SOLARES
ARCHITECTURE

***REPORTS* ON ENVIRONMENTALLY INTEGRATED HOMES**

# GARDEN AVENUE RENOVATION

## REPORT 1

April 2012

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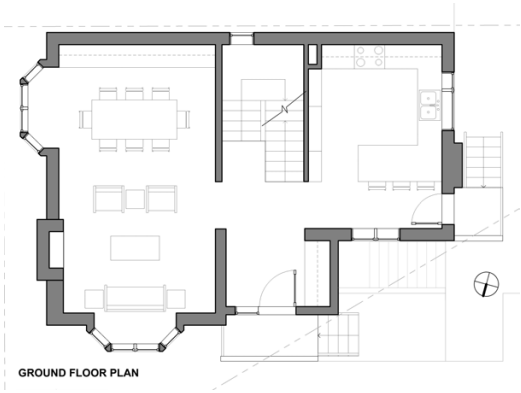
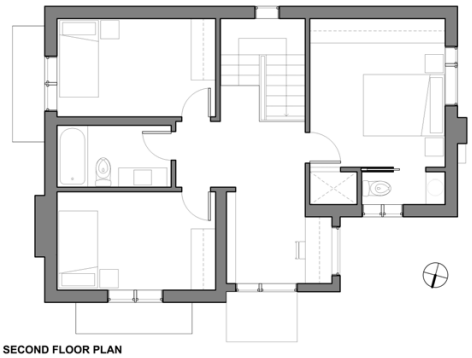
Typically we profile our projects after construction is complete and our clients are happily settled in their new home. This month we are kicking off something a little different. Over the spring, summer and fall we will chronicling the construction process of a major renovation of a century old home in Toronto's High Park neighbourhood. Here is the story so far.



GROUND FLOOR PLAN

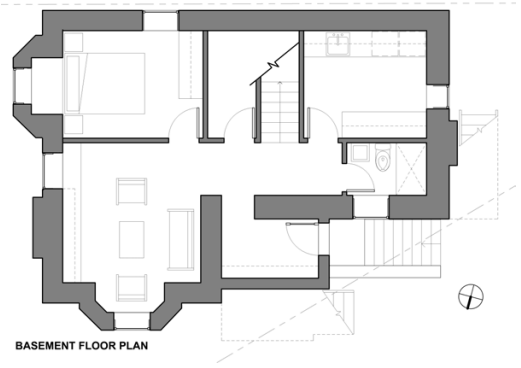
In 2006 Nick and Julia fell in love with a charming 2-storey brick house on Garden Avenue, one block west of Roncesvalles Ave. They loved the neighborhood but the house needed a major overhaul. At that time they didn't have the funds but were willing to put up with drafty windows, a leaky roof, the cramped layout and exorbitant gas bills until they could afford a top to bottom renovation. Five years living in the original house gave them time to analyze exactly what their needs were so they could accurately define the scope of work.

The house was built in 1911. Over the decades, previous owners had converted the rickety front porch into living space, underpinned the foundation, removed the basement stair to create a separate apartment unit accessible from a new outdoor stair and cosmetically updated the bathroom and kitchen but many elements from the original house still remained such as plaster and lathe, single-pane wood windows, fireplaces and knob-and-tube wiring. At the end of 2011, on the house's centennial year, Nick and Julia and their two young children moved out and the renovation process finally began. Luckily, they didn't have to go far: they moved in with Julia's mother next door!



SECOND FLOOR PLAN

Besides greatly improving the energy efficiency of the building, something that is common to all Solares projects, one of Nick and Julia's most important goals is to create space to accommodate their growing family without building an addition which would make the project cost prohibitive. The house is approximately 750sf per floor including the exterior brick walls but in reality the actual living space of the house is 1815sf over three floors. Nick and Julia came to us with a long list of requirements: an eat-in kitchen, a formal living/dining room, a playroom, a study, 4 bedrooms (one with an en-suite) and 3 bathrooms. In such a tiny footprint we certainly had our work cut out for us!

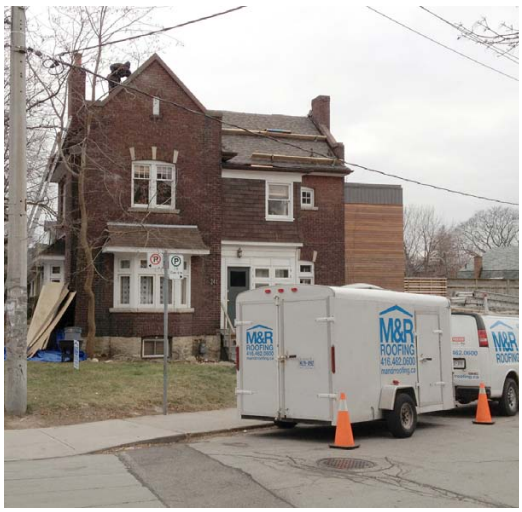


BASEMENT FLOOR PLAN

The new design will re-instate a stair connecting the ground floor to the basement which will be finished to include a Playroom, Guest Bedroom, Guest Bathroom, Laundry Room and a tiny Mechanical Room tucked under the stairs. The ground floor will have an open concept Living/Dining Room east of the foyer and stair hall and a Kitchen with a small breakfast bar to the west with a direct connection to the back yard. Creative planning on the second floor will allow for the 2 small children's Bedrooms and Bathroom, an open study on the landing (which is designed to be easily converted to another bedroom if required) and a large Master Bedroom with a small "boutique hotel" style en-suite bathroom.

To help reduce the amount of material that would end up in the dumpster, Nick and Julia posted as much of the contents of their house on Kijiji as possible. With much success, they sold cabinetry, plumbing fixtures, miscellaneous hardware, lights and the old school radiators. They even had someone spend two days dismantling and taking the old wood baseboards and trim. They also intend to give away the original wood windows when the new replacements arrive.

Replacing the roof was the first step in tackling the building envelope improvements. The roof started leaking about two years ago and whenever it rained, water would trickle down the walls around the stair and form large "bubbles" in the plaster. At the same spot on the exterior of the house, the brick was beginning to spall, indicating that it had absorbed water and was being damaged by the freeze/thaw cycle. The old shingles were replaced with a durable fiberglass fiber impregnated asphalt shingle that comes with a 30-year warrantee. Soffit vents were cut into the original wood soffit and a continuous ridge vent at the peak of the roof was installed. This was an important step in improving the building envelope as proper ventilation is key in preventing over-heating in the summer. New flashing was also installed over all the wall parapets to ensure proper water-proofing.




Once all the plaster and lathe was removed from the walls we could really see what shape the bones of the house were in. The first task was to replace and move an existing steel beam in the ground floor. Initially, we hoped to re-use the existing beam but it was undersized and inadequately supported on the two ends: half was resting in an original window opening propped up by 2x4s and half on the edge of the rubble wall. Furthermore, the beam was installed too low

which meant that the floor above settled. The replacement beam rests on a new concrete block tied into the foundation walls. Shifting itslightly to the east allows adequate space for the new basement stair opening.

As mentioned above, the ground floor sagged to a low-point in the middle of the house. The floor was so out of level, the builder wasn't able to jack up the floor to level it out. As such, we decided to re-build the entire ground floor structure to ensure a flat solid surface going forward. The kitchen will really benefit from a level floor as it is much easier to install cabinets on a level surface than having to level each cabinet to accommodate a sloped floor. Although the second floor also has a slight slope to it as well, we decided to leave it as is since it isn't as critical to have a level surface in the smaller bedrooms upstairs.

For more photos of the demolition and construction process please visit our website.

In the Next Installment: final structural repairs, new window and door openings, new drains and basement slab.