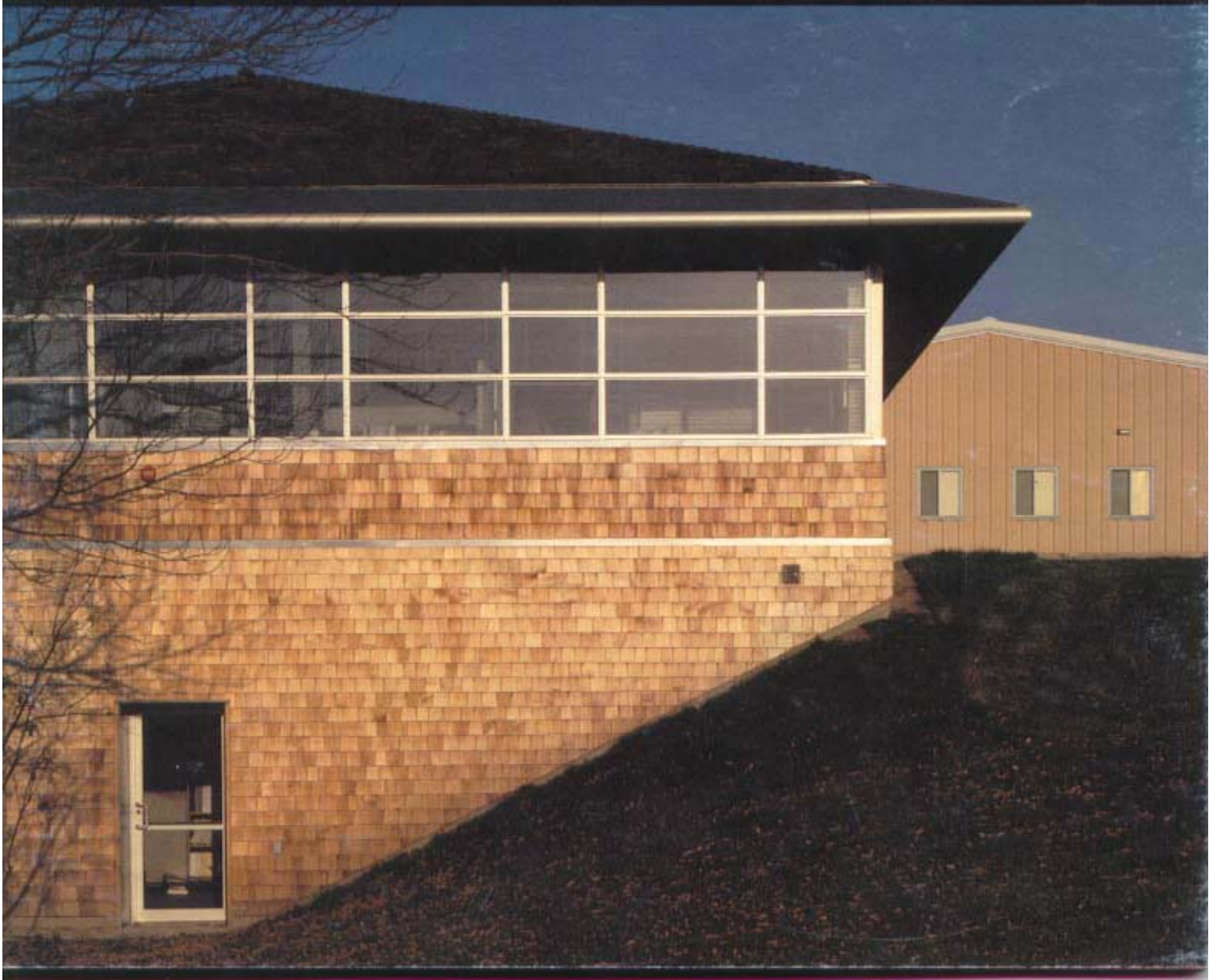


Canadian **Architect**

Training Centres/OPP Headquarters



Training Centre 2: Cedar Box

Ontario Hydro New Trades Building, Orangeville, Ontario; Julian Jacobs Architects

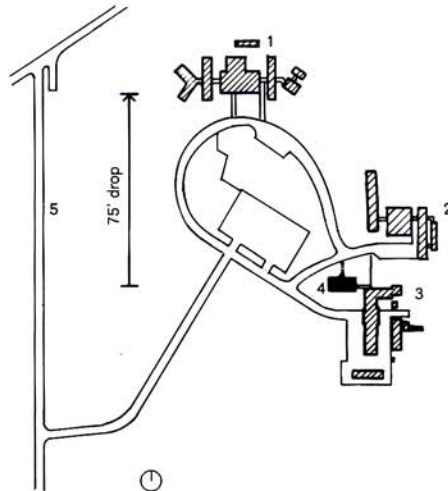
In the picturesque Hockley Valley north of Orangeville, Ontario, lies Ontario Hydro's Conference and Development Centre. The giant utility began developing the complex in the 1960s, and its residences, sports facilities, seminar rooms and workshops are used for training office and blue collar workers.

The New Trades Building, a heavily insulated, cedar shingle-clad box, commands a high site on the campus, just below an existing workshop at the crest of a hill. It provides offices for the full-time instructors in this workshop. While the workshop is a pre-engineered metal building, the architect wanted a more humanistic treatment for the office, and has clad it entirely in untreated cedar shingles which will weather to a silver grey in time.

Half-buried in the hillside, like traditional European barns, the building has entrances at its upper and lower levels. The instructors enter from the workshop at the upper level and descend by a spiral staircase set in a rotunda which is the centre and pivot of the plan. From the lower level a central door leads down to the campus.

Three different structural orders are clearly expressed. A poured concrete retaining wall forms the lower level, a perimeter steel post-and-beam structure is at the second level, and it supports a 45-foot span open glulam roof truss system above.

The building uses around 35 per cent less energy than an equivalent conventional building. It has highly efficient lighting, and for heating and cooling, it uses the earth as a heat sink. A water solution is pumped through pipes sunk 200 feet down to the west of the building and exchangers draw off or expel heat depending on the season. **BL**



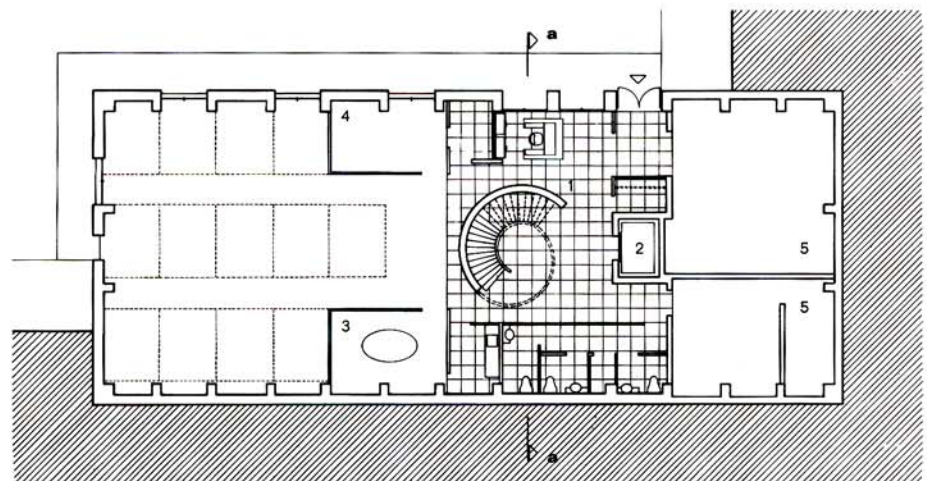
Context plan

Context plan

- 1 main building
- 2 residences
- 3 existing Trades Building
- 4 New Trades Building
- 5 Highway 10

Ground floor plan

- 1 lobby/lounge
- 2 elevator
- 3 meeting room
- 4 office
- 5 mechanical and electrical



Lower level

0 8'

Client: Ontario Hydro; Jilan Balbaa (project architect)

Architect team: Julian Jacobs, David Kaplin, Gail Weinger

Structural: Read Jones Christofferson

Mechanical/Electrical: MCW Consultants

Landscape/Interiors: Julian Jacobs Architects

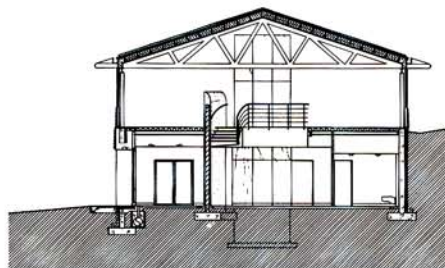
Size: 8,100 s.f.

Budget: \$1.2 million

Completed: 1992

Suppliers: W.R. Grace (roofing), Canadian Gypsum Company (wallboard), Armstrong World Industries (ceilings)

Photography: Steven Evans Photography



Section a-a

Below: the building slips into the hillside, its cedar-clad concrete base topped by a band of glazing and a deep aluminum-faced eave. **Bottom right:** upper entry for workshop staff. **Bottom left:** at the second level an exposed steel post-and-beam structure allows a column-free space. Suspended lighting casts diffuse light up into the open glulam roof truss.

