

4.7.1 GREEN BUILDING DESIGN

1 INDOOR AIR QUALITY

Detailing building finishes to ensure products with minimized Volatile Organic Compounds (VOCs) are used. Testing spaces for air quality prior to occupancy will help ensure the spaces are free of potentially harmful concentrations of chemicals emitted from newly installed materials.

2 VERIFIED VENTILATION

Ensuring that ventilation air is distributed to each space directly through a energy recovery ventilator which improves energy efficiency while optimizing ventilation delivery.

3 EMISSIONS CONSCIOUS DESIGN

Modeling the building early to establish the amount of embodied carbon and energy associated with its construction. Seeking accessible ways to reduce the building’s impact through construction. The project has an embodied emissions value of 385 kgCO2e/m².

4 BUILDING DELIVERY AND ONGOING MANAGEMENT

Commissioning the building to ensure energy efficiency from day one. Building level and end-use metering will be used to further verify building performance years into their operation.

5 HIGH PERFORMANCE BUILDING DESIGN

Using a measured combination of building envelope, mechanical, and electrical energy efficiency to deliver a low energy consuming and GHG emitting building.

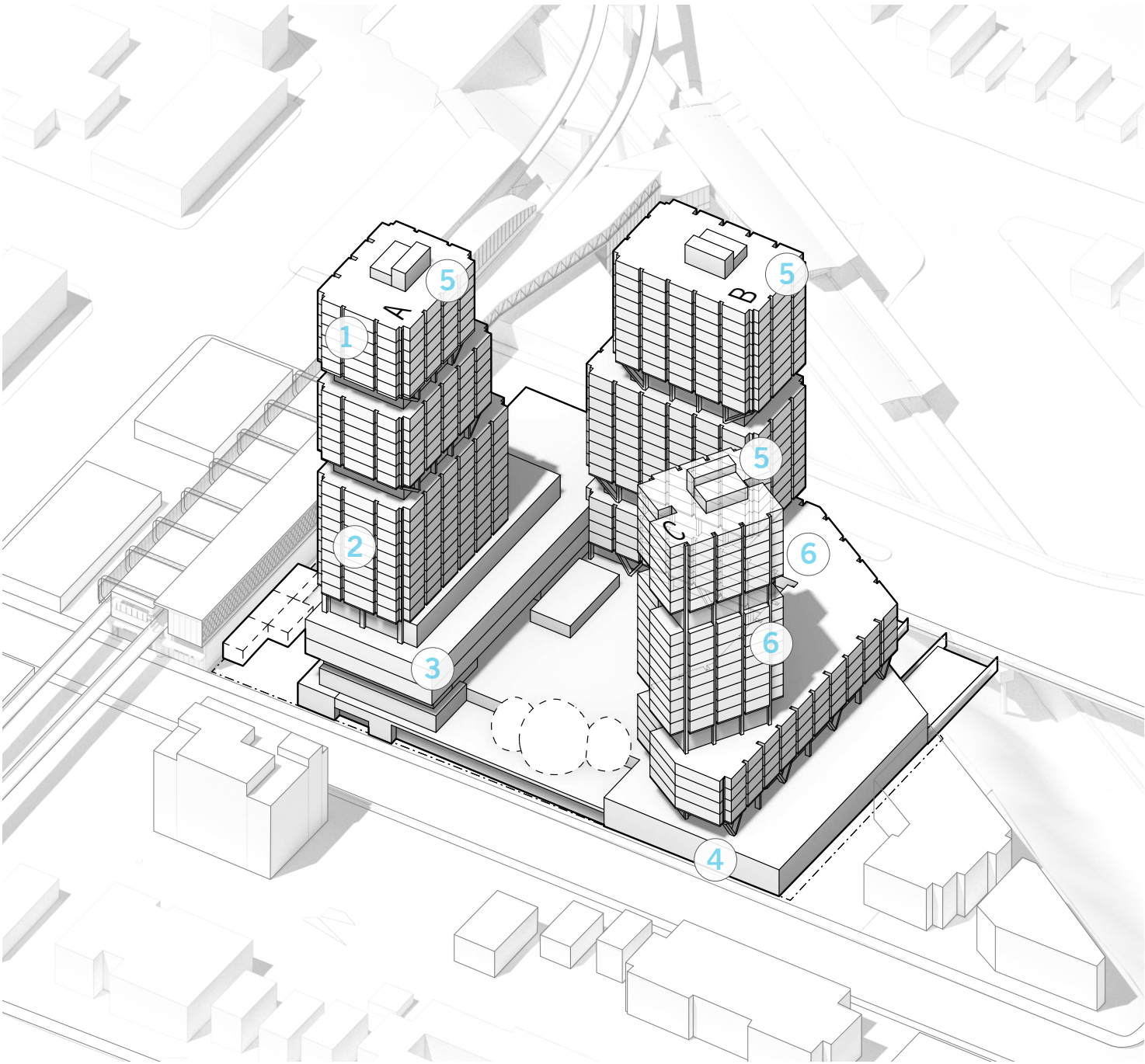
Proposed Performance:

- 151 kWh/m2/yr. -Total Energy Use Intensity
- 42 kWh/m2/yr. -Thermal Energy Demand Intensity
- 3.8 kgCO2e/m2/yr. -Greenhouse Gas Intensity

6 HIGH PERFORMANCE BUILDING DESIGN CONT'D

Using innovative energy modeling techniques to test multiple combinations of building systems to find the “best fit” of performance and budget.

- 50% Window to Wall Ratio
- LED Lighting in suites & common areas
- Water efficient plumbing fixtures
- Energy Recovery Ventilation
- Electrically sourced heating and cooling equipment including to avoid the use of GHG intensive natural gas
- High-Efficiency condensing boilers or solar thermal for back-ups



4.7.2 SUSTAINABLE LARGER DEVELOPMENTS

1 RESILIENT CONSTRUCTION

High performance envelope design and durable building construction aim to help make the building resilient to changing climates and improve the building's comfort in the event of hotter summers and colder winters.

2 OPEN SPACE

Providing more housing without limiting open and enjoyable spaces for people to be outside.

3 GREEN MOBILITY

Providing residents with the best opportunity to live car free including the optimum access to transit, amenities, and cycling networks.

4 FOOD SYSTEMS

Providing residents space to grow their own food and increase their access to healthy local produce. This project will provide garden plots for as much as 30% of residents and as much as 400+ meters of orchard trees for fruits.

5 WASTE MANAGEMENT

Providing residents with the spaces they need to effectively sort and divert recycling streams from the landfill. Making these space bright and engaging to change attitudes around recycling.

6 HOUSING DIVERSITY

Proposing a mix of unit types including affordable housing outlined by the City of Housing Vancouver Strategy.

7 RAINWATER MANAGEMENT + WATER USE REDUCTION

Improving the site to help reduce the flow of peak stormwater volumes to sensitive habitats + finding innovative ways to reduce potable water demand by retaining and reusing stormwater.

8 SITE DESIGN

Developing to support a thriving community and connecting to surrounding green spaces.

