

MUNICIPALITY OF BIFROST-RIVERTON

POLICY & PROCEDURES MANUAL

CULVERTS

Reference/Title:	Culverts
Policy Number:	2017-01
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PURPOSE

The Council of the Municipality of Bifrost-Riverton wishes to establish guidelines and conditions for the supply and installation of culverts within the Municipal Road Allowance. The culverts shall be of adequate size so as not to impede water flow. It is not the Municipality's mandate to provide access for vacant land where there is no taxable benefit to the Municipality.

POLICY

Property owners must apply to the Municipality for permission to:

- Install a new driveway to access property
- Widen an existing driveway
- Install a temporary driveway approach entrance to provide access to vehicles during construction projects, etc.
- Or the relocation of an existing approach

If an access driveway falls within the right of way of a Highway, application must be made to Manitoba Infrastructure and Transportation. If an access driveway falls within the right of way of a Provincial Waterway, application must be made to Manitoba Infrastructure.

No work shall begin until a permit has been issued and payment of the permit fee has been received, and any applicable Water Stewardship applications made, approvals received and fees paid.

Rural Residential / Field Properties

Policy:

1. Minimum culvert capacity is to be 450mm (18") (unless a block crossing is warranted and no culvert is necessary). In the case of a new residential development, minimum culvert capacity can be set at 300mm (12") if approved by the Public Works Manager.
2. Only new galvanized or HDPE culvert pipes are approved.

3. When drains are being constructed or reconstructed by the Municipality, existing culverts will be replaced by the Municipality if necessary.
4. The Municipality cost sharing on culverts over 900mm (36") will apply to only one (1) crossing per property. Second or any additional crossing to be the landowner's responsibility. The cost sharing will apply to a maximum crossing width of 12m (40'). Any cost above and beyond will be the landowners cost.
5. Residential access - Maximum top width is 9m (30') with a minimum side slope of 3:1.
Field access - Maximum top width is 12m (40') with a minimum side slope of 3:1. If a landowner would like to widen the approach greater than the above, it will be at the expense of the landowner. If the access was wider than the above, the Municipality will keep the current width for the new access.
6. When work is being conducted by the Municipality and a landowner would like an approach relocated within that work area, the Municipality can relocate it at no extra cost. When there is not any work being conducted by the Municipality and a landowner would like to relocate an approach, it will be at the expense of the landowner.
7. When an updated survey is available from the Municipality, the culvert is to be installed at the new proposed grade line.
8. The Municipality accepts no responsibility for any decorative additions, concreted ends or other materials on the access approach.
9. The landowner / contractor must apply for clearances from utilities (eg. MTS, Manitoba Hydro & Gas) prior to landowner / contractor work commencing.
10. Landowners to try and place crossings over the ditch requiring smallest diameter culvert possible.
11. New developments, the developer is responsible to provide culverts for new lots. All culverts must be installed to Municipal specifications.
12. Where a culvert has to be replaced because it has collapsed, become plugged or otherwise does not function properly, the landowner shall be responsible for the total cost of said replacement. If the above causes an upstream issue, the Municipality has the right to fix or replace the issue at the expense of the landowner.
13. When a culvert installed by the Municipality fails within a 12 month period of installation, the Municipality shall replace the culvert at no expense to the landowner. If a culvert that was installed by someone other than the Municipality fails, the Municipality bears no responsibility and expense.

14. All culverts shall not be tampered with. If landowner damages the culvert, they will be charged for the repairs / replacement of the culvert.
15. Failure to comply with the above conditions shall result in the removal of the culvert at the landowner's expense.
16. Any necessary licensing and associated cost through Manitoba Water Stewardship will be the responsibility of the landowner, and work must not proceed until licenses are approved.
Manitoba Water Stewardship requires that for installation of new approaches:
 - Not to alter water flow rates, volumes or directions of flow as compared to pre-construction conditions; and
 - Have culvert crossings sized equal to the culvert through the next immediate crossing downstream.

**Former Village of Riverton Properties
Policy:**

1. Minimum culvert capacity to be 300mm (12") (unless a block crossing is warranted and no culvert is necessary). 1 access per property.
2. Only new galvanized or HDPE culvert pipes are approved.
3. When drains are being constructed or reconstructed by the Municipality, existing culverts will be replaced by the Municipality if necessary.
4. Maximum top width is 6m (20') with a minimum side slope of 3:1. Any extension would have to be approved by the Public Works Manager. If approved, would be at the landowner's expense.
5. When an updated survey is available from the Municipality, the culvert is to be installed at the new proposed grade line.
6. The Municipality accepts no responsibility for any decorative additions, concreted ends or other materials on the access approach.
7. New developments, the developer is responsible to provide culverts for new lots. All culverts must be installed to municipal specifications.
8. Where a culvert has to be replaced because it has collapsed, become plugged or otherwise does not function properly, the landowner shall be responsible for the total cost of said replacement. If the above causes an upstream issue, the Municipality has the right to fix or replace the issue at the expense of the landowner.
9. All culverts shall not be tampered with. If landowner damages the culvert, they will be charged for the repairs / replacement of the culvert.

10. Failure to comply with the above conditions shall result in the removal of the culvert at the landowner's expense.

Culvert Installation Guidelines:

1. Unless otherwise stated, culverts are to be installed with inverts at elevations specified on profile. The landowner or contractor is responsible for ensuring these elevations using laser, GPS or other desired survey means.
2. Culverts of size 900mm (36") and greater are to have 2m (6.5') of ends wrapped in filter cloth before installation.
3. Culvert gravel will be ¾" limestone.
4. Culvert gravel for the base shall be spread uniformly along the full length of the culvert. For metal culverts, the base shall be constructed so that after compacting, a depth of at least 150mm (6") remains under the full length of the culvert. After the culvert has been installed and assembled on the base, the base on both sides of the culvert shall be compacted using a plate-type packer. Fill material under the haunches shall be placed alternately in 150mm (6") layers on both sides of the pipe to permit thorough compaction. The material under the haunches must be in firm contact with the entire bottom surface of the base. Culvert gravel shall fill adjacent to and over an assembled culvert.
5. Once the culvert is backfilled above the assembled culverts height with ¾" limestone, debris free clay backfill material may be used. The clay material is to be installed in 300mm (12") lifts and compacted.
6. Top material of the crossing will be constructed with ¾" limestone at a minimum of 200mm (8") throughout the entire crossing.
7. There is to be no standing water or excess moisture present during installation and backfilling.
8. Erosion control of clean rip-rap of size (6"-18") shall be placed at the inverts of culverts as well as on the side slopes of crossings surrounding culverts. Aprons shall be sub-cut 0.5m under each invert and extended for 2m (6.5') on the up and downstream sides.
9. When required, couplers are to be installed and tighten by electric impact gun or hand wrench to ensure a secure joint.
10. Culverts are to be moved by fabric sling whenever possible and the landowner / contractor will be held responsible for any damage caused during handling and installation, including but not limited to the replacement cost of the culvert and reinstallation.

**Culvert Policy
Schedule "A"**

Name: _____

Legal Description: _____ Roll No: _____

Phone: _____ Email: _____

Type of Installation:

- New
- Relocation
- Replacement / Upgrade

Culvert Type:

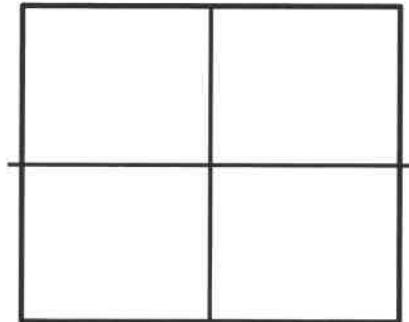
- Galvanized Steel
- HDPE (Plastic)

Size and length of Existing or Proposed Pipe Installation (if applicable):

Size: _____ x Length: _____

GPS Coordinates: _____

Include Diagram



Signature

Date

Public Works Manager:

Inspected on (date): _____

Approved

Denied

Reason for being denied: _____

Approved Culvert Size: _____ Length: _____

Galvanized Steel

HDPE Plastic

Signature

Date

