
HOWARD DEBECK ELEMENTARY SCHOOL SEISMIC UPGRADE

TARGET CONSTRUCTION START:	April 2024
TARGET COMPLETION:	December 2025
PROJECT BUDGET:	\$17.52 Million
FUNDING SOURCES:	Ministry of Education Capital Plan - \$20.74 Million (maximum)
CONSULTANT:	Thinkspace Architecture Planning Interior Design Ltd.
CONSTRUCTION MANAGER:	Unitech Construction Management Ltd.
PROJECT MANAGER:	Richmond Project Team Enquiries: Karen Kwan, 604-308-1226

BACKGROUND

Howard DeBeck Elementary is in a single-storey wood frame building of 3,332 m², constructed in 1991 with additions and renovations in 2000. School District No. 38 (Richmond) has confirmed that the school is needed for the long term as part of the overall long-range strategic planning.

The K-7 school, which consists of three distinct blocks, was seismically assessed using Version 3 of EGBC's Seismic Retrofit Guidelines. The entire school has a moderate-high risk of liquefaction potential requiring substructure upgrades, with Block 1 (1991 Original Classrooms/Library) having a Seismic Risk Category H1 rating, Block 2 (1991 Gymnasium/Administration) having a Seismic Risk Category H2 rating and Block 3 (2000 Classrooms Addition) having a Low Risk rating.

PROJECT SCOPE

- Seismic retrofit to achieve a life-safety level includes reinforcing existing brace bay columns with cross-bracing and column enhancements, adding new braces, thickening and widening existing brace bay footings, re-pinning the existing roof deck and adding new steel strapping and steel angle to its underside, and upgrading connections throughout.
- Non-structural seismic resistance upgrade to the entire school (added restraint of lighting, HVAC, plumbing and cabinets).
- Restoration of wall/floor/ceiling/exterior finishes and hard/soft landscaping affected by the structural work, addition and demolition.
- Minor removal and replacement of mechanical and electrical equipment to accommodate structural work.
- Additional scope funded out of the Provincial Building Envelope Program includes replacement of failed stucco exterior wall cladding with new prefinished metal cladding to match the rest of the building (\$275,000).

PROJECT STATUS

- Project approval and funding agreement received from the Ministry of Education and Child Care 22 February 2023.
- Construction was divided into six phases to accommodate the ongoing classes in campus. All six phases are substantially complete. All staff and students have moved back into the building.
- Minor deficiencies are being rectified on site.
- Project completes within budget.