MAKING A NET-ZERO HOME

DEMOLITION & WASTE MANAGEMENT

OUR GOAL

Reduce the amount of demolition and construction waste produced by restoring and reusing as much of our 1912 home as possible

WHY?

Construction, renovation, and demolition waste accounts for 12% of all solid waste generated in Canada
(Canadian Council of Ministers of the Environment, 2016)

2.45 million tonnes of solid waste was disposed of in B.C. in 2017
(Environmental Reporting BC)

BARRIERS TO SUSTAINABLE WASTE MANAGEMENT

Hazardous Materials

Many old homes are filled with hazardous materials that are leeched out when demolishing the home

Cost of Deconstruction

The labour cost of desconstruction can often be significantly higher than that of demolition

Places to Recycle

It can be difficult to find places that will recycle construction waste with potentially hazardous materials

OUR JOURNEY WITH DEMOLITION & WASTE MANAGEMENT

1

Our first step was creating a budget for each part of the renovation, including demolition costs

Renovation costs are difficult to estimate before construction starts because there are so many moving parts and potential mishaps

2

Then, we had to make a decision on what to do with the stucco on the outside of the house. Option 1 was estimated to cost around **$35,000**, while option 2 was estimated to cost around **$17,500**

Option 1:
Remove stucco and bring it to the dump

Option 2:
Leave stucco on and add shingles on top of the existing exterior

3

We went with **Option 2,** in order to save money and minimize materials being brought to the dump

This proved to be one of our biggest issues with the demolition, as the labour costs for adding shingles overtop of the stucco were much higher than expected and ended up being more than $35,000 - we still do not know the final labour costs

Weight of Material Taken to the Dump

Stucco: 4,000-5,000 kg
Lead Waste: 1,500-2,000 kg
Drywall/Plaster Waste: 1,235 kg
TOTAL = 7, 725 kg

3x more waste would have been taken to the dump if we removed the exterior stucco

4

We had a hazardous materials report done and luckily found virtually zero asbestos. It is important to know this before you begin renovations so that you can be prepared financially

The minimum fee for asbestos removal is $1000 for two hours of work

To recycle the materials we couldn't use ourselves we placed everything on Used Victoria to be taken to a new home

5

We did a combination of demolition and deconstruciton in which we tried to save as much good quality material from the orignial home as possible

We used the company **Hall It Up** to source materials - they find quality wood from other demolition sites in Victoria to reuse in your home!

6

We are still waiting for the final numbers for the demolition and deconstruction - the contractors are still working away so we cannot provide a detailed summary yet

WHAT WE LEARNED

- Flexibility is key - there are many unprecedented changes that may occur during your demolition
- Since so many homes in Victoria have stucco, research needs to be undertaken by the city to figure out the best way to retrofit these homes in an affordable, sustainable way
- It is important to balance between the cost and quality of recycling used material: is the material environmentally and financially worth the work that you need to put in to restore it?

RESOURCES IN VICTORIA FOR REDUCING DEMOLITION WASTE

Hall It Up Recycled Floors Etc.
Source local recycled building materials

Local Hauling
Asbestos Abatement & Demolition Services

Unbuilders
Unbuild homes to minimize cost, hassle and environmental footprint

My Recylopedia
CRD database of what can be recycled and where

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