

PROJECT HIGHLIGHTS 2019 | 2020

Each year, in our Project Highlights edition, *Innovation* showcases the engineering and geoscience work of our registrants both here in BC and around the world. *Innovation* and the Engineers and Geoscientists BC Editorial Advisory Committee thank all who submitted project photographs and descriptions.



GNW PAVILION AT 565 GREAT NORTHERN WAY

Adjacent to Emily Carr University of Art + Design in Vancouver's South Flatz neighbourhood, this artistic lotus flower-shaped retail pavilion provided an interesting structural design opportunity. Facilitated by digital modelling through Spearhead Inc., a unique yet simple hybrid timber-steel structure was developed to support this complex lotus shape. The principal structure consists of five inner petals constructed of curved glulam members and seven glazing columns that support a hybrid timber-steel dome. The five outer curved petals were sculpted from engineered wood and are supported on the lower dome and petals. The complete structure was fabricated from approximately 40 prefabricated sections comprising of over 7,000 individual pieces of wood and steel, all cut with tight tolerances from CNC machinery.

Owner: PCI Developments. Participants: RJC Engineers: Grant Newfield, P.Eng., Colin Gilbert, EIT. Architect: Perkins + Will. Digital Modeller and Fabricator: Spearhead, Inc. PHOTO: EMA PETER PHOTOGRAPHY.

