

RIVER DISTRICT PARCEL 19.1

Greater Vancouver, BC | Design Phase

Role of the firm: Structural Engineer of Record

Size: 249,000 sq. ft. (23,133 sq. m.)

Budget: Undisclosed

Architect: DIALOG

Client: Wesgroup Properties

Parcel 19.1 of the ambitious River District project encompasses an 18-storey residential mixed-use mass timber tower, atop a commercial/residential podium, along with a 7-storey mid-rise rental building, totaling 240 rental and strata housing units. Distinguished by its broad use of point-supported mass timber, this development achieves a remarkable 60% reduction in non-biogenic carbon in both the building structure and envelope, when compared to conventional concrete construction.

The construction of these buildings will incorporate a hybrid approach, utilizing mass timber cross-laminated timber (CLT) floor panels with steel connections, and columns with concrete shearwalls in the tower. A hybrid wood/steel lateral system will be used in the mid-rise building. The underground parking and at-grade structure will be constructed using concrete. The project will take full advantage of mass timber's faster prefabricated construction and aims to provide an expansive selection of housing units in line with the City of Vancouver's Family Housing Mix Policy and guidelines.

The project has been awarded funding through the Mass Timber Demonstration Program to analyze, design, and implement the use of mass timber on a wide scale throughout the project including the construction of a full-scale constructability and performance mock-up.

