

DRAINAGE AND WATER CONTROL LICENSING TILE DRAINAGE REQUIREMENTS FACT SHEET

This Factsheet is intended for proponents of tile/subsurface drainage projects.

THE WATER RIGHTS ACT AS IT RELATES TO TILE DRAINAGE DEVELOPMENT

The Water Rights Act suggests that no person shall control water or construct, establish or maintain any water control works unless he or she has a valid and subsisting licence to do so.

Water control works are defined as any dyke, dam surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage.

Tile Drainage networks are considered Water Control Works and therefore require licensing under the auspice of The Water Rights Act prior to installation.

APPLICATION FOR WATER RIGHTS LICENCE

To apply for a Water Rights Licence a completed licence application along with the licence fee must be submitted to Manitoba Water Stewardship at the address indicated on the application form

Application forms can be obtained from Water Stewardship from our Regional offices or Water Resource Officers.

TILE DRAINAGE PROJECT LICENSING REQUIREMENTS

Water Stewardship requires the following technical information prior to the issuance of a Water Rights Licence for a tile drainage project:

- Legal location (section township range) of proposed project
- Number of acres to be tiled within the land description
- Written Landowner and municipal consent

PROPOSED TILE DRAINAGE NETWORK DETAILS INCLUDING:

LATERAL PIPES

- location, size, flow direction
- Perforated Lateral pipe depth - average depth of lateral not to exceed 36 inches (3 feet) unless proponent can demonstrate need
- Pipe gradient
- Detail connection between lateral and header pipe

HEADER PIPE DETAILS

- Header pipe location, size, depth and outlet location, flow direction
- Proposed runoff co-efficient should not exceed the 3/8 24 hour co-efficient.
- Co-efficient and system design shall include proposed system runoff rate (units l/s, cfs)
- Header pipe outlet to be designed so that an operational control structure may be installed if required
- Perforated Header pipe depth – average depth of perforated pipe invert depth not to exceed 60 inches (5 feet)
- Any pipe exceeding 60 inches in depth (5 feet) should be non-perforated unless need for perforated can be demonstrated by proponent

PROJECT OUTLET

ALL TILE DRAINAGE OUTLETS REQUIRE:

- Outlet to be rip rapped
- Outlet pipe location to be marked/identified by visible bollards, antennae or by any other means identified by affected municipality, Conservation and Water Stewardship or other provincial agencies

ADDITIONAL OUTLET STRUCTURE INFORMATION IS REQUIRED FOR:

SUMP PIT/PUMP OUT STRUCTURES

- Proponent to provide design drawings which detail pit location, pump size, location, proposed pump rate
- Pump Out electrical Panel to be equipped with an acceptable recording device (eg HOB0 Data Logger) which annotates pump operations including length and frequency of pump operations.
- Annual proposed pump shut off date
- Proposed water/float level within the structure that the pump will operate – meaning what is the proposed water level (relative to prairie elevation) at which point the pump will activate and remove water from the structure

CONTROL STRUCTURE

- If a control structure is deemed necessary on the outlet pipe - location and type of operational flow control structure and proposed operating plan to be detailed.
- Please note that in higher land slope areas where overall internal tile system elevation differences exceed 30 inches, additional internal flow control structures may be required

LANDOWNER AND AGENCY SIGNOFF REQUIREMENTS

- For systems that outlet into municipal drains within one mile of the tile outlet and stays within the municipal drainage system written approval from the affected municipality is required.
- If the municipal drainage system outlets into/becomes a natural waterway within 2 miles of the proposed outlet, additional landowner signoff may be required
- For systems that outlet into natural drains that cross private property – written landowner approval is required for any affected landowner within 2 miles downstream of any outlet
- For any systems that outlet into the Provincial Drain or Highway network, written authorization from the affected government agency is required
- All tile works must have a minimum 50 meter setback from any semi permanent or permanent wetland

RECEIVING DRAINAGE NETWORK REPORT

Proponent must clearly detail in the project report with drawings the route from the proposed outlet of the tile drainage network's point of entry into the existing drainage system to the point where the discharge would enter an established drain/creek/river/lake etc. for a minimum of 2 miles downstream of the proposed project.

PROJECT IMPACT STATEMENT REQUIREMENTS

A Project impact Statement consisting of an Engineer's/Hydrologist's report may be requested for tile drainage projects in sensitive areas. These reports will contain among other things technical drawings showing the location extent of the proposed works, the route proposed from the point of entry into the existing drainage system to the point where the discharge would enter an established drain/creek/river/lake/etc. Additionally the applicant may be requested to provide pre and post development discharge calculations to prove discharge rates have not changed and will not result in a negative effect on downstream landowners or infrastructure.

Additional landowner signoff may be required for projects in sensitive areas. The extent of landowner signoff will depend on the scope of the project being applied for

ADDITIONAL APPROVALS

Please note some municipalities or government agencies may have additional requirements with respect to tile drainage that will need to be adhered to in order to obtain approval for a tile drainage project. Project proponents are

advised to contact the municipality directly.

AS BUILT DRAWINGS

As a final condition of approval as built drawings of the final installed tile drainage are required

For any additional questions related to the Water Rights Licence process please contact:

Eastern Manitoba (Winnipeg, Capital Region and surrounding areas)

Ginette Caillier – Senior Water Resource Officer at (204) 392-2736, email: ginette.caillier@gov.mb.ca

Western Manitoba (Brandon and surrounding area)

Darren Nicklin – Senior Water Resource Officer at (204) 572-7265, email: darren.nicklin@gov.mb.ca

Mailing address is Box 4558, Stonewall, MB R0C 2Z0