

Flood Proofing Requirements

Fitzroy Harbour – Chats Falls Generation Station
and Power Dam to Canon Smith Drive

Item:	Required Standards: (meters – G.S.C.D.)
Regulatory (1:100 Year) Flood Plain	61.3
Minimum elevation of living space floor assembly (underside of floor joists) and floor of attached garage	61.9
Minimum floor surface elevation for a crawlspace ^{1,2}	60.2 (5-year level)
Maximum height of crawlspace (floor surface to underside of floor assembly (Bottom of floor joists)	1.8 m
Minimum underside of floor assembly elevation for a detached garage/auxiliary building	61.6
Minimum elevation for electrical & mechanical services (i.e. hot water tanks, furnaces, power boxes, outlets and duct work)	61.6
Minimum elevation of openings (i.e. windows, doors, vents) in exterior walls	61.9
Safe access minimum	Not more than 0.3 m below 1:100 year: 61.0
Minimum elevations for Septic Systems ³	Replacement System (developed lot): 60.75 New System (vacant or redevelopment): 61.3
Septic Systems – Taper-down from finished grade of area bed and mantle	Taper-down shall be no flatter than 4:1 (h:v) in order to minimize the amount of fill in the flood plain.
Fill Apron (grading around foundation)	Top of fill apron maximum elevation of 0.15m above the 1:100 year elevation; extend from the foundation wall 1 m, max. of 4.5 m at the toe; taper down at a max. of 3:1 (h:v) to existing grade. The extent of the fill area should be clearly outlined on the site plan. Swales required to accommodate local drainage.
Drainage swales - changes in grade must not result in drainage being directed onto neighboring properties.	Site grading plans must illustrate and/or describe how drainage will be directed off the site so that it does not impact on neighboring properties (e.g. drainage swales along the side yard lot lines)

Notes:

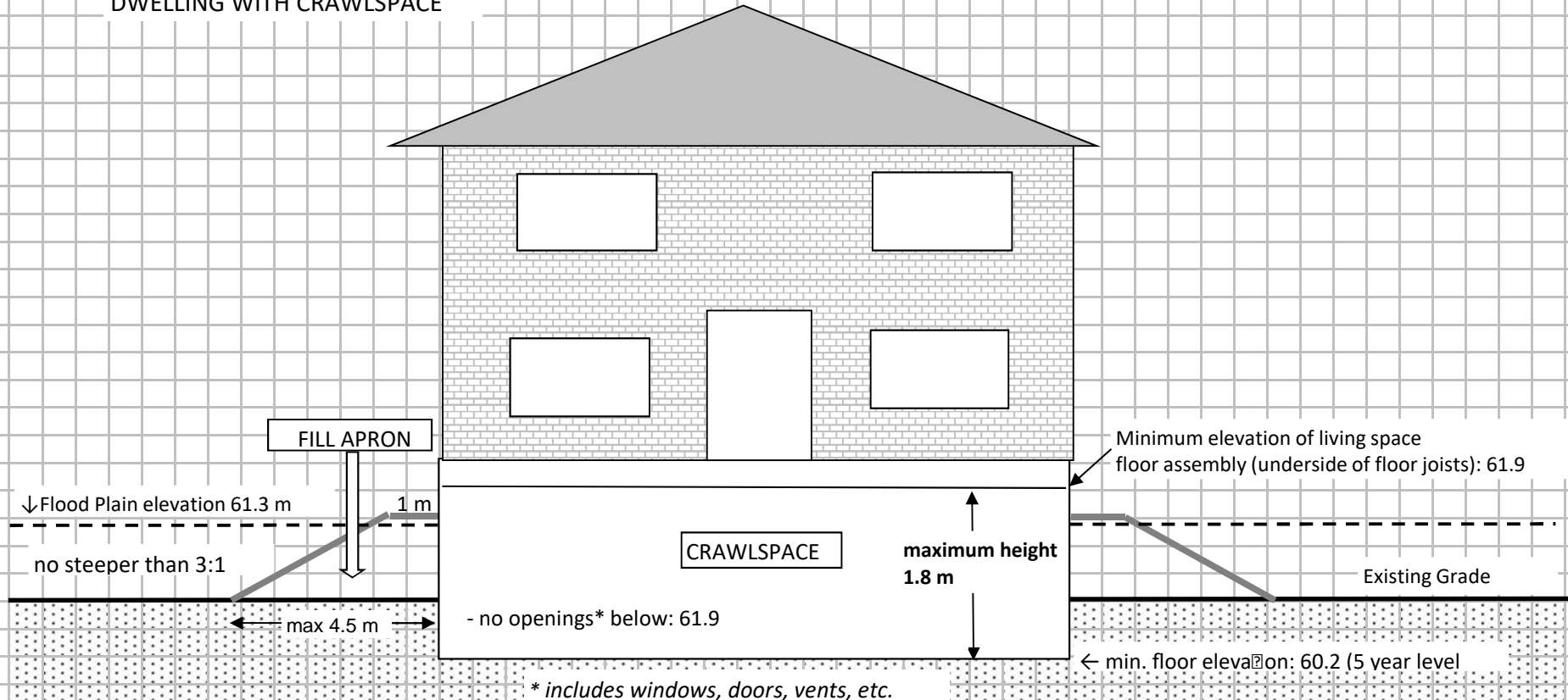
1. Crawlspace floors are to remain unfinished (i.e. gravel) or be designed by a professional engineer.
2. Basements are not permitted below the 1:100 year flood level. Underside of basement floor assemblies (i.e. walkouts) are to be flood proofed to the elevation specified for living space.
3. Requirements for flood proofing of Septic Systems vary depending on the type of system being installed. Flood proofing requirements will be specified for the type of system being proposed.

FLOOD PROOFING STANDARDS

Fitzroy Harbour

Chats Falls Generation Station and Power Dam to Canon Smith

DWELLING WITH CRAWLSPACE



Fill Apron (grading around foundation): Top of fill apron maximum elevation of 0.15 m above the 1:100 year elevation; extend from the foundation wall 1 m, max. of 4.5 m at the toe; taper down at a max. of 3:1 (h:v) to existing grade. Swales are required to accommodate local drainage. The extent of the fill area should be clearly outlined on the site plan.

Minimum elevation for **electrical & mechanical** services (including hot water tanks, furnaces, power boxes, outlets and duct work etc): 61.6 G.S.C.D.

Drainage Swales: Changes in grade must not result in drainage being directed onto neighbouring properties. Site grading plans must illustrate and/or describe how drainage will be directed to an adequate outlet (e.g. roadside ditch, lake, etc.) so that it does not result in increased drainage onto adjacent properties (e.g. provision of drainage swales along the side yard lot lines)

Crawl Space Floor: Must remain unfinished i.e. gravel. Otherwise, finished/concrete floors must be designed by an engineer to withstand hydrostatic pressure.