



Building a Detached Residential Parking Garage in a Floodplain?

Conservation Sudbury regulates development in and/or adjacent to wetlands, hazardous lands, inland lakes, river and stream valleys and watercourses as per [Ontario Regulation 41/24](#), made pursuant to the [Conservation Authorities Act](#).

Where existing residential development exists within the flood hazard, new accessory uses may be permitted provided the development is appropriate and safe. Constructing a detached residential parking garage in a floodplain requires a permit from Conservation Sudbury. Application forms and associated fee schedules can be found [here](#). **Complete** applications are reviewed, and permits can usually be issued within **30 days** provided all required information is received.



In order to limit the placement of fill within the floodplain, detached garages are required to be built at grade and wet floodproofed. The intent of wet floodproofing is to ensure the integrity of the structure and reduce damages when the garage gets inundated with floodwater. Wet floodproofing involves design considerations for the building foundation, interior and exterior finishes, electrical service panels, and heating equipment. Generally, the structure will require poured concrete or block retaining walls extending, at a minimum, to the flood elevation. Parking garages considered under this guidance are not permitted to include plumbing fixtures.



Fill placement is permitted to facilitate the building foundation and promote positive drainage around the structure. Fill placement is generally limited to 1 m from the perimeter of the new garage. No additional fill is to be placed in the floodplain and any excavated fill must be removed from the [Regulated Area](#).

Flood elevations (where available) can be provided at pre-consultation or once a permit application is received. Approximate elevations within the property can be provided by staff during a site visit, and subsequent flood depths and design requirements can be interpreted. In some cases, the applicant may need to engage a qualified professional to determine elevations. The potential for structural damage increases rapidly with increasing depth and velocity of flood waters. Garages proposed in areas with flood depths greater than 0.8 m, or where water velocities are considered significant, require a design approved by a structural engineer.

Additional restrictions may apply if the parking garage is also located within or adjacent to an erosion hazard or wetland. *If you are looking to build a garage on a property zoned for industrial, commercial or institutional use, please contact NDCA@conservationsudbury.ca.*

Design Requirements

The following are the minimum requirements to be incorporated into the design of a detached parking garage in a floodplain:

- Must be constructed in the area of least flood depth (ie. high point of land).
- Must be constructed at grade. Fill is permitted to facilitate foundation levelling and positive drainage around the structure but must be kept to a minimum.
- Must be single storey.
- Concrete foundation (poured or block) up to flood elevation (minimum).
- All electrical panels and heating appliances must be at least 30 cm above the flood elevation.
- Erosion and sediment control measures are required if the proposed development is within 15 m of a watercourse or waterbody.
- Existing drainage patterns within the property are to be maintained.
- Must be constructed for the purpose of parking vehicles.
- No habitable space can be created in the garage (ie. bedrooms, recreation room, etc.)
- Must not include plumbing.

Complete Application Requirements

As part of a complete application, the applicant is required to submit the following items demonstrating how the above design requirements will be achieved.

Section 28.1 Permit Application

	Complete
Complete application form, signed by the landowner	<input type="checkbox"/>
Signature to assign an agent (if agent is required, see first page)	<input type="checkbox"/>
Payment of permit deposit of \$200 (details on last page of application form)	<input type="checkbox"/>

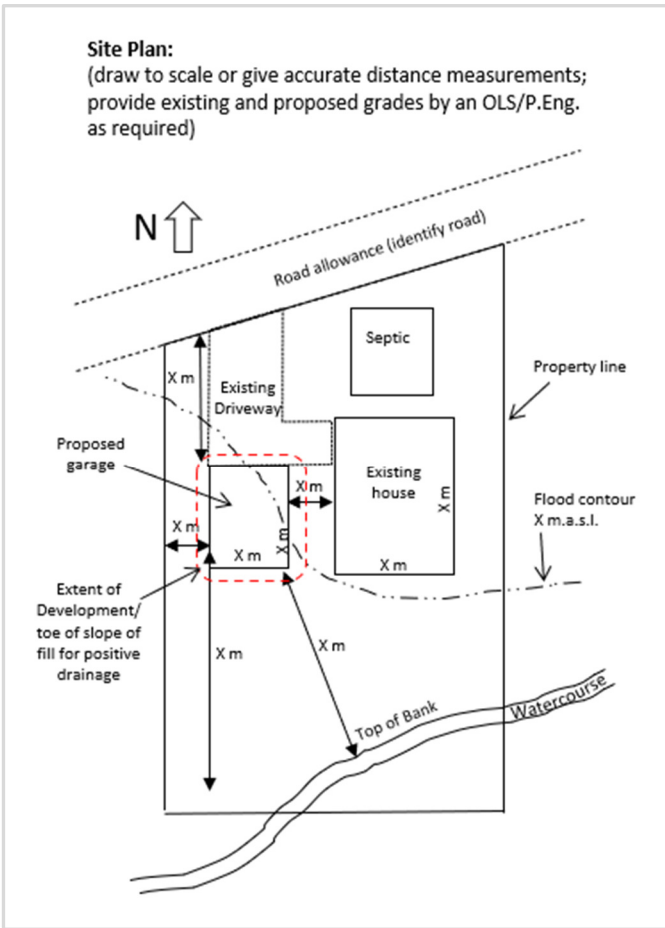
Site plan and Drawings – the following items must be shown on the plans

Property Lines	<input type="checkbox"/>
Location and dimensions of existing structures (if applicable)	<input type="checkbox"/>
Location and dimensions of proposed structure (incl. location of doors)	<input type="checkbox"/>
Cross-section of building, including foundation and grades relative to existing (dimensioned)	<input type="checkbox"/>
Floor plan	<input type="checkbox"/>
Extent of fill placement and general grading plan (dimensioned with depths)	<input type="checkbox"/>
Stabilization/erosion control methods (if within 15 m of a regulated feature)	<input type="checkbox"/>
Regulated features present on site (ie. watercourse, waterbody, wetland...)	<input type="checkbox"/>
Location and extent of floodplain on the parcel (flood contour)	<input type="checkbox"/>
Flood depth at proposed location of garage (if known)	<input type="checkbox"/>

****All plans must be signed and dated***

Sample Drawings

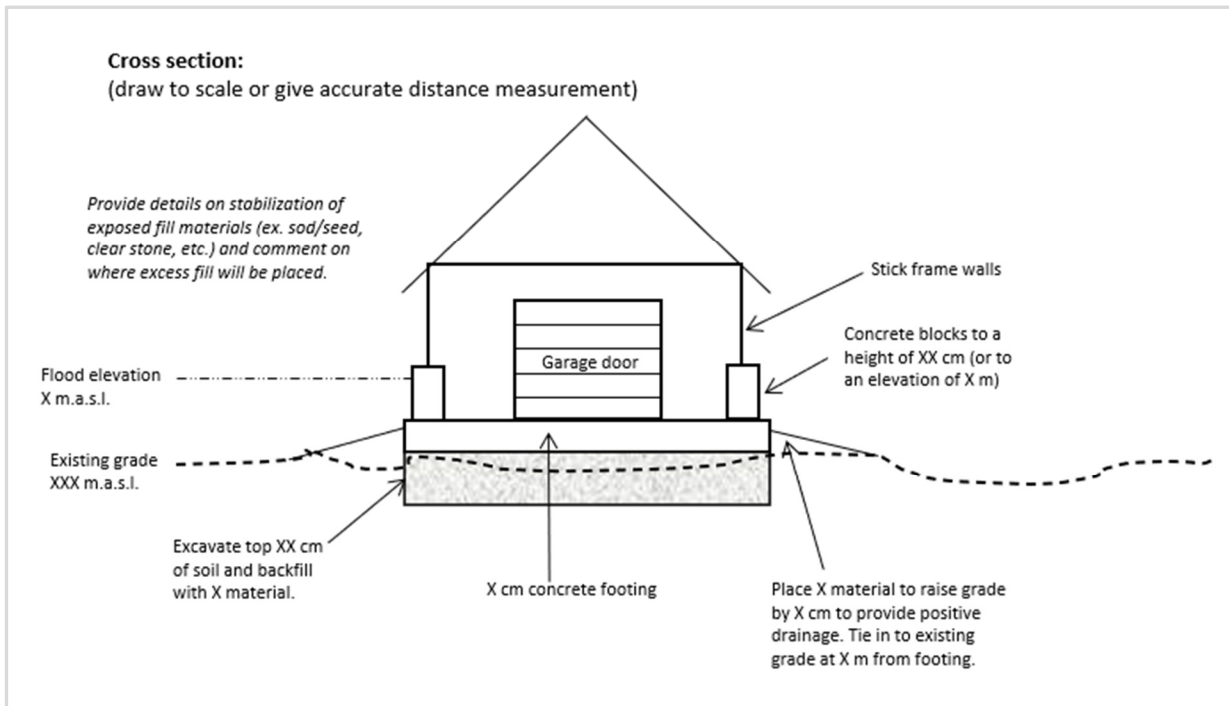
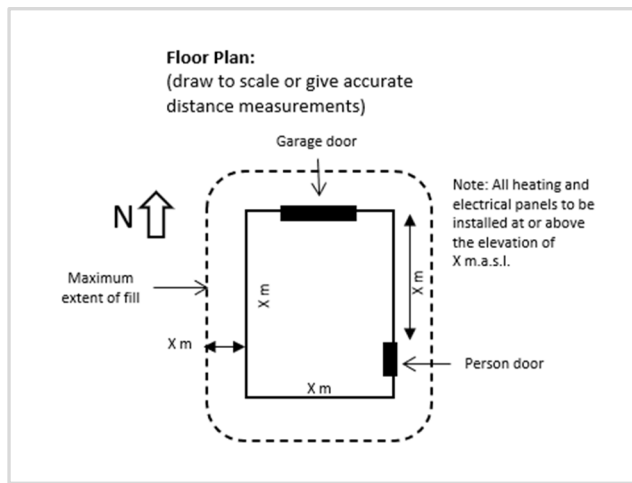
(Drawings are only examples and may not be submitted as your own)



All drawings must include:

1. Applicant name
2. Municipal address (or legal address)
3. Signature of author
4. Date

Note: m.a.s.l. means the elevation above sea level.



Other Drawing Resources:

- [City of Greater Sudbury Detached Garage Slab on Grade with Perimeter Footing Typical Drawings](#)