Drainage Requirements

Typical Systems for Foundation Drainage and Storm Drainage
The following information is in reference to the drainage of foundations and the storm drainage systems for surface drainage.

Drainage Systems

The following are considered acceptable practices:

- Rainwater Leaders (RWL) must be drained to a storm drainage system of approved piping (not perforated). The piping shall be not less than three (3) inches
  Note: Calculations of the area of surface drainage may require larger sizes.

- The storm drainage piping shall be sloped in accordance with the BC Plumbing Code.

- The use of approved drainage fittings is required for storm drainage systems: i.e. forty-five (45°) degree bends at the corners of the building and Ys at the connection to the storm sewer.

- The storm drainage system shall be solvent cemented and capable of withstanding a test, if required.

- Foundation drainage, C.S.A. approved, perforated sewer piping, must connect to the storm sewer using approved fittings - Ys etc. The piping should be sloped one (1) inch in forty (40) feet, where possible.

- A properly trapped and primed floor drain may be connected to the foundation drain, when approved.

- Driveways and similar surfaces shall drain to the storm drainage system. A sump should be installed in the area being drained. The sump should be adequate to serve as an interceptor and be covered with a grate.

- An interceptor may be required, located as shown on the drawing or in some other convenient location, into which the discharge from the foundation drainage is collected.

- To safeguard against flooding caused by storm sewer surcharging, a backwater valve should be installed on the outlet of the interceptor. The storm drainage piping from the RWL should be connected downstream from the interceptor. Backwater valves must be accessible for servicing.

- If an interceptor and a backwater valve are not installed, a backwater valve may be required on the floor drain, driveway drain and other surface drainage inlets.

- If "Big O" is used for the sub-soil drainage system, it must not be buried more than four feet (4'). Also, if it is placed under a driveway it must have a minimum of twenty-four inches (24") of coverage.

NOTES:
- Separate solid pipe rainwater leader system 1 in 50 grade.
- Floor drain connected directly to exterior drain.
- Sanitary Ts and 90 degree elbows only on perimeter drains.
- Perimeter drains and storm piping enter catch basin separately.
- 4" C.O.s to access each direction of high point of perimeter drain.
- Storm building sewer or equivalent. 1 in 100 min. grade