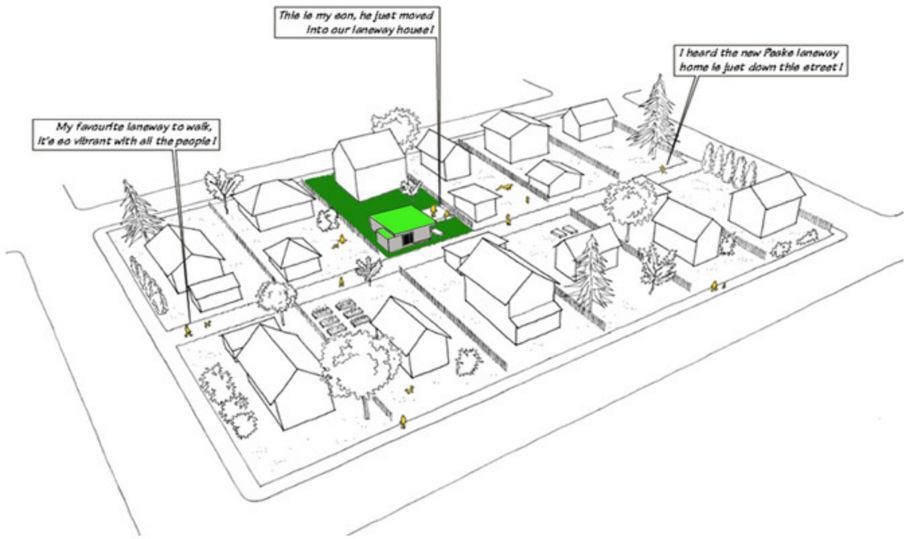


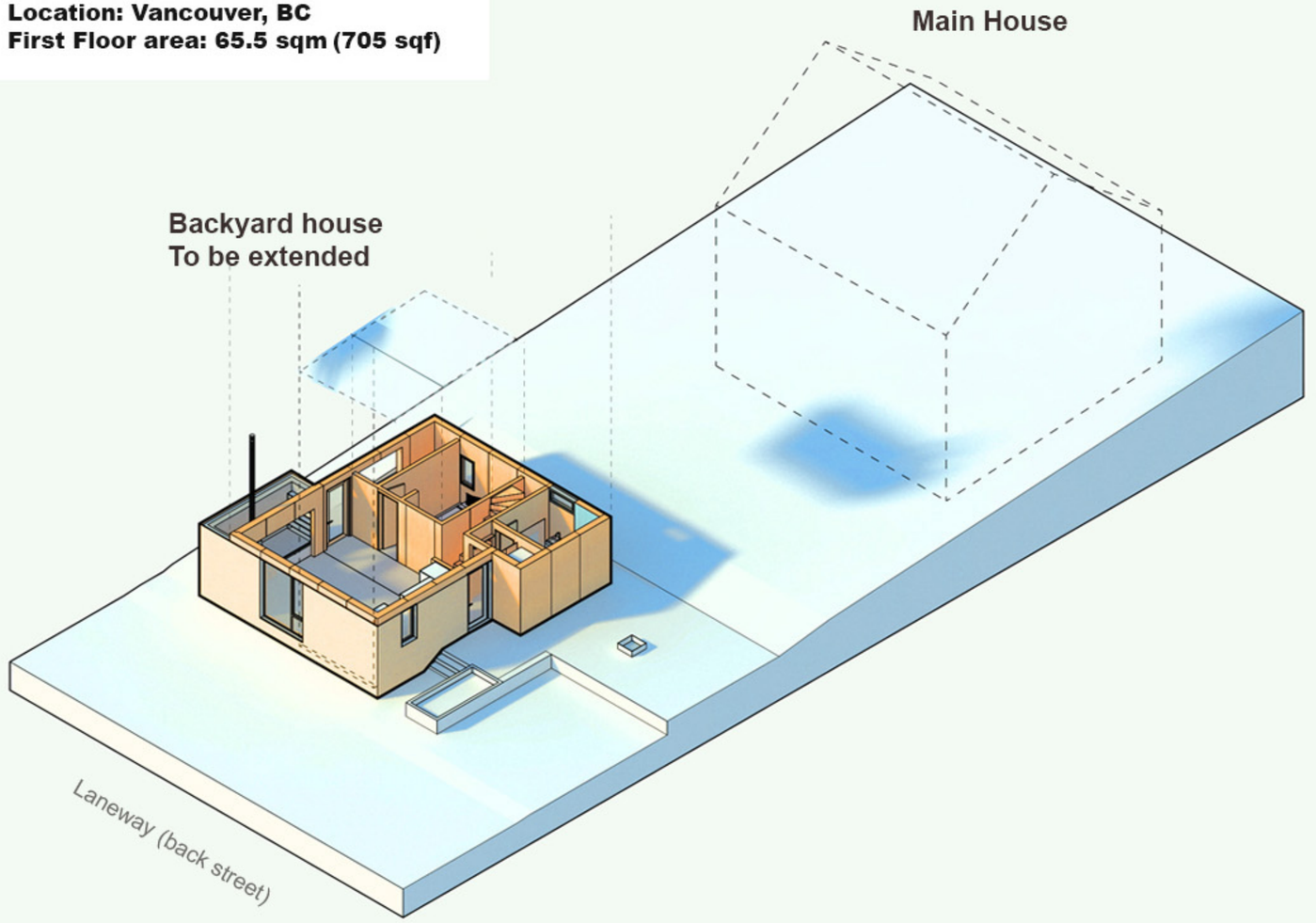
Call for Entries

Smart Design: An Evolving Layway House

This is a competion to design 3 extension modules for a backyard small house

"Nelson Peaks" by Tyler Reynolds & Adrienne Gerrits, Intern Architects (NSAA) (Halifax, NS)

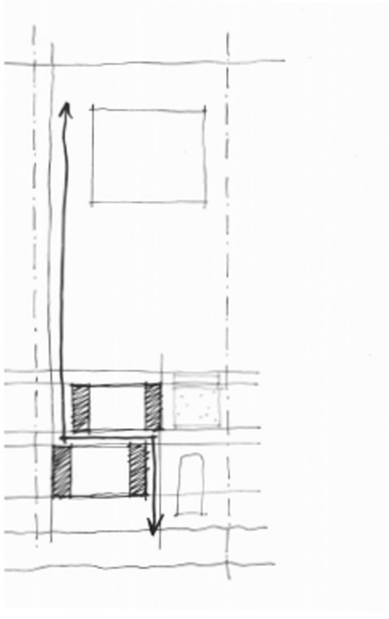
Location: Vancouver, BC
First Floor area: 65.5 sqm (705 sqf)



Backyard House is a new phenomenon in Vancouver, BC to tackle our housing crisis. This house design was published by the city as one of the suggested models for a backyard house. The house has only one floor and one bedroom as a start.
This house is to be extended (grow) with time as the family needs grow.

Three sizes of extension modules are to be designed skillfuly as future options.

Bring your innovative skills to solve this design challenge of adding extensions to a backyard house.

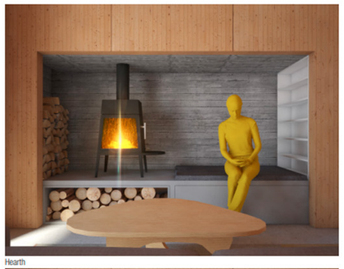


The Existing Backyard House Concept (without extension)

The current architect's concept features high space efficient plan with well designed access/circulation.
The design has an open concept living space with an adjoining loft above.
The dwelling layout utilizes adaptable book-end elements that flank the central interior spaces, such as the kitchen and hearth that frame the main living space.
The floor plan is organized along a central corridor with exterior entrances at each side, enabling consistent access to the laneway, yard, and street-front.
The house utilizes a mass timber construction strategy with strong beams at top.
The exterior accessed storage provides dedicated space for active living equipment such as skis or bikes.

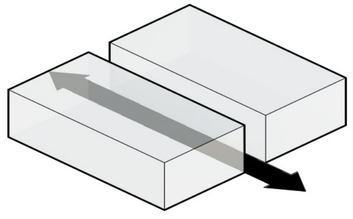
The Competition Purpose

Enabling people to grow their own small house
Let the house evolve with the family needs

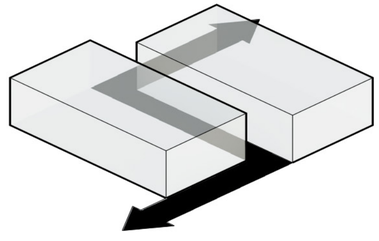


Hearth

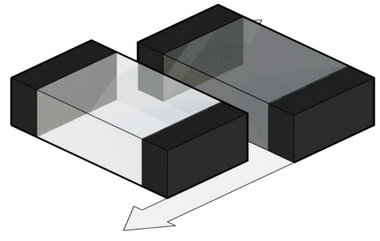
Entertainment centre + shelving



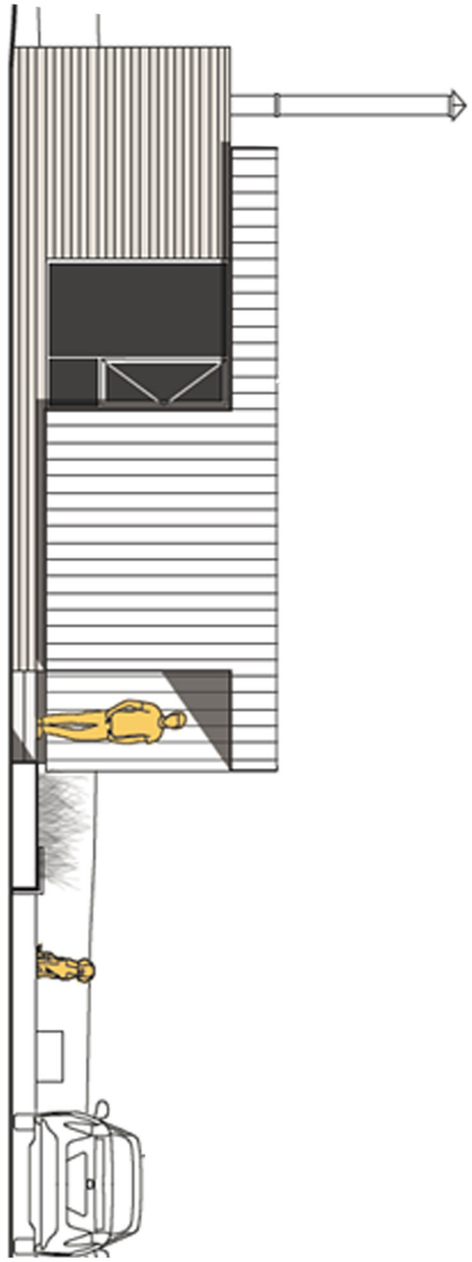
1. Split mass for internal circulation.

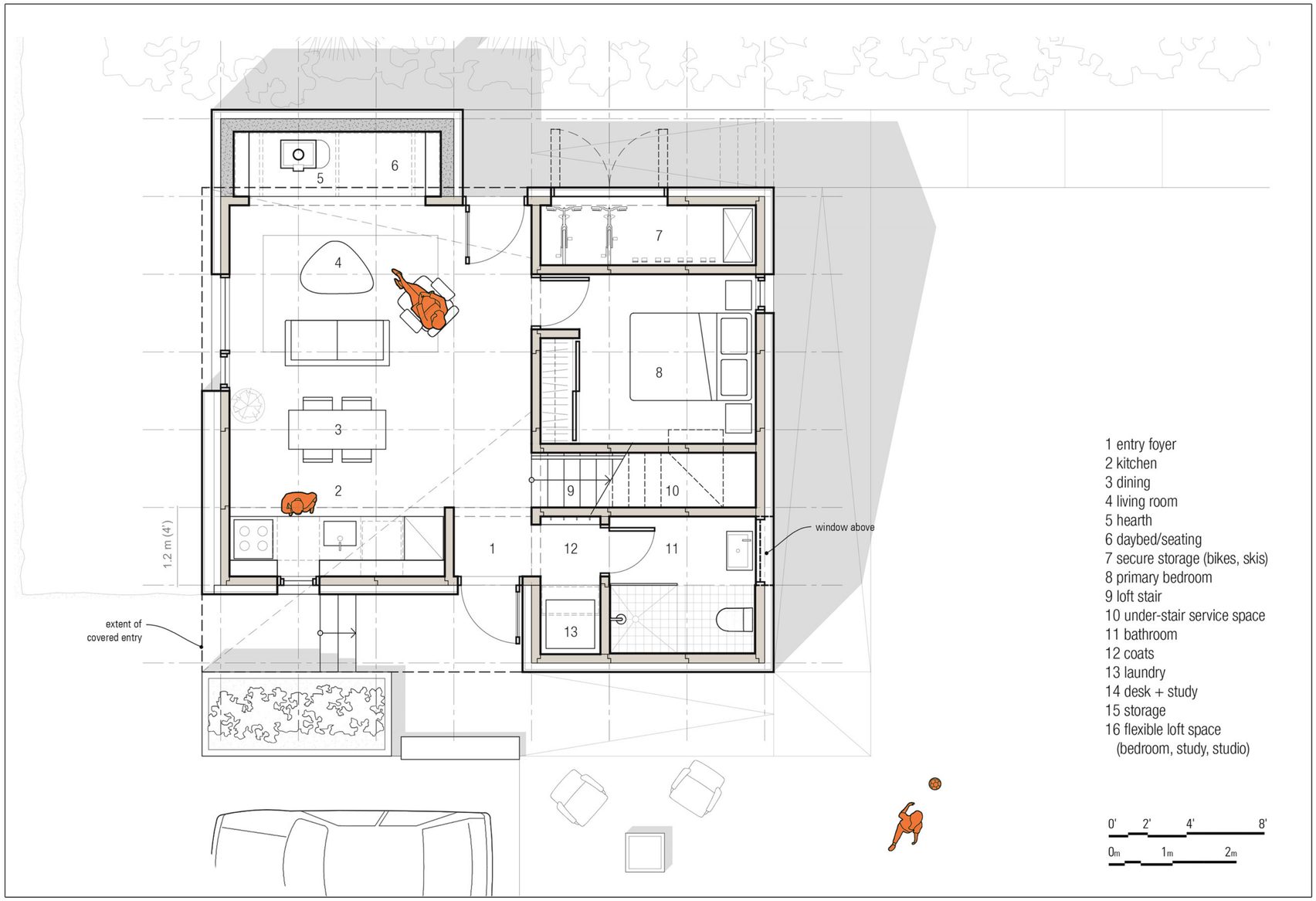


2. Shift mass to connect street + laneway + yard.



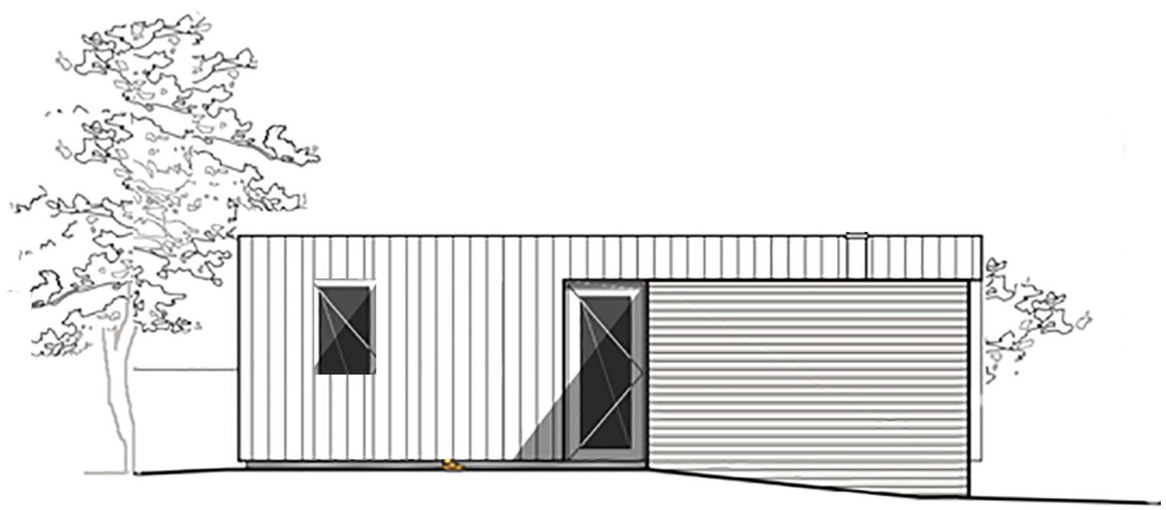
3. Flexible *book-end* programming strategy.





1 entry foyer
2 kitchen
3 dining
4 living room
5 hearth
6 daybed/seating
7 secure storage (bikes, skis)
8 primary bedroom
9 loft stair
10 under-stair service space
11 bathroom
12 coats
13 laundry
14 desk + study
15 storage
16 flexible loft space
(bedroom, study, studio)

0' 2' 4' 8'
0m 1m 2m



Evolving Backyard House Scenarios

The municipality of a little town, in BC, is providing four design options for the public to make the process of building a backyard house fast and smooth.
The city is thinking of a futuristic way through considering a flexible evolving design.
Since the needs for every family are different and the needs may change crucially with time, the city is looking for a space efficient house design that can evolve and extend with time. This house has the ability to grow as family needs and financial ability grow.
The innovation design contribution (needed) is that this house can be extended with flexible prefabricated modules, to make the extension easy and flexible.

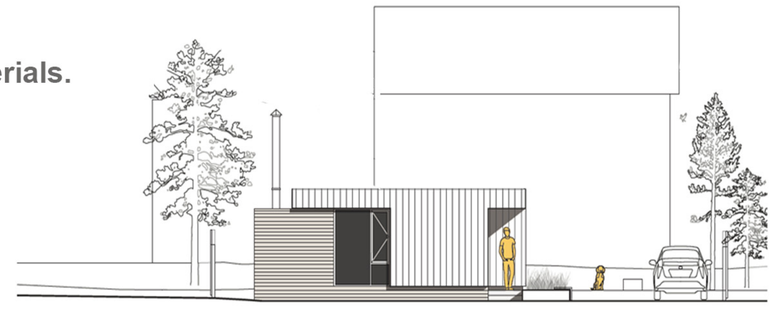
Each household can easily choose/add these modules to his/her backyard house.
These wood modular prototypes will be ordered and made in a factory. The modules to be added with time.
The house was designed with a stair for future extension.

Design Requirements

This house needs to evolve flexibly in the future to extend beyond one floor, one bedroom with (65.5 sqm, 705 sqf) of an area, and 3m height.

Design each of the 3 modules and show the overall house design (in 2D and 3D or elevations) when adding each of these extensions.
The next sheet is showing the boundaries of these extensions.
You can add or deduct up to 20% of the area of each proposed extension for functional or aesthetical purposes.
Note that these modules need to be manufactured in a factory and moved to site.
The truck can contain only 13’ W x 25’ D of a room size. One or two trips to carry each extension.

Note: The current design has 2 finish materials. Maintain the architectural expression of using 2 finish materials.



The Design Scenarios

This is a competition to bring the best design solutions for these 3 extension modules. Smart space division with aesthetically appealing facades of each scenario are needed. The genaral layout of the 3 needed scenarios are shown here on the left.

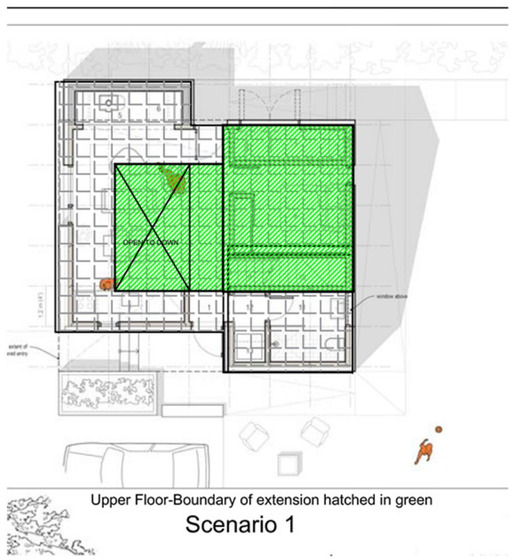
These are the requirements for every extension based on the 3 scenarios:

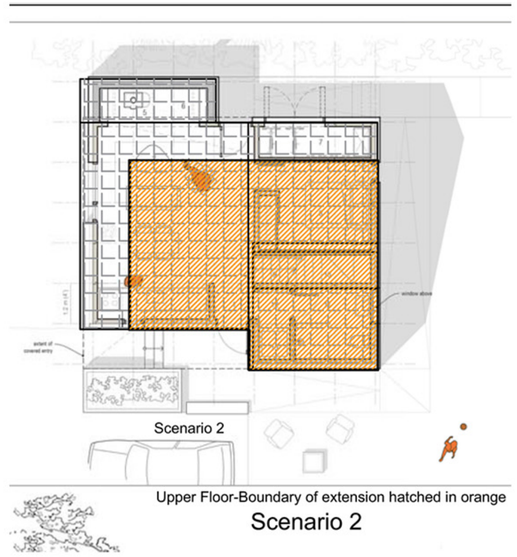
1- Adding 1 office room on the upper floor without a bathroom. The upper floor extension to be opened to the living space below with a skylight at the apex of the roof, providing skyward views and light to the volume of the living space.
This loft floor to be above the bedroom section of the house. The current stair will be leading to the loft.

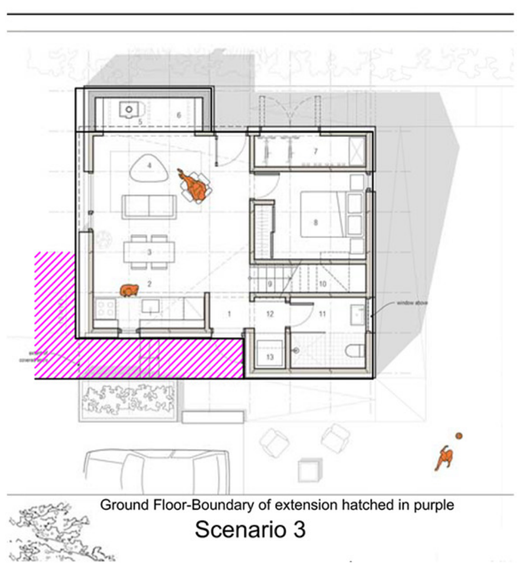
2- Adding 1 bedroom plus 1 office room with a bathroom. A skylight at the apex of the roof, providing skyward views and light to the upper floor.

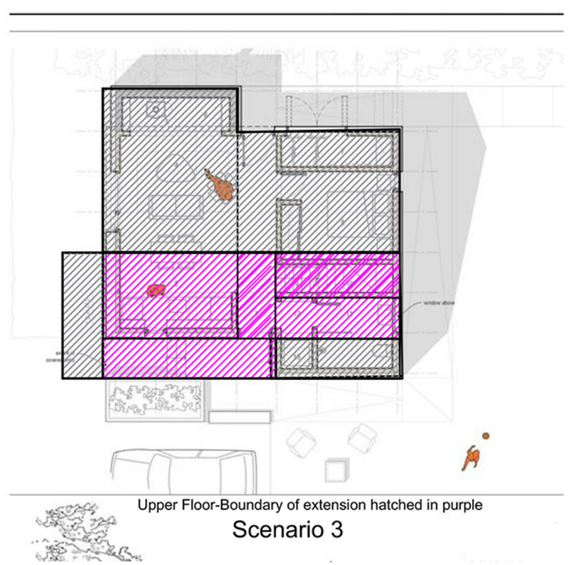
3- Enlarging the living room while adding an upper room. You can only extend the ground floor 4 feet from the front side (back street) and the right side (adjacent to the living room side).

The height of the upper floor not to exceed 3.2 m for flat roof and 4.5 m for pitched room









Submissions:
Plans, elevations, and 3Ds. PDF file to be uploaded with maximum 15 MB

Submission Fee:
Free for students
Non Students $20 Canadian Dollars

Eligibility: Eligible for all

Registration Deadline: 1st July 2021
Submission Deadline: 25th July 2021

Winners will be announced: 20th August 2021
,
Prizes:
First place winner: $200
First 5 winners: will be featured in the magazine and given certificates