

## SCHEDULE "A"

### STANDARDS FOR LIQUID MANURE PIPELINES ON COUNTY ROADS

1. Only Permanent Crossings will be permitted.
2. "Permanent Crossings" will require an encroachment agreement with the County of Oxford;
3. Permanent crossings must adhere to the following standards:
  - (i) no liquid manure pipelines permitted within 100 metres of a watercourse;
  - (ii) existing road crossing and entrance culverts not to be used;
  - (iii) the crossing pipe shall extend to a minimum of 15 metres beyond the road property line on both sides of the road;
  - (iv) the crossing pipe shall cross the roadway at right angles;
  - (v) the road crossing is to be designed and by a Professional Engineer licensed to practice in Ontario;
  - (vi) the pipeline crossing shall be designed to accommodate 1.5 times the peak pumping pressure;
  - (vii) the system must be designed to prevent water hammer;
  - (viii) a 400 mm high berm must be constructed along the property line adjacent to the roadway for 50 metres each side of the road crossing except where the adjacent land slopes away from the road;
  - (ix) the pipeline under the road must be drained while frost is in the ground;
  - (x) the pumping system shall be operated in such a manner that it will be shut down within 1 minute of pipe/equipment failure;
  - (xi) all road crossings must be installed by boring and jacking;
  - (xii) the installation and operation of the liquid manure pipe shall conform to all federal and provincial standards;
  - (xiii) aerial spraying application of liquid manure is not permitted; and
  - (xiv) prior to initial use of the liquid manure pipe crossing under the County road, and semi-annually thereafter, hydrostatic testing shall be conducted under the supervision of a Professional Engineer licensed to practice in Ontario. Hydrostatic testing shall conform to OPSS 701.07.19.