



## Summary of Proposed Sustainability Measures



May 3, 2017

Dear Scott Erdman  
Rezoning Planner | Vancouver – Midtown  
Planning, Urban Design and Sustainability | City of Vancouver

**Re: Sustainability Statement, 1619-1651 East Broadway**

Jameson Broadway & Commercial LP's proposed retail and residential building at 1619-1651 East Broadway is being designed to meet the City of Vancouver's new Green Buildings Policy for Rezoning.

Vancouver City Council approved the new Zero Emissions Building Plan in July 2016, adopting a target to reduce emissions from new buildings by 90% as compared to 2007 by 2025 and to achieve zero emissions for all new buildings by 2030. The plan establishes greenhouse gas emissions limits and thermal energy limits for new buildings. As part of the implementation of the Zero Emissions Building Plan, the new Green Buildings Policy for Rezoning was approved by council in November 2016, adopting targets and policies around energy, greenhouse gas emissions, water and waste reductions, healthier homes, and resiliency. We believe this project will be in compliance with the new Green Buildings Policy for Rezoning, using the strategies outlined below.

Energy use intensity, greenhouse gas emissions, and thermal demand of the building (TEDI) will be minimized, using:

- Ventilation air heat recovery, minimizing mechanical heating requirements while supplying outdoor air
- Exterior insulated wall assemblies to minimize thermal bridging and maximize effective thermal performance.
- Reduced window areas to below 45%, minimizing heat loss through glazing.
- Heating provided by electric baseboards, minimizing greenhouse gas emissions.
- Domestic hot water provided by high efficiency natural gas heater for residential portion of the building.
- High-efficiency LED lighting in common and suite areas, and occupancy sensors for lighting in common areas, minimizing lighting energy use.
- MRL elevators to reduce elevator motor consumption.
- Central switch in each suite to shut off all plug loads, minimizing phantom power.
- Passive cooling will be achieved using operable windows located to enable significant opening areas (i.e. restrictors not required), providing natural ventilation. Larger windows are strategically located under balconies to provide shading, and within portions of the floor plate near internal corners, using the building shape to provide vertical shading. Window sizes are minimized, minimizing solar heat gain, and windows are slightly recessed, providing some additional shading due to the exterior insulated wall assemblies.
- A VRF system with HRVs will be used for retail, reducing greenhouse gas emissions and thermal demand.

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- DHW for retail tenants will be supplied with electric hot water heaters, reducing greenhouse gas emissions.

These strategies are expected to meet the City of Vancouver's new energy use intensity, greenhouse gas, and thermal demand targets, based on parametric energy modeling analysis of an archetype multi-unit residential building. A detailed model is under development and additional parametric analysis will be conducted to ensure that the proposed strategies meet the targets. The model will also include an analysis of overheating in suites to ensure that passive cooling strategies meet the city's requirements. This will help ensure that the building occupants will have a comfortable environment and that suites will not overheat.

Jameson Broadway & Commercial LP has also committed to conducting whole-building airtightness testing, engaging a Commissioning Authority to conduct enhanced commissioning, designing for direct ventilation, and selecting low-emitting materials. Indoor air quality testing will be conducted for a sample of suites. Morrison Hershfield has been engaged to conduct a life cycle analysis to calculate the embodied and refrigerant emissions over the life of the building.

Each residential suite and retail tenant in the building will be separately submetered.

Clean drinking water access will be provided in the amenity space for building residents.

Integrated rainwater management and green infrastructure strategies are being designed for, and will be shown on drawings and in the draft integrated rainwater management plan.

We trust that the above description of the project's design strategies clearly documents how the proposed retail and residential rental building at 1619-1651 East Broadway will meet the City's new rezoning policy.

Yours truly,  
**MORRISON HERSHFIELD LIMITED**

  
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