

# **VILLAGE OF BROWN DEER DRAINAGE DITCH REHABILITATION POLICY**

## **GENERAL:**

Drainage ditches within the Village of Brown Deer shall be constructed or rehabilitated in accordance with the standards set by the Department of Public Works and Community Development Department. These standards set the location and alignment of the drainage ditch to ensure proper conveyance and temporary storage of storm water runoff. The standards shall be in compliance with the Village's Storm Water Management Plan and applicable State and Federal guidelines, standards and regulations.

## **PUBLIC INFORMATIONAL MEETING:**

A public informational meeting for input from residents within a proposed project area and those immediately abutting shall be held for proposed projects effecting five (5) contiguous properties or more. The public informational meeting shall be conducted approximately four (4) months prior to the start of the proposed project. For projects effecting less than five (5) properties, the Department of Public Works shall conduct a joint or individual meeting with the effected residents for their input.

## **STORM SEWER WITH CURB AND GUTTERS:**

The Village's Storm Water Management Plan is based upon the existing development of the Village's storm water collection system. It is the policy of the Village not to extend storm sewers and curb and gutters as a replacement for drainage ditches. If residents request the installation of storm sewers and curb and gutters, the full cost thereof shall be assessed to the adjacent benefiting properties. The cost shall also include the cost of detention/retention facilities required due to the storm sewer and curb and gutter extension, engineering costs for all work, and costs to revise the Village's Stormwater Management Plan to reflect the extension.

## **DITCH DRAINAGE PIPE INSTALLATION:**

In connection with a Ditch Rehabilitation Project, a resident may request the installation of a drainage pipe within the drainage ditch. The full cost of a 12-inch diameter pipe shall be paid by the resident regardless of the actual size (12" minimum, Village may place larger pipe for proper drainage, ease of maintenance and/or installation) of the pipe installed. The installation of a drainage pipe within the drainage ditch shall only be approved if the following conditions exist:

- 1) The depth of the ditch is over 2.70 feet as measured from the street pavement edge for a distance of 25 feet from an existing culvert or 50 percent of the net frontage and/or
- 2) The side slope to the street is steeper than 2.5:1 for a distance of 25 feet from an existing culvert or 50 percent of the net frontage

For ditch depths over 3.0 feet and a side (fore) slope to the street steeper than or equal to 2.0:1 the Village shall install a drainage pipe at no cost to the resident.

In no case shall a drainage pipe be installed in a ditch with a depth less than 2.7 feet as measured from the street pavement edge.

The side (back) slope to the property shall not be used as criteria for determining the installation of a drainage pipe.

Sump pump and downspout pipes shall not be connected to the drainage pipe, but shall discharge to the ditch above the drainage pipe. It shall be the responsibility of the resident to adjust their sump pump and downspout pipes to the new ditch elevation above the drainage pipe. This will allow the water to dissipate in the upper ditch and not impact the downstream properties.

Prior to installation, the requesting resident shall be provided with an estimate of the pipe, fittings and inlets and shall sign an agreement to pay for same. In cases where the drainage pipe would front more than one property, both property owners must sign an agreement for the installation of the pipe along their respective frontages. All charges allocable to an owner of property pursuant to the provisions of this policy shall be invoiced to the owner of the property in accordance with Village policy and shall be subject to interest charges for any unpaid balance. Any balance and interest charges not paid on or before the first day of October following the mailing of the invoice shall be collected as a special tax which is hereby levied and which shall be placed upon the tax bill of the property. The obligation to pay the special tax shall run with the land and is not affected by transfer of title.

**REPLACEMENT OF EXISTING DRIVEWAY APPROACH AND CULVERT:**

If rehabilitation of the ditch requires the relocation or replacement of a culvert serving a property, the policy for replacement shall be as follows.

The Department shall determine the condition of the culvert and the driveway approach. The effected property shall be credited with the estimated remaining life of the existing culvert and driveway approach. The net cost of the new culvert and driveway approach shall be assessed against the effected property in accordance with Wisconsin State Law.

<u>Culvert Condition Rating:</u>	5 years or less in age	- 100 percent credit
(The Department shall	6-10 years	- 75 percent credit
use photographs of	11-15 years	- 50 percent credit
typical conditions	16-20 years	- 25 percent credit
for ranking)	20+ Rusting through	- 0 percent credit
	Age unknown,	- 25 percent credit
	condition questionable	

<u>Driveway approach Condition Rating:</u>	4 years or less in age	- 100 percent credit
(The Department shall use	(minor cracks)	
photographs of typical conditions	5-8 years	- 75 percent credit
as guide for rating)	(medium cracks and some alligating)	
	9-12 years	- 50 percent
	(medium + cracks and medium alligating)	
	13-16 years	- 25 percent
	(heavy cracks and alligating)	
	17+ or gravel	- 0 percent
	(totally broken)	

The driveway approach shall be replaced from the edge of the street pavement to the adjacent rights-of-way line in accordance with Village specifications and Code. The asphalt shall be wrapped down and around the culvert to seal and finish the driveway approach ends. The resident has the option of installing a headwall in accordance with Village Code Chapter 5, Article 10. Existing concrete driveway approaches shall be replaced with asphalt.

All permit fees required by Village Code for driveway approaches and culverts shall be waived for replacements conducted under a Ditch Rehabilitation project.

The Village shall warrant and seal any cracks or repair slippages for a one year period from date of driveway approach surface installation.

**PRIVATE IMPROVEMENTS LOCATED IN THE RIGHTS-OF-WAY:**

Any private property placed in the rights-of-way shall be removed by the owner prior to the start of the ditch rehabilitation project. Private property includes, but is not limited to: plantings and other landscape material, turf irrigation system and fencing. Any private property found by the Department in the rights-of-way shall be removed and disposed of by the Department. The adjacent property owner will not be compensated for any removed item unless prior Village approval was granted for the placement of the item.

The Department will strive to protect and maintain mature trees that are found to be in the rights-of-way and may or may not have been planted by the adjacent property owner. Trees located within the lower one-third of the rehabilitated ditch shall be removed with no replacement. If the ditch rehabilitation requires excessive removal of the root system and the tree has been determined to be a hazardous tree by the Department, the Department shall remove the tree and at the option of the resident plant a new tree on the resident's property from two (2) feet to three (3) feet behind the rights-of-way line.

**LANDSCAPING OF THE DRAINAGE DITCH:**

The Department will restore the ditch with a hydroseed application consisting of a blue grass mix. Residents have the option of restoring the ditch with other non-woody natural plantings. Other landscaping may be done by the resident on the property side of the ditch at the rights-of-way line; such as step down retaining walls and groundcover, natural plantings and/or dwarf woody plantings (dwarf woody plantings shall be allowed in the top half of the side slope to the property). The Department may need to install rip-rap and/or natural plantings at major inlets or other locations for water quality control to comply with NR216 and NR151. Adjacent property owners will be informed if the Department will need to finish the fronting ditch in a non-turf form.

The adjacent property owner shall maintain the drainage ditch area, except for areas naturalized by the Department to comply with NR216 and NR151 regulations.

No plantings shall be placed so as to block the flow of storm water through the culverts.

The top one (1) foot of the ditch at the road shall remain as a gravel/stone shoulder. Placing clay soils along the shoulder area traps water along the pavement edge and will accelerate deterioration of the pavement. This shall apply to those roads that are found to have a full gravel base. On roads without gravel bases, soil and turf shall be allowed to a point 4 inches below the edge of the road.