



DAMPPROOFING & DRAIN TILE INFORMATION BULLETIN

The information listed below and in the attached illustrations is provided only to assist home owners and builders in clarifying some of the B.C. Building Code (Code) and Saanich Building Bylaw (Bylaw) requirements for foundation dampproofing, drain tile and storm water disposal. In all cases the wording listed in the referenced Code or Bylaw takes precedent.

Where you are unclear as to what is required for drain tile or roof water collection, please contact a Building Inspector. If you are not sure if there is a Municipal storm drain connection at the road fronting your house, contact drafting services staff in the Engineering Department at Saanich. Where you are unclear as to whether or not your property is connected to a municipal system at the road, contact staff from Development Services to arrange for a dye test - cost of \$175.00. Where you have general questions pertaining to the storm connection listed on a building permit, contact staff from Development Services in the Engineering Department at Saanich. All the referenced staff members can be reached at 475-5457. The cost of a new connection to an existing Municipal system is \$3700.00

Where additions to Single Family Dwellings or new Accessory Buildings are proposed, particular care and planning are required to ensure the storm water can be discharged to a storm lateral that Saanich will approve. This must be labeled on the plans submitted for building permit.

The purpose of dampproofing and drain tile is to limit the probability of ground water from entering a basement or crawlspace or negatively affecting a foundation. Section 9.13 and 9.14 of the Code address this topic. Storm water collected from roofs must be collected in a solid or "tight pipe" system. The perforated drain tile system located at the bottom of the foundation is intended to collect only ground water – not roof storm water.

Please note:

Saanich Building & Plumbing Bylaw 8627, in Subsection 4.7 states in part: 4.6.1.(1) *"No permit for the construction of any building or building addition shall be issued unless the following works and services are provided:...(1) (d) an approved method of storm drainage disposal has been installed to service the building."* See below for the list of Saanich approved methods for storm drainage disposal.

The storm drainage disposal lateral must be connected to one of the three following three facilities:

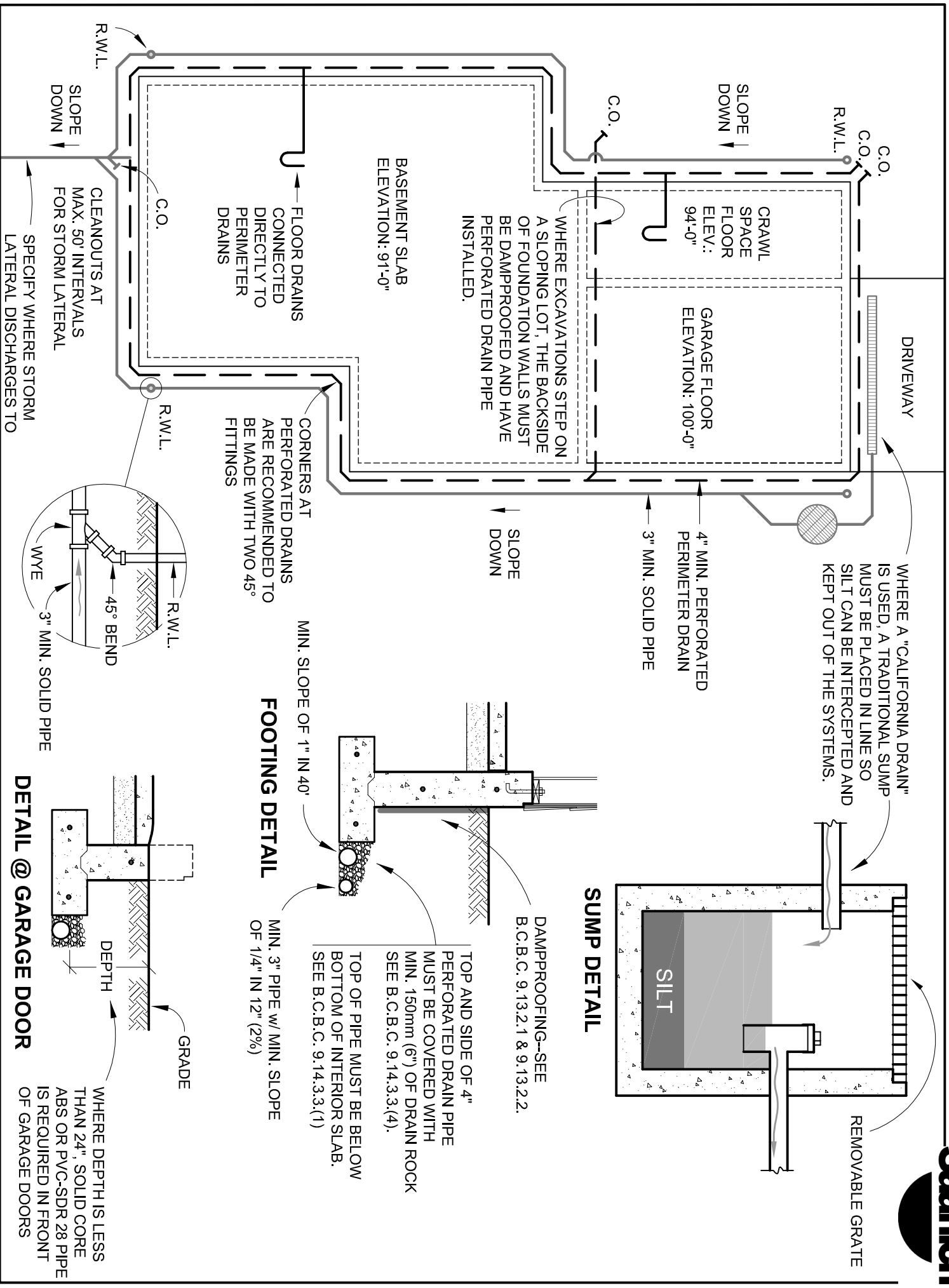
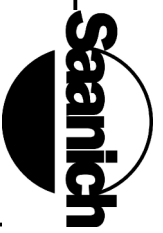
- 1) A new or existing storm lateral leading to a Municipal and approved STORM DRAIN CONNECTION;
- 2) A new or existing storm lateral leading to a Municipal, approved and existing SUB-STANDARD CONNECTION;
- 3) A new or existing storm lateral leading to a Municipal approved method of ON-SITE DISPOSAL designed and installed under the supervision of a PROFESSIONAL ENGINEER – LETTERS OF ASSURANCE REQUIRED.

The building permit application form requires that the owner and designer conduct investigations prior to applying for a building permit and note on the plans and on the building permit application where storm and ground water is to be discharged – Saanich staff can assist in this investigation. The assessment of storm drainage disposal is a very important step and should be completed prior to application for building permit. If this is not addressed diligently by the building designer, this can lead to a protracted permit issuance process, potential and significant additional costs and potential problems with inspections in the field. It is the owner's responsibility to ensure adequate investigation has been done.

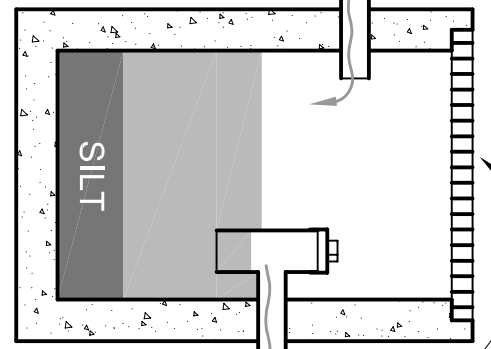
Newer Municipal connections at the property line will be indicated with green painted stakes or green electrical wire for the storm sewer and red painted stakes or red electrical wire for the sanitary sewer lines. The clean-outs on private property side should have screw caps glued to the risers and colour coded (spray painted) the same. It is extremely important that owners and contractors properly connect to the municipal systems so that no "cross-connection" (i.e. storm water directed to the municipal sanitary collection system) is created. Please check the as-built drawing provided with your permit for the location and approximate depth of both storm and sanitary connections. Please carefully review conditions placed on the building permit indicating where storm discharge is to be connected. Please also read all associated information on the information bulletin attached to the plans.

SAMPLE DRAIN TILE & SOLID PIPE LAYOUT

B.C.B.C. 2018



WHERE A "CALIFORNIA DRAIN" IS USED, A TRADITIONAL SUMP MUST BE PLACED IN LINE SO SILT CAN BE INTERCEPTED AND KEPT OUT OF THE SYSTEMS.



SUMP DETAIL

REMOVABLE GRATE

DAMP-PROOFING--SEE B.C.B.C. 9.13.2.1 & 9.13.2.2.

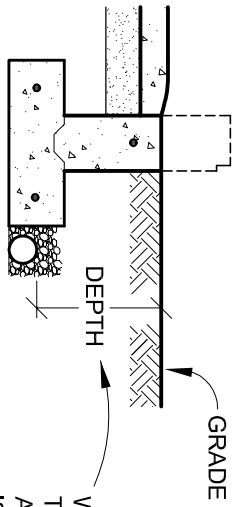
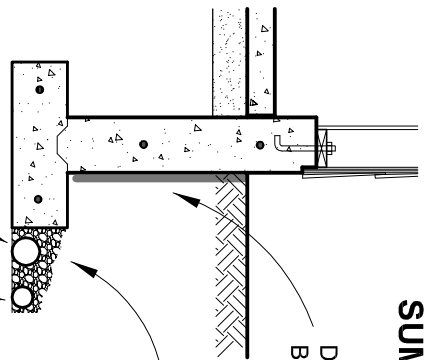
TOP AND SIDE OF 4" PERFORATED DRAIN PIPE MUST BE COVERED WITH MIN. 150mm (6") OF DRAIN ROCK SEE B.C.B.C. 9.14.3.3.(4).

TOP OF PIPE MUST BE BELOW BOTTOM OF INTERIOR SLAB. SEE B.C.B.C. 9.14.3.3.(1)

FOOTING DETAIL

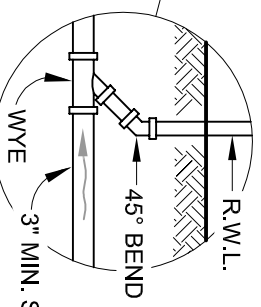
MIN. 3" PIPE w/ MIN. SLOPE OF 1/4" IN 12" (2%)

MIN. SLOPE OF 1" IN 40'



DETAIL @ GARAGE DOOR

WHERE DEPTH IS LESS THAN 24", SOLID CORE ABS OR PVC-SDR 28 PIPE IS REQUIRED IN FRONT OF GARAGE DOORS



CLEANOUTS AT MAX. 50' INTERVALS FOR STORM LATERAL SPECIFY WHERE STORM LATERAL DISCHARGES TO

FLOOR DRAINS CONNECTED DIRECTLY TO PERIMETER DRAINS

WHERE EXCAVATIONS STEP ON A SLOPING LOT, THE BACKSIDE OF FOUNDATION WALLS MUST BE DAMP-PROOFED AND HAVE PERFORATED DRAIN PIPE INSTALLED.

BASEMENT SLAB ELEVATION: 91'-0"

GARAGE FLOOR ELEVATION: 100'-0"

4" MIN. PERFORATED PERIMETER DRAIN

3" MIN. SOLID PIPE

SLOPE DOWN

CORNERS AT PERFORATED DRAINS ARE RECOMMENDED TO BE MADE WITH TWO 45° FITTINGS

SLOPE DOWN

SLOPE DOWN

DRIVEWAY

C.O.

R.W.L.

C.O.

R.W.L.

R.W.L.

R.W.L.

R.W.L.

DEPTH

GRADE

DEPTH

WHERE DEPTH IS LESS THAN 24", SOLID CORE ABS OR PVC-SDR 28 PIPE IS REQUIRED IN FRONT OF GARAGE DOORS