. • Glass should be clear; tints, colours or mirrored surfaces are not acceptable. • Frames and sashes should preferably be of painted or stained wood but aluminum clad windows are also acceptable. • Vinyl windows are not permitted. • The sash should be recessed within the window frame at least 4 inches from the exterior surface of the building façade.			
4.5.6	**Materials**			
4.5.6(a)	Brick in a range of buff/beige through red colours, traditional dimension.		✓	
4.5.6(b)	Building stone, particularly granite and sandstone.		✓	
4.5.6(c)	Terracotta, tile and glazed brick materials and decorative elements.		✓	
4.5.6(d)	Cast iron and pressed metal decorative elements, particularly cornices		✓	
4.5.6(e)	Wood elements for shopfront base panels, windows, bay window framing.		✓	
4.5.6(f)	Parged or cement rendered surfaces.		✓	
4.5.6(g)	Specially treated concrete finishes for rear or for some secondary surfaces		✓	
4.5.6(h)	Wooden clapboards or shingles.		✓	
4.5.6(i)	Vinyl siding, plastic, plywood, concrete block, and EIFS (exterior insulation and finish systems where stucco is applied to rigid insulation), and metal siding utilizing exposed fasteners are prohibited for use on historic buildings in the downtown.			
4.5.6(j)	Darkly tinted or mirrored glass is also prohibited.		✓	
4.5.7	**Cornices and Parapets**			

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
4.5.7(a)	The retention of original cornices and parapets is required.		✓	
4.5.7(b)	Repairs should be undertaken with matching materials and anchoring systems should be reinforced to ensure safety.		✓	
4.5.7(c)	If cost or structural considerations make conservation of existing cornices difficult, substitute materials can be considered.		✓	
4.5.7(d)	Where original cornices have disappeared, their replacement can be considered based on archival evidence.		✓	
4.5.8	**Penthouses & Minor Rooftop Structures**			
4.5.8(a)	Where feasible, existing mechanical penthouses should be retained.		✓	
4.5.8(b)	New rooftop elements or equipment on top of heritage buildings, such as satellite dishes and skylights should be set back far enough from the front or other facades to be inconspicuous from the sidewalk on the opposite side of the street.		✓	
4.5.8(c)	The cladding material for new rooftop elements should be compatible with and distinguishable from those of the main building.		✓	
4.5.9	**Awnings & Canopies**			
4.5.9(a)	Retractable fabric awnings are encouraged for use on all buildings. The fabric (usually heavy canvas, not shiny or translucent vinyl) can be a solid colour, preferably a traditional dark colour, or striped and usually the ends of the frame are left open.		✓	
4.5.9(b)	Plain valences, often with a signband are acceptable.		✓	
4.5.9(c)	In some instances, metal and glass fixed canopies are appropriate, particularly if there is archival evidence of their precedent on the building or on similar historic buildings.		✓	
4.5.9(d)	Stretch skin plastic or vinyl awnings are prohibited		✓	
4.5.9(e)	Curved stretch skin plastic and idiosyncratically shaped fixed awnings are prohibited.		✓	
4.5.9(f)	Internal illumination of awnings or canopies is prohibited.		✓	
4.5.10	**Paint Colour**			

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/ A**	**Discussion**
4.5.10(a)	Most paint manufactures supply a range of mid-toned 'heritage colours' that complement traditional masonry materials and, in general, any and all of these are suitable for use on Barrington Street.		✓	
4.5.10(b)	While it is possible to research original colours by scraping down, this has limited value because of the extent of renovation on the street – many wooden features are not original. Rather, it is recommended that paint to be used in a way that enhances the architectural character of the building.		✓	
4.5.10(c)	Paint schemes should respect and reinforce the articulation of architectural features such as pilasters, columns, base panels, window casings, moulded trim elements, cornices, dentils, and brackets, etc.		✓	
4.5.10(d)	Colours appropriate to the era of the building are encouraged, with the exception of the area described in Section 4.5.3. Within that area, higher-toned colours of individual choice are allowed, although vivid day-glow and fluorescent colours are not allowed. Appropriate colours for areas outside the shopfront (i.e., structural elements framing the shopfront and painted elements on upper storeys) are defined as colours within the 'heritage colour' palettes of major paint manufacturers.		✓	
4.6	**GUIDELINS FOR SIGNS ON REGISTERED HERITAGE BUILDINGS AND BUILDINGS IN HERITAGE CONSERVATION DISTRICTS**			
4.6.1	**Basic Principles**			
	For the purpose of these guidelines, the main function of 'business signs' is to identify the business. Business signs are intended to be permanent, exterior signs, usually mounted on buildings. These signs do not carry advertising or temporary or changeable messages. Content is restricted to include only the business name and visual identity graphics, plus brief text and appropriate graphics to describe products and services.		✓	No signs are included in the applicant's proposal
4.6.2	**Sign Lighting**			
	With the exception of restrictions on internally lit sign boxes, or awnings, for aesthetic reasons (see next section) there are no specific restrictions in these guidelines for lighting methods. In general, non illuminated signs or indirectly illuminated signs (which reflect light from a source intentionally directed upon it) are preferred.		✓	
4.6.3	**Materials**			

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	Prohibited Materials Include:			
4.6.3(a)	internally-illuminated fascia signs or internally-illuminated awning signs;		✓	
4.6.3(b)	stretch skin plastics for awning or canopy signs; and		✓	
4.6.3(c)	textile banners, with or without frames. Banners are not suitable for permanent business signage.		✓	
4.6.4	**Allowable Sign Types**			
4.6.4.1	**Fascia Signs and Flat Wall-Mounted Signs**			
4.6.4.1(a)	Fascia signs should be installed in the architectural frieze above the storefront, if one exists, in which case the size of the frieze dictates the maximum size of sign.		✓	
4.6.4.1(b)	If no frieze or other similar architectural feature exists, facia signs for ground-floor businesses should be located in a horizontal band above the upper line of ground floor windows and doors, and below the lower sill of second storey windows. Fascia signs for upper floor occupants would be similarly located above the upper line of windows on their respective floor.		✓	
4.6.4.1(c)	The size of such a wall-mounted should be no greater than 50% of the area of the door.		✓	
4.6.4.1(d)	Flat wall-mounted signs should project no more than 10cm from the wall if they are located closer than 2.5m vertical to the sidewalk. Wall signs which are above that elevation (i.e. typically those used to sign upper storey occupants) should project no more that 30cm from the wall.		✓	
4.6.4.2	**Awning Signs**			
4.6.4.2(a)	Permanent sign graphics may be placed on the sloped front surface of awnings, on the front valence, or on side panels, where these exist.		✓	
4.6.4.2(b)	If multiple awnings are used on one wall, only the two outermost side panels may be used for signage.		✓	
4.6.4.3	**Projecting Signs**			
4.6.4.3(a)	Projecting signs that identify a ground floor business should be located above or adjacent to the entrance to the business premises.		✓	
4.6.4.3(b)	Projecting signs can also be used to identify businesses in upper storeys if they are accessible from a street level		✓	

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	door. In this case one projecting sign is allowable for each such entrance in addition to projecting signage for the ground floor occupant.			
4.6.4.3(c)	Projecting signs may be comprised of 3-dimensional, flat and contour shapes, including effigy signs and symbols. In most cases the imagery represented by sculptural effects or shapes should relate to the business, its products and services so that they serve to identify the business and convey its image		✓	
4.6.4.4	**Window Signs**			
	Window signs are typically those where the name of the business is painted on a window to both identify the business and provide a visual screen through which the window display can be viewed. For these reasons, window signs should be designed so that they do not unduly obscure vision through the window.		✓	
4.6.4.5	**Free-standing (Ground) Signs**			
	There are very few opportunities for freestanding (ground) signs in front of historic commercial buildings in the downtown, as buildings typically abut the sidewalk.		✓	
4.6.4.6	**Number of Signs**			
	In order to minimize signage clutter, only two of any of the following sign types should be used for any one business: a. Fascia or awning sign (front panel). b. Projecting sign or awning side panels (max 2 panels). c. Wall mounted sign or window sign (including multiple window signs). d. Free-standing (ground) sign.		✓	
4.6.4.8	**Building Identification Signs**			
	A sign which denotes the address and name of a building (but excluding the name of the business) shall be permitted in addition to other permitted signs. Such signs shall meet the guidelines applicable to the sign type (fascia, hanging, etc.).		✓	
4.6.4.9	**Murals and Mural Signs**			
	A mural is a painting on a building wall or structure which contains no advertising message or sign, and which is intend ed to serve only as public art or to provide a historical interpretation. A mural sign is a painted sign which is applied directly to the wall of a building or a		✓	

Attachment E– Design Manual Checklist: Case 23663				
Section	**Guideline**	**Complies**	**N/A**	**Discussion**
	panel attached to a wall for decorative and illustrative purposes and which contains words, logos, messages or images as an accessory to permitted advertising.			
4.6.4.10	**New Signs Modelled on Historic Signs**			
	New signs modelled on historic signs which may not meet these guidelines but for which there is historical evidence may also be permitted subject to referral to and recommendation by the Design Review Committee and Heritage Advisory Committee and subject to such signs being approved under the Land Use By-law.		✓	

Kassner Goodspeed Architects Ltd.

23 March 2021

Case No 23663
Re-development 1138-1150 Barrington Street

Conservation Rationale for 1138 Barrington Street, Old South Suburb

Context

Case 23663 is an integrated development proposal including the property at 1138 Barrington. Although the existing building is not a registered heritage property, it has been designated as a Contributing Heritage Resource of the Old South Suburb.

Conservation is required to preserve the Heritage value of the existing two storey wood frame structure. The building is typical of the housing stock constructed throughout the district in the late nineteenth century. It been used for residential accommodation throughout its life, although there is anecdotal evidence that there may have been some commercial use on the main floor. The building has a much later one storey addition to the rear, accessible from the flanking street. As part of the integrated development, the residential use will continue. The interior is to be reconfigured to create four residential units and the exterior is to be rehabilitated.

The two storey structure is elevated above Barrington Street on a stone foundation. It is a typical low slope form with a ridge parallel to the fronting street. The street façade is expressed with an upper Mansard roof, featuring a large projected bay window and a shed dormer with paired windows. The main level features twin door, sidelight and transom assemblies, accessed from an elevated porch.

Rehabilitation

As a conservation strategy, the proposed integrated development includes rehabilitation of the heritage asset. Rehabilitation is justified by the extent of repairs required and the proposed addition to the rear of the building.

To ensure its continued use, the building will require considerable work to the exterior envelope. The foundation requires repairs to correct leakage, the framing requires attention to meet contemporary Code requirements. The windows and door are in need of replacement. The wall assemblies require proper air and moisture control and upgraded insulation. Exterior cladding and trim requires either extensive repair or replacement. The roof membrane requires replacement and upgrades to roof insulation levels.

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The later addition to the rear of the house was poorly constructed, without a foundation. It represents minimal historic value. The integrated development proposes a new basement level that extends behind the original house to provide a proper foundation for new construction and also to link the existing house to the new basement level.

Additional Standards for Rehabilitation

(refer to Standard 10) To the greatest extent possible, efforts will be made to repair the existing character defining elements. As these elements are generally wood, if they are too deteriorated for re-use, they can be replaced with new wood components that match the existing to the greatest extent possible. New wood doors and windows with matching dimensions, proportions and casings will be installed in existing openings. New window openings will match existing in size, type and proportion. New wood shingles will be installed over a drainage plane.

(Refer to Standard 11) The new addition proposed to the rear of the building addresses the flanking street. The addition is expressed as a two storey block with single windows and a simple cornice. It has a mono pitch roof sloped to the rear. The façade of the addition is set back 600mm from the plane of the side wall of the original house. This setback is increased to 1000mm at the narrow entry bay immediately adjacent to the existing house. This subordinates and distinguishes the addition from the original structure The addition is to be finished in wood shingle cladding and trim, both to be visually compatible with the original building and the adjacent houses on Kent Street and also distinguish it from the larger masonry clad structure behind. The window proportions are drawn from the larger building behind and are distinctly different from the original house. The addition will be finished in a different and complimentary colour to further distinguish it from the heritage asset.

(Refer to Standard 12) The placement of the proposed addition is stepped back from the corner of the existing house and to reveal the essential form and integrity of the original structure. The addition could be removed without compromising the heritage asset, given appropriate repairs to the envelope of the house.

dbg
2/9/2021
Rev 3/23/2021/Rev 8/12/2021

Kassner Goodspeed Architects Ltd.

The Olympic – 1138-1150 Barrington Street

1138 Barrington Street – Anticipated Rehabilitation Costs

The following addresses only the rehabilitation work to the existing building envelope.

Floor Area: main floor 1064 sf upperfloor 1073 sf, perimeter 136.9 ft

Exterior wall area 3,109 sf

Required Public Benefit: 1,727 m2 of additional FAR x 0.2 x $258 = $89,149.32

Demolition and disposal		allow	5,000
Stabilize and waterproof foundation		allow	4,000
Repair and reinforce existing framing		allow	4,000
Insulation and air seal exterior wall		3109 x $3.50	10,800
Supply and install new windows and entrances	11 windows, 2 entrance systems		15,000
Exterior shingles and drainage plane		2503 x $9	22,500
Replace exterior wood trim		allow	8,000
Roof insulation		1064x $3	3,200
Roof membrane and accessories		1064 x $7	7,500
Rehabilitate front porch		allow	5,000
Anticipated Rehabilitation Costs			85,000
Management and General Conditions		10%	8,500
Total Rehabilitation Budget			**$ 93,500**

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