APPENDIX

Narrated Renovation Pictures

Before and After: A significant change with the garage now integrated into the home. Notice entry into the garage has been raised over two feet ensuring water flows away from the home. An octagonal window has been introduced, adding light to the central-hall interior and balance to the exterior by creating a central focal point.

Foundation: The first picture below shows the new weeping system, protected and insulated by 2" polystyrene panels and crushed stone. The foundation wall is protected by Armtec Platon foundation wrap, with a rubberized waterproofing agent (Aqua-Bloc 720-38) applied beforehand as illustrated in the second photo.

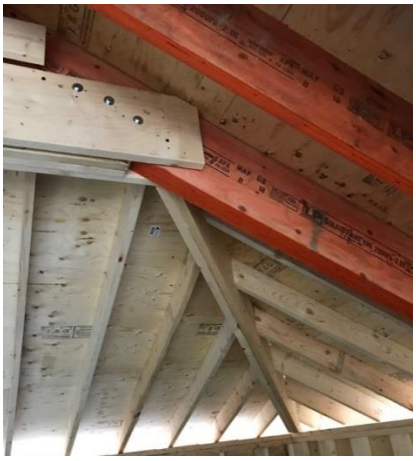
The block foundation wall is strengthened against lateral shifting by applying vertical reinforcements (Fortress Stabilization System #6596) in key areas as illustrated in the third photo above. The 'X' in the photo represents a new egress window, currently in the dining area of the basement, which will be cutout later during construction. An old sump pump, seen at the bottom of the third photo, has been decommissioned and covered, with a new sump pump added at the most downstream area of the weeping system located at the front of the home. For additional insurance, a backwater valve has also been added. Access to the backwater valve is via an ABS cap visible on the floor of the western side of the Entertainment room.

Completing the foundation wall interface: The first picture below shows crushed stone which has been installed from the weeping tile up to ground level. This ensures water flows properly down and around the home, exiting via the weeping system into the City's sewer system. The second photo below shows how the foundation, which has now been parged (i.e., covered with mesh and a concrete finish), works with the outer wall of the home ensuring a continuous barrier against water and cold air infiltration. Later a drip edge is added to ensure water flows over the foundation wall and down into the weeping system. The final picture shows the addition of 5/8th plywood to the Silverboard insulation in the second picture. If you look closely, you will see high-strength TORX screws have been used for this application.

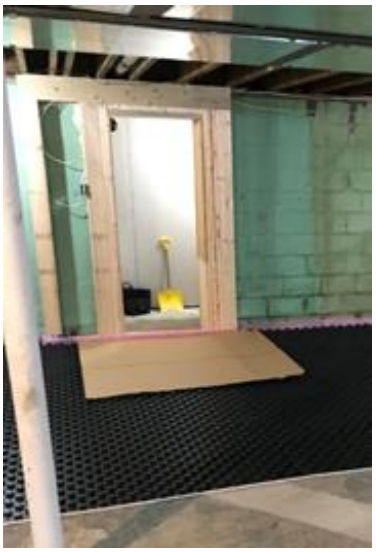
Outer wall completion: The outer walls of the home have been finished with LP Smartside siding, an engineered wood composite that offers protection against wind, moisture, fungal decay and termites. It also looks good. Installation of the siding is visible in the middle picture below. There, you will notice an air gap has been provided by installing the siding over ¼ inch strapping. This ensures the siding breathes properly. The first picture below shows the old siding as it is being removed. This includes a layer of vinyl siding (not shown) and the original wood siding. The tar paper, which is not breathable, is also removed before adding a new out layer of Silverboard insulation, plywood, Tyvek wrap and siding.

The new siding application was applied to all original areas of the home. For new areas and those adjacent to the garage addition, closed cell spray foam was employed, as illustrated in the third picture in the row above.

Soffit and Garage Addition: Similar to the outer walls, there were two layers of soffit (the original wood soffit and a newer vinly layer) that were required to be removed before installing the aluminium soffit currently on the home. This was a messy job that required the repair of some the rafter extensions as noted in the first two pictures below. The third picture below illustrates the 22 foot-long LVL (laminated veneer lumber) roof joists used in the garage, along with the through-bolted interface for the back end of the garage where the skylight is placed. The new garage roof should not fall down in a wind storm.



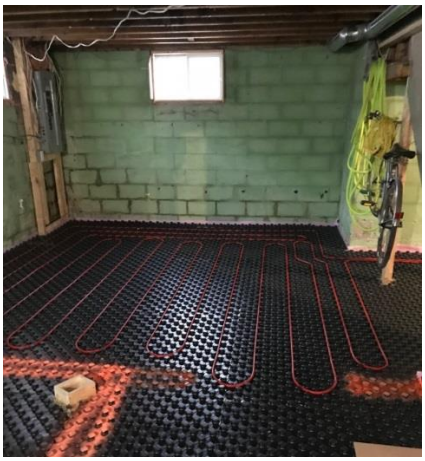
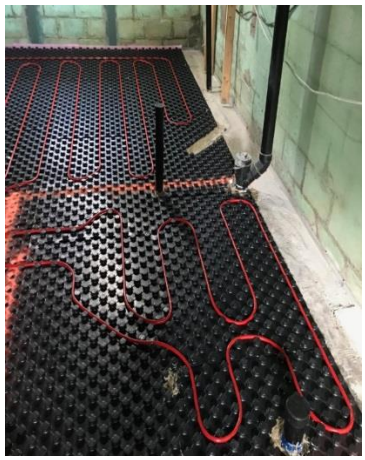
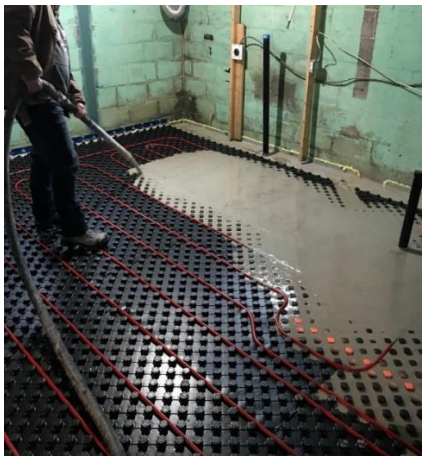
Basement structural upgrades – Before proceeding with the basement addition a number of upgrades were required. The first picture below shows a new header being applied to the door frame leading into the cold cellar. In this instance, the old steel plate that was supported by cement block had begun to fail. The second picture below shows the installation of new pillar holding up the eastern floor beam. This was required to permit an open space between the new basement kitchen and the adjacent dining area. The third picture shows the strengthening (sistering) of floor joists, which was not required but was prudent given the opportunity to do this existed prior to closing the ceiling space.



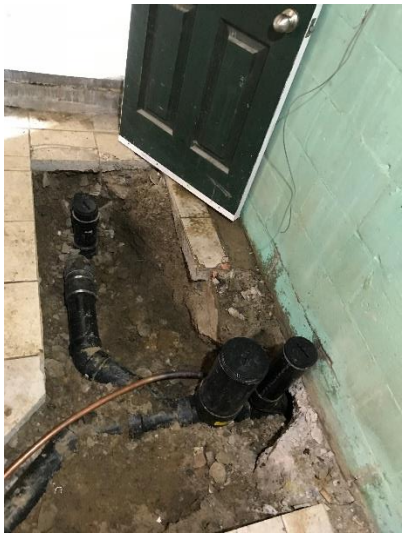
Taking advantage of the open rafters – Similar to the last point, given the open floor joists the opportunity to improve the quality of the upper floor was undertaken. This was done by gluing and screwing plywood and 2x2 sister beams on select joist areas. The main focus here was to reduce squeaks that existed in the center hall area of the main floor.

The third picture above reinforces the importance of structural integrity associated with the addition. Here 2x8 studs are used in the lower bathroom wall area. Combined with the adjacent wall, this application ensures two floor joists are directly supported in the area where the pillar for the eastern beam used to exist. It is a bit of overkill, but why not take the opportunity to strengthen things when given the chance – a sense of quality through quietness and stiffness in the upper floor is the direct result of these types of changes.

Adding a hydronic floor – The home greatly benefits from the addition of an in-floor hot water system which heats the home from the bottom up. This system has two heating zones, one in the main bedroom (the first picture below) and another zone for all other areas of the basement. The third picture below shows how gypsum is poured to complete the application. It took three days to lay the insulated backing and tubing, and less than three hours to pour the floor – as the individual responsible for the latter, that doesn't seem fair.

Upgrading the plumbing – Before putting in the hydronic floor a number of plumbing upgrades were undertaken. The old cast iron sewer pipe was replaced with ABS and a drain was added for the new utility room. The main water line was also moved to the utility room at this time. Later, the copper water feeds were replaced with PEX, a flexible polyethylene product that does not sweat. Water zones were also added by providing separate shut-off valves for each area of the home. The pictures below illustrate: the dig to replace the cast iron; the addition of the backwater and cleanout valves and movement of the water main to the utility room (note, the upper ABS pipe shown in the photo is where the weeping system feeds into the sewer system); and, the replacement of the cast iron for the main stack up to the first-floor toilet (from there the original cast iron vent continues to the roof, as before).



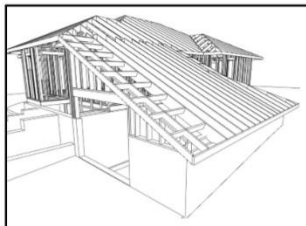
Upgrading the electrical system – One of the first renovation activities was the replacement of the old electrical panel with a 200 amp unit. The first photo below shows a close-up of the ESA-certified panel (note, a detailed description of the circuits is available at the panel); the second shows how the wires distribute into three areas: 1) to the ceiling where they either go northwest around the stairwell or directly west through the stairwell itself (see the third photo, which is the bottom of the stair landing); 2) along the east wall to the lower kitchen; and, 3) along the south wall to the Entertainment room.

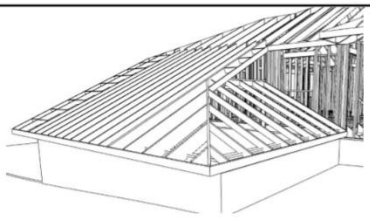
Finishing the basement – The photos below show key elements required in finishing the basement. The first photo shows the same electrical panel area as before, this time after insulation including closed cell spray foam on external walls and Roxul ceiling insulation. For the latter, two layers of 5/8th inch fire code drywall, with GreenGlue sound insulation in between, were installed in finishing the room. This was the norm for most ceiling and all basement common area walls. The second photo illustrates the sealing required to meet fire code for separate occupancy units. This included 3M sealant for wires (shown) and Intumescent sealant for ABS pipes (not shown). The final photo shows how recessed lights required separation boxes, again to meet the fire code.

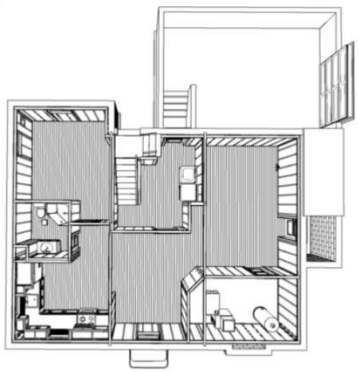
Building plans and compliance with associated standards

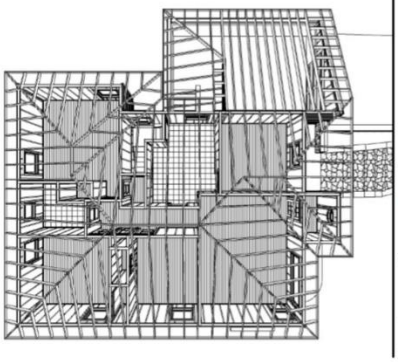
The renovation was conducted under a City of Ottawa building permit. There are currently three minor deficiencies outstanding in this regard, with resolution and final inspection scheduled for September 4th. The electrical (ESA) inspection is complete. A copy of select pages from the building plan is provided below for reference. A full set of plans along with related inspection documents is available upon request.

A copy of the 25-year foundation guarantee is also available upon request.









All dimensions must be confirmed by the builder prior to ordering materials.
DO NOT scale the drawing - any errors or omissions shall be reported to the designer without delay.
All work to be done in accordance with the Ontario Building code & local by-laws.

SCOPE OF WORK:
CONVERT EXISTING FINISHED BASEMENT AREA INTO A LEGAL SECONDARY DWELLING UNIT OF A SINGLE STORY HOME.
REPLACEMENT OF EXISTING GARAGE / BREEZEWAY W/ NEW ATTACHED GARAGE W/ NEW ROOF.
NEW POST LOCATION IN BASEMENT.

EXISTING
garage rebuilt with slab ht.
elevated & new roof line

LIST OF DRAWINGS

A0	COVER PAGE
A1	SITE PLAN
A2	BASEMENT (proposed)
A3	GROUND FL. (proposed)
A4	ROOF FRAMING (illustrated)
A5	SECTIONS / DETAILS
A6	ELEVATION FRONT
A7	ELEVATION LEFT
A8	ELEVATION REAR
A9	ELEVATION RIGHT

David Inshaw
BCIN (Individual) # 34449
(Firm) # 43214
613 443 -9611

The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the Ontario Building Code to be a designer.

NO.	REVISION	DATE
#2		
#1	PERMIT	June 12 2018

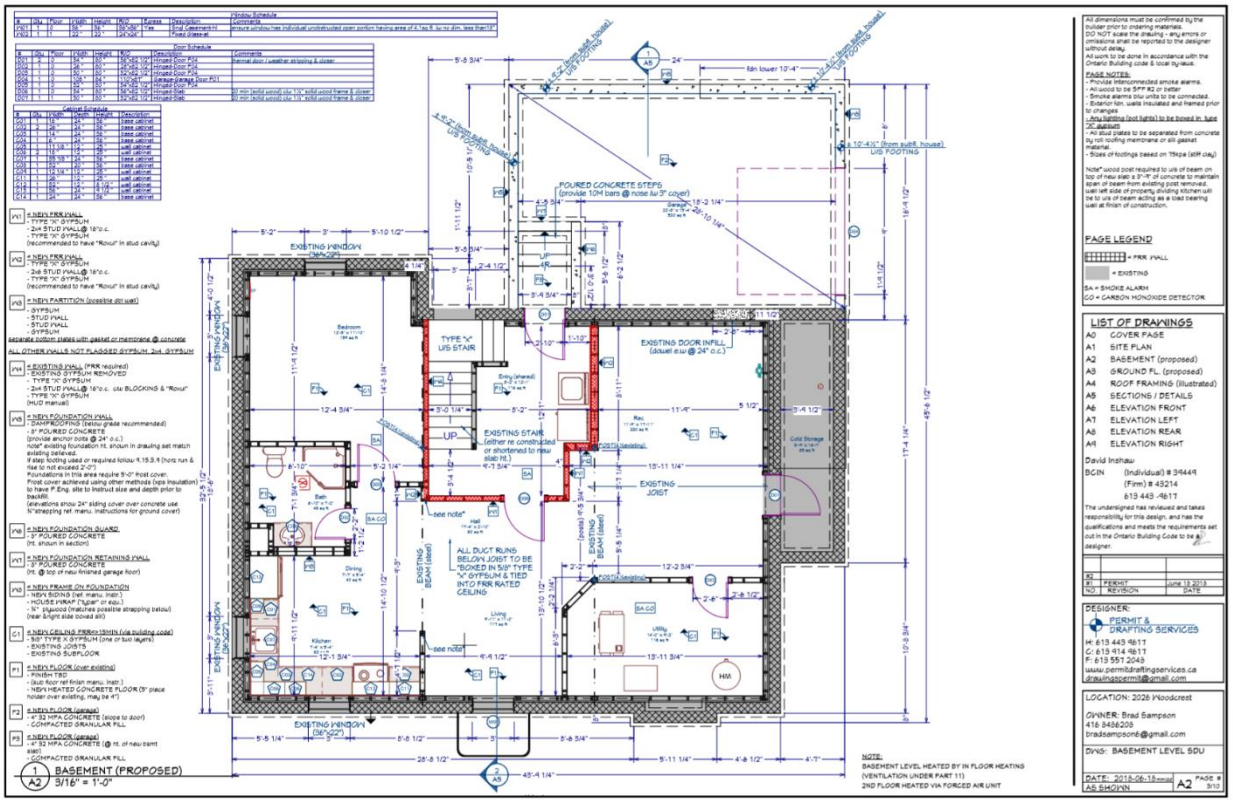
DESIGNER:
PERMIT & DRAFTING SERVICES
H: 613 443 9611
C: 613 414 9611
F: 613 551 2048
www.permitdraftingservices.ca
drawingspermit@gmail.com

LOCATION: 2026 Woodcrest

OWNER: Brad Sampson
416 8486208
bradsampson6@gmail.com

DWG: COVER

DATE: 2018-06-18 | SCALE: AS SHOWN | A0 | PAGE # 1/10


Window Schedule
Door Schedule
FOUNDATION WALL SCHEDULE
FLOOR SCHEDULE
FOUNDATION WALL NOTES
FOUNDATION WALL
FOUNDATION WALL
FOUNDATION WALL