



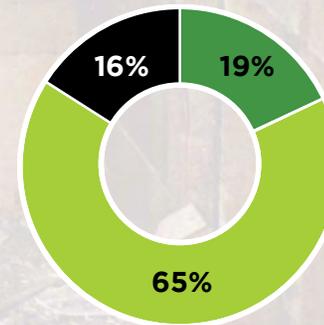
DECONSTRUCTION

CASE STUDY



RILEY PARK 1910 - 2018

**84% OF THIS BUILDING
WAS SAVED FROM LANDFILL**



-  REUSED
-  RECYCLED
-  DISPOSED

The material chart excludes all recycled concrete.

STEPS OF DECONSTRUCTION

CASE STUDY RILEY PARK

1 ASSESSMENT & QUOTE, SALVAGE & ABATEMENT



APPLIANCES, INTERIOR DOORS, CASINGS, TRIMS, BASEBOARDS

ASBESTOS

SAFE ASBESTOS REMOVAL PROTECTS NEIGHBOR AND WORKERS HEALTH

100% REUSED

2 INTERIOR STRIPPING



8,544 kg FLOORING
Salvage rates:
Floated: 99%
Nailed: 88%
Glued: 0%

5,100 kg PLASTER
+ RAW MATERIAL

NEW GYPSUM WALL BOARD

85% REUSED

15% LANDFILL

100% RECYCLED

3 EXTERIOR DECONSTRUCTION



24,120 kg LUMBER
Lumber shorter than 4' can only be recycled.

22% REUSED

74% WASTE TO ENERGY

4% LANDFILL

REUSE OF LUMBER

Most pre 1950 homes are built of old growth lumber, which has a high **ECONOMICAL AND HISTORICAL VALUE** and is often reused in interior design.



“The **lumber package** of this home was particularly beautiful as the original owner of this house **owned a saw mill.**” Some was reused in the Welcome Parlour ice cream shop in North Vancouver, creating a warm aesthetic and unique character.

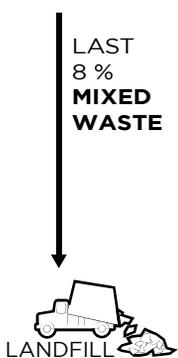
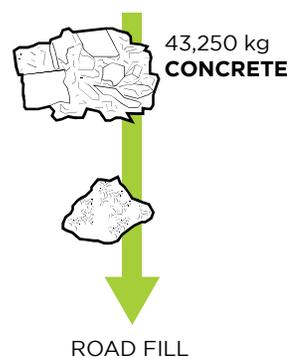
* Quote Adam Corneil
Photo Credit: Welcome Parlour



Photo Credit: Welcome Parlour

AFTER DECONSTRUCTION

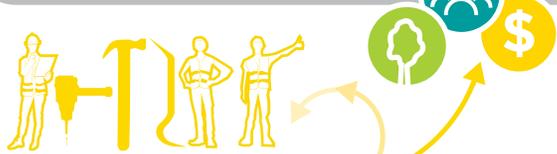
4 EXCAVATION & SITE CLEANING



DECONSTRUCTION ?

Deconstruction is done mostly by hand – a crew takes apart the building piece by piece. Some materials are salvaged for reuse, much is recycled, and only a small percentage goes to landfill. This reduces the environmental impact of house removal, supports the local economy and creates jobs in deconstruction, recycling, and creative upcycling industries.

Deconstruction has **ENVIRONMENTAL, SOCIAL AND ECONOMIC BENEFITS** over demolition.



DECONSTRUCTION
= Taking buildings apart by hand, which enables recycling and reuse of materials and supports a circular material flow.

DEMOLITION
= “Machine-based” tear down of buildings and disposal of most materials.

BENEFITS

ENVIRONMENTAL

- Zero Waste
- Less Raw Material Production
- Reduced Greenhouse Gas Emissions
- Proper Handling of Hazardous Waste
- Healthier Environment

SOCIAL

- Additional Local Work
- Preservation of History
- Education & Research Potentials

ECONOMIC

- Support of Local Economy
- Cost Comparable to Demolition

COST COMPARISON

	Deconstruction	Demolition
House Removal	\$ 34,800	\$ 26,000
Tax credit for donation - of salvaged material*	\$ 22,600	\$ 0
Total cost	\$ 12,200	\$ 26,000

*Tax receipt value: \$ 51,500.
Exact tax credit value depends on income of person claiming the tax credit (typically 44-50% of receipt value).

General Contractor: Powers Construction
Deconstruction Contractor: Unbuilders

HOW CAN YOU DO YOUR PART?

HOME OWNERS
Consider deconstruction as alternative to demolition - it might be more cost effective.

DESIGNERS
Support deconstruction by design with salvaged materials and designing for disassembly.

CONTRACTORS
Support the deconstruction industry by diverting materials and incorporating salvaged products.

We are **PRESERVING HISTORY** by salvaging old growth lumber.

Deconstruction **CREATES JOBS**, not only for the deconstruction company but also within the entire recycling sector.

Deconstruction allows us to **REMOVE HIDDEN HAZARDOUSE WASTE** that would otherwise end up in the landfill.

Salvaging materials **REDUCES** the **NEED FOR NEW MATERIALS**.
This reduces the impact on the land where new raw materials are extracted.

We donate many materials to **Habitat for Humanity**, a non-profit organization. They issue a **TAX RECEIPT** that reduces the cost of deconstruction.

