# **NORTHFIELD TOWNSHIP**

**COOK COUNTY, ILLINOIS** 





# **STORM WATER MANAGEMENT PROGRAM PLAN**

**NPDES PERMIT ILR400098** 

NORTHFIELD TOWNSHIP ROAD DISTRICT 237 MELVIN DRIVE NORTHBROOK, ILLINOIS 60062

847-724-7055

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#### 0.0 Overview

Northfield Township has a General Permit from the Illinois Environmental Protection Agency (IEPA) for its Municipal Separate Storm Sewer System (MS4) and as such the Township has developed this stormwater management program to prevent and reduce pollution to its storm sewer system to the maximum extent practicable. This document describes the pollution prevention practices that comprise the Township's stormwater management program.

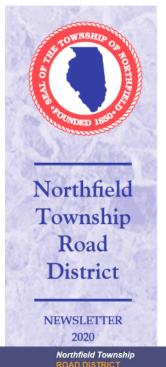
Northfield Township has a population of 14,900 residents in unincorporated areas. Northfield Township Road District maintains only those areas in Northfield Township that are unincorporated areas of the Village of Glenview, the Village of Northbrook and the Village Northfield, not the entire Township. The Township Road District only maintains approximately (21) twenty-one center miles of roadway. The remainder of the Northfield Township roadway, storm ditches, and storm sewer are maintained by the Illinois Department of Transportation, Cook County, Village of Glenview, Village of Northbrook, Village of Northfield, and private homeowner maintained roadways. Northfield Township follows the Cook County Watershed Ordinance and Practices; and the Metropolitan Water Reclamation District requirements.

The Township also belongs to the Lower Des Plains watershed and the Northbrook Chicago Watershed. All building and grading projects must be reviewed and approved by the Cook County Building and Zoning Department and Metropolitan Water Reclamation District for projects requiring their permit.

#### 1.0 Public Education and Outreach

#### BMP No. A1 Resident Newsletter – Stormwater Articles

Stormwater articles are included in the Northfield Township Road District website and newsletter sent to residents every spring. Northfield Township provides flyers on stormwater issues available at the Township Building.



# From the Highway Commissioner

Dear Residents,

It has been a little over a year since Northbrook, IL 60062. The Melvi the building storage as the old proj better maintain its equipment, sav Northfield Township residents.

I would like to invite you our town officially open our recycling center township is the second oldest form

Last September we resurfaced 8 ros Applegate Lane, Knollwood Lane, approximately 900 linear feet of ex we have constant freeze and thaw determine which need to be resurf

Last year we also replaced 1000 fee in unincorporated Northbrook wit

As always, we will be providing the

- an aggressive program to repla persistent maintenance of sto
- resurfacing our roads
- emergency storm services
   maintenance of public streets

- brush pick-up
   parkway care including mowi
   fleet maintenance and manage
- a reforestation program that s
- trimming trees on the right-o tenance of Tow

Tim Rueckert



Annual Parkway Tree Program

Brush Pickup

Emergency Management

Freedom of

Overhead Sewer

# Flood Control Response Pol.

The Township Road District is assigned the care, maintenance and repa Township Road District storm sewer, or access thereto, is found to be Road District to correct the problem and return the normal flow or syste



PURPOSE It is the purpose of this policy to

to unusually heavy or sustained indirectly cause localized flooding

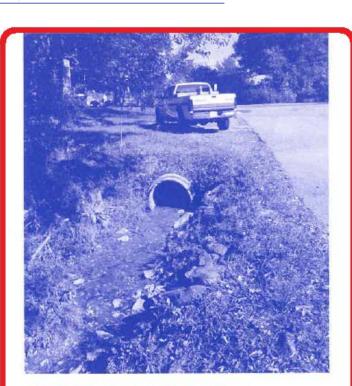
Download the Resident Flood

PROCEDURE

General Guidelines:

Township Road District personnel are assigned as needed to monitor, correct, and where possible, to mitigate the effect of heavy rainfall conditions. This is done by inspecting locations which may be prone to blockages of storm inlets and culvert pipes by debris and by responding promptly to resident's complaints of storm and sanitary sewer backup, including street flooding/buildup.

Heavy Rainfall/Flooding Response



# STORM DRAINAGE DITCHES & SEWERS

If you have a storm drainage ditch, culvert or a storm sewer manhole on or near your property, please keep it clear of grass, branches, vegetation and debris (e.g.: plastic bags, balls, bottles, toys, etc.). This will help keep water flowing, as it should during wet weather. If a key ditch, culvert or storm sewer manhole becomes blocked during a rain storm or due to melting snow and ice and begins to overflow onto your property or roadway, please call the Township Road District at 724-7055. During the summer please be sure to regularly mow the vegetation in the drainage ditch. This will help keep the vegetation levels manageable and water flowing freely.

## How You Can Help

Stormwater management does not merely apply to flood control. It can also be used to improve water quality and conserve potable water. You can help out by implementing Best Management Practices at your residence. Example BMPs include rain barrels, cisterns, green roofs, rain gardens, permeable paving and natural landscaping. One simple measure would be to disconnect your downspouts from the public storm sewer system. The stormwater could be stored in rain barrels to be used to water gardens or directly discharged to rain gardens instead of flowing into our sewers. Reduction of

stormwater flow into our sewers reduces the amount of flow discharged into our waterways and can help to alleviate flood damages from occurring due to overbank flooding.

It is illegal to dump paint, oil, or any hazardous material into a street inlet as these materials will also pollute the waterway to which the storm sewer eventually discharges. Residents living near waterways should take extra care to remove debris on their property which could wind up in the waterway. Yard waste should be properly disposed of and not dumped into or along the banks

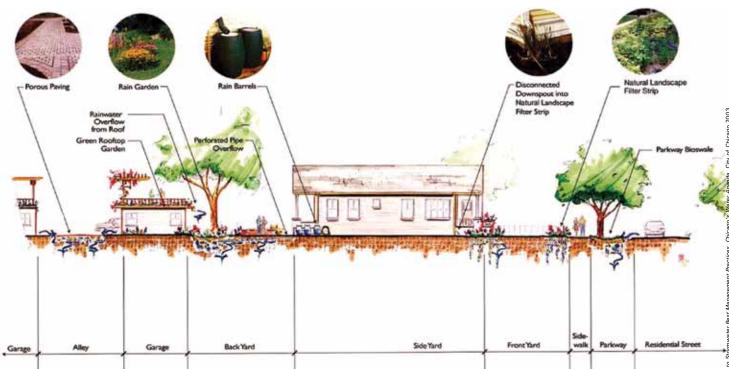
of creeks or streams. Branches, bushes and other debris cause blockages at culverts and bridges which can cause flood damages for you and your neighbors. If you see anyone dumping garbage or any debris into a waterway, please call 1-800-332-DUMP.

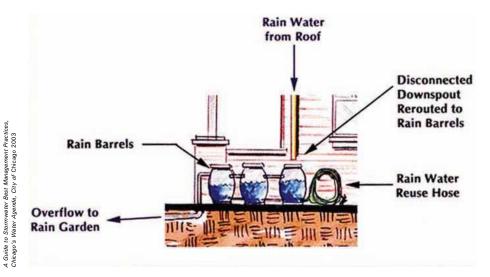




Debris piled along waterways (left) by residents or business owners can be swept away during high flow events possibly resulting in blockages (right), which can result in flooding.

Examples of best management practices residents can implement in their own backyards.





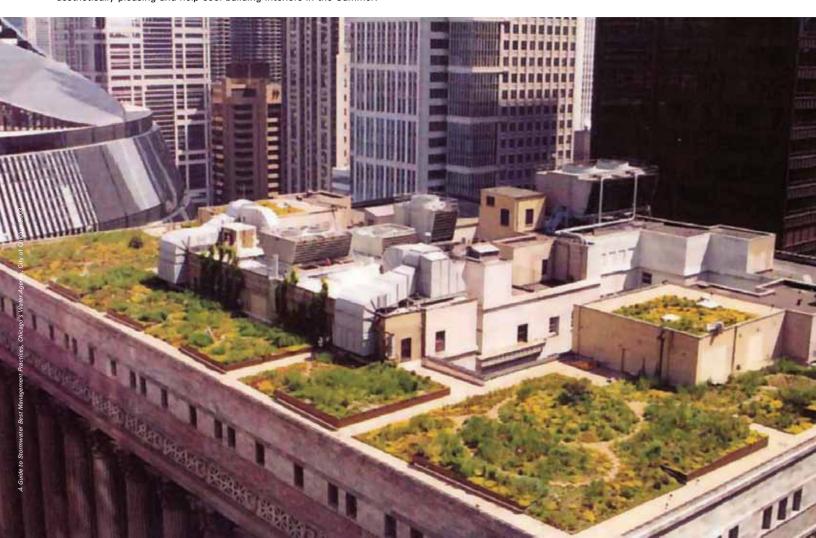
Rain barrels, another Best Management Practice, can be used to temporarily store stormwater, which can later be used as an efficient way to water lawns, landscaping and gardens.

#### For Further Information

Please visit the District's website at www.mwrd.org and click on "Stormwater Management" or write to Stormwater@mwrd.org if you are interested in obtaining more information on the following:

- Cook County Stormwater Management Plan
- 2. Detailed Watershed Plans
- Absolute minimum requirements for projects to be funded under the District's program
- 4. Best Management Practices

Green roofs, like this one shown atop Chicago's City Hall, capture stormwater that would otherwise drain to sewers and rivers. Green roofs are also aesthetically pleasing and help cool building interiors in the Summer.



#### 2.0 Public Participation/Involvement

#### BMP No. B4 Public Meeting

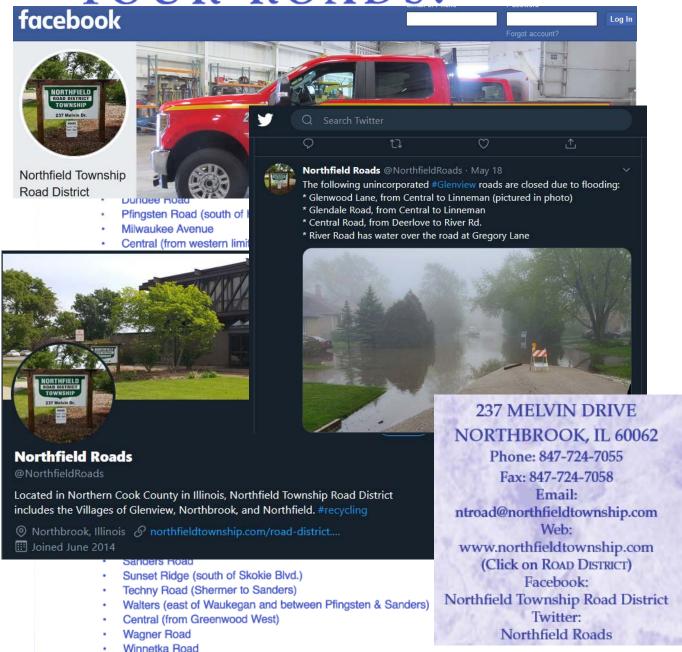
Northfield Township Road District holds a recycling program for the public six times a year. At the recycling program, staff is present to discuss stormwater issues and answer questions. The Highway Commissioner attends stormwater meetings with the public four times a year and attends Homeowner Association meetings to discuss stormwater.



#### **BMP No. B7 Public Reporting**

The Township Road District annual newsletter contains a contact number for reporting stormwater related issues. The Township has a Flood Reporting form on the Township website. Additionally, the Road District is present on social media.





To report emergency conditions on County roads call 847-827-1164.

The **Northfield Township Road District** maintains the right-of-way on all dedicated streets within the unincorporated area. To report emergency conditions on Township Road District roads call 847-724-7055 or 847-471-7055.

# Northfield Township Road District

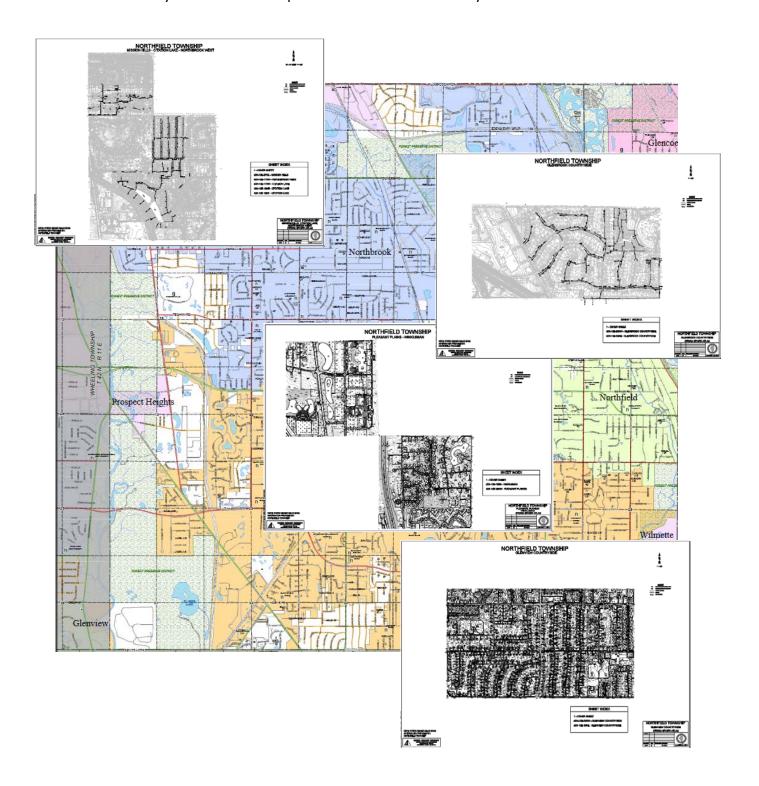
# **Flood Control Report Form**

Name of Resident:	Date:	
Address of Resident:		
Phone Number:		
Location of Problem:		
Type of Problem:		
Time Problem Discovered/Reported:		
Description of Resolution:		

# 3.0 Illicit Discharge Detection and Elimination

#### BMP No. C1 Stormwater Atlas

Township storm sewer atlases have been developed. The Township has categorized four stormwater areas Glenbrook Countryside, Mission Hills/Citation Lake, Apple Valley, and Glenview Countryside. The Township reviews the atlases annually.



#### BMP No. C7 Visual Dry Weather Screening Program

Township road crews visually inspect all ditches, detention basins and outfalls on an ongoing basis, specifically prior to, during, and following every rainfall. All ditches are cleared of debris and mowed by the Township road crew on 4-5 week schedule. All storm sewer is inspected by the Township Road crew on a 4-year cycle. Any storm sewer found to be blocked will be televised and cleaned.

#### BMP No. F2 Inspection and Maintenance

The Township conducts a regular inspection and maintenance program designed to reduce pollutant runoff. In addition to the dry weather screening program, the Township provides street cleaning as necessary. This program is reviewed annually.

# Northfield Township Road District Annual Storm Sewer Cleaning and Repair Report

				1		1		
Date	Address/area v	1 0	Linear footage	Manhole	Notes			
	was performe		of pipe install	Repair/replaced				
4-09-19	1040 Prairiela	wn	New frame &	Manhole	Curd/street			
	Glv		lid	replacement	restoration	]		
4-11-19	1041 Prairiela	wn	New frame &	Manhole	Curb/street			
	Glv		lid	replacement	restoration			
4-12-19	1119 Prairiela	wn	New frame &	Manhole	Curb/street			
	Glv		lid	replacement	restoration			
4-22-19	1116 Prairiela	wn	Now frama &	Manhola	Curh/stroot	1		
	Glv	Monthfield	Toumahir	Dood Die	twist Annual C	town	0040	
4-22-19	2949 Apples	Northileid	Township	Road Dis	trict Annual S	torm	2019	
	Glv	Sev	ver Cleani	ng and Rei	pair Report			
4-24-19	2929 Apples		ver dieum	ing and rec	pan report			
	Glv							
4-25-19	3003 Apples	Northfield Township Road District has issued (9) construction permits in accordance with our drainage						
	Glv	policy of detention and the latest MWRD requirements for storm water run-off. This practice includes						
4-26-19	1139 Huber	the installation of water gardens, underground detention system with water filtration.						
	Glv							
4-30-19	1709 Cent							
	Nbk	Monthly mowing and ditch cleaning with-in the township boundaries. Monthly cleaning and inspection						
5-2-19	Meadow storr	of curb drains before and after a rain storm.						
	Nbk							
5-3-19	Meadow storr	Marked (46) storm dra	ain locations in Ci	itation Lake Subdi	vision "Drains to Lake,	with fish syn	nbol, No	
	Nbk	Dumping"						
5-8-19	1120 Huber							
	Glv	We have replaced 18	manholes, renair	ed 11 manholes r	replaced 24 manhole fr	ames and lid	s. cleaned	
5-10-19	Glv We have replaced 18 manholes, repaired 11 manholes, replaced 24 manhole frames and lids, cleaned 3,700 feet of storm-lines, replaced 1,615 feet of defective storm—line, regraded 250 feet ditch line.							
	Glv	3,700 feet of storm-lin	ies, repiaced 1,6.	12 teet of detectiv	e storm –iine, regrade	a 250 feet al	itch line.	

The Township plans the following maintenance projects in the March 2020-March 2021 reporting period:

member of the Des Plains and North Branch of the

- Storm sewer slipline.
- 2. Joint repairs in the parkway.
- 3. Manhole/catchbasin repairs
- 4. Point repairs to the storm sewer
- 5. Driveway culvert replacement Manhole lid/frame replacement 6.
- 7. Monthly ditchline/parkway cleaning and mowing.
- 8.

looding projects. Central road project in Glenview,

Curb/street

Storn	air	restoration			
Storm sewer cleaning, root cutting, and water jetting.					Yard restoration
	Glv	Holly storm line		installed	
		system begins			
5-29-19	1127 Holly Crt	Replacement of	42 feet	Removed	Street restoration
	2943 Knollwood	10" storm under	10 inch SDR 26	existing broken	
	Glv	Holly Court	pipe	pipe	
	•				•

#### 4.0 Construction Site Runoff Control

#### BMP No. D2 Sediment and Erosion Control BMPs

The Township requires erosion and sediment control BMPs for projects within the Township ROW as required by Cook County.

#### BMP No. E3 Long Term O&M Procedures

The Township requires Long Term O&M procedures for stormwater facilities as required by Cook County.

NORTHFIELD TOWNSHIP RELIES ON COOK COUNTY REQUIREMENTS FOR CONSTRUCTION SITE RUNOFF CONTROL. THE TOWNSHIP COORDINATES WITH THE COOK COUNTY HIGHWAY DEPARTMENT.

DEPARTMENT OF BUILDING AND ZONING OF COOK COUNTY, ILLINOIS

DONALD H, WLODARSKI
COMMISSIONER OF BUILDING AND ZONING
OF COOK COUNTY



County Administration Building 69 W. Washington, Suite 2830 Chicago, IL 60602-3169 TEL (312) 603-0500 FAX (312) 603-9940 TDD (800) 526-0857

# Site Engineering Review Requirements for Single Family Residential Construction

You must submit in quadruplicate the following documents to the Department of Building & Zoning as a part of your building permit application. Please note that all drawings must be signed by a registered professional engineer, and/or a registered land surveyor, whichever apply.

- 1. Current, one year old or less, signed and sealed Plat of Survey of property to be developed.
- Fully engineered site drawings that include all of the following:
  - · Existing site elevation
  - Existing elevation of all contiguous properties
  - Proposed foundation elevations
  - · Direction of surface and downspout runoff
  - Final elevation for grading
  - Culvert location and elevation
  - · Bench mark to be placed on the nearest available permanent structure
  - Any landscape structures and/or piping
- 3. Complete erosion control plans (including plan detail).
- 4. Driveway/Road-cut Permit.
- If septic, copy of approved septic drawing.

#### DEPARTMENT OF BUILDING AND ZONING OF COOK COUNTY, ILLINOIS

DONALD H. WLODARSKI COMMISSIONER OF BUILDING AND ZONING OF COOK COUNTY



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# MEMORANDUM

TO:

Unincorporated Northfield Township Residents

FROM:

Cook County Building & Zoning Department

RE:

New Single Family Construction, substantial addition construction and all other construction projects in Unincorporated **Northfield Township** 

Please be advised that effective November 1, 2001, we will not accept any permit applications for new construction or substantial room addition construction in unincorporated Northfield Township until the following documents are submitted with the permit application:

1. Approved (signed, sealed and dated) site engineering/grading drawings (3 sets) from the Daniel Creaney Company. Approval from the Daniel Creaney Company will constitute to us both Glenview and Northfield Township's approval.

NOTE: If the scope of work does not constitute an engineering review, we will need a waiver from the engineering company attesting to the fact.

2. Approval (signed and dated) permit or letter for water and/or sanitary sewer service.

NOTE: If the work does not constitute or require a water or sanitary service permit, we will need a waiver from the service provider.

3. Driveway Permit (if applicable) from the Northfield Township Highway Commissioner (847-724-7055).

Please Note: You must first secure site engineering approval from the Northfield Township Road District Office at 1928 Lehigh Avenue, Glenview.

> You can apply for any other permits except the aforementioned and submit the Northfield Township permit or waiver while permit is being processed

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COMMISSIONER OF BUILDING AND ZONING
OF COOK COUNTY



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# **ENGINEERING REVIEW**

For all new commercial or industrial construction improvements and/or grading and fill, you must submit in quadruplicate a permit application along with the following documents to the Department of Building & Zoning. Please note that all drawings must be signed by a registered professional engineer, and/or a registered land surveyor, whichever apply.

- 1. Current, one year old or less, signed and sealed Plat of Survey of property to be developed.
- 2. Current, one year old or less, **signed and sealed topographical survey** showing elevations before and after grading.
- 3. Grading plan showing existing and proposed elevations signed by a professional engineer.
- 4. \* Storm drainage plan showing sewers, swales and detention systems, following NIPC's Best Management practices.
- 5. \* A professional engineer's report covering drainage calculations and opinions regarding adequacy of existing structures.
- 8. \*A professional engineer's estimate of quantities IDOT nomenclature) and cost of the work to be done on the public roadways including excavation, grading, drainage and all related appurtenances.
- 7. \* Copies of issued permits from all regulatory agencies, such as the IDNR, IEPA, Army Corp of Engineers, USDA-NRCS, soil and water conservation district, etc. and the Metropolitan Water Reclamation District of Greater Chicago covering all sanitary storm sewers and detention systems.
- 8. \* Bonds to cover the entire cost of work for the construction of the roadways as estimated in item number six, which applies <u>only</u> to Planned Unit Developments (P.U.D.)
- 9. As built drawings and/or final grading survey for subdivisions and/or individual lots upon project completion.
- 10. Complete erosion control plans and details signed by a professional engineer.
- 11. \* Driveway/Road Cut Permit.
- 12. A minimum non-refundable deposit of 1/10 of 1% of the estimated cost of construction or \$25. (whichever is greater) is required for plan review prior to full permit issuance if permit is engineering review only.

#### \* If applicable.

Cook County Department of Building & Zoning, upon examination of your documentation, may request additional information, but the submittal of the aforementioned will help to initiate the processing of your permit application.

### 5.0 Pollution Prevention / Good Housekeeping

#### BMP No. F3 Municipal Pollution Prevention Plan

The Township Road District has a storm sewer/culvert/ditch policy. In addition to the policy the Township practices proper disposal of hazardous material, judicious use of roadway salt, and appropriate use and storage of construction and landscape materials. The Township operational policies are designed to reduce pollutant runoff from Township operations. This program is reviewed annually.



# Storm Sewer/Culvert/Ditch Policy

# **POLICY**

The Northfield Township Road District is assigned the care, maintenance and repair of the storm sewer system (includes ditches, culverts and sewer lines in the public right-of-way). The proper operation, maintenance, repair and replacement of individual storm sewer service lines shall be the financial responsibility of the property owner. Under no circumstances shall the Township Road District be responsible for proper operation, repair or replacement of any portion of an individual line due to settlement, collapse, root impaction or any other cause of failure between the main line and the private structure.

Township Road District responsibility for the proper operation, maintenance, repair and replacement of storm sewers shall be limited to main lines (also known as trunks or collectors), culverts and ditches. Such definition shall be construed to include the sewer tap (also known as the service connection wye or tee). Property owners are expected to keep storm sewer grates, storm drainage ditches and culverts, clear of long grass, branches, other vegetation and debris.

Under no circumstances will the Township Road District accept liability for property damage caused by any storm sewer system or service line failure, blockage, surcharging or flooding condition. Such conditions and occurrences are beyond all reasonable ability of the Township Road District to predict or control.

It is in the public interest to regulate the location, design, construction, maintenance and drainage of driveways, through the issuance of permits, for the purpose of economy of maintenance, preservation of proper drainage, and safe and reasonable access.

# **PURPOSE**

To define and ensure consistent administration of practices, policies and procedures which address responsibilities for the proper operation, maintenance, repair and replacement of storm sewer system lines.

Drainage cannot be overemphasized. Water affects the entire serviceability of a road. Water allowed to remain on top of a black-topped road weakens the surface and, combined with traffic, causes potholes and cracking. If improperly channeled, water causes soil erosion and a breakdown of pavement edges.

A good storm sewer drainage system is the best way to lessen water damage on a road. Proper surface drainage prevents water from infiltrating the pavement surface and removes water from the driving lanes in a constant thin sheet to the side ditches, main lines and culverts, which carry the water away from the roadway.

Except for some water needed for soil compaction, dust control, and vegetation, water is the roads worst enemy.

# **PROCEDURE**

#### General Guideline:

Full maintenance of all storm sewer collection facilities (main trunk lines including the wye and tee, culverts and ditches in the public right-of-way) shall be, at all times and in all circumstances, the specific responsibility of the Township Road District. Property owners are expected to keep storm sewer grates, storm drainage ditches and culverts clear of long grass, branches, other vegetation and debris.

#### Main (Trunk Line) Blockages

- 1. Property owners should always promptly notify the Township Road District of any storm sewer flow difficulties in order for the Township Road District to verify actual field conditions and to determine responsibility.
- 2. Upon notification of sewer flow difficulties, regardless of the time of day, or day of the week, the Highway Commissioner shall, without delay, cause the current flow status of the Township Road District storm sewer serving the property involved to be investigated. If such investigation reveals a blockage and/or a restriction to flow in the Township Road District storm sewer, such blockage will be immediately cleared by the Township Road District. If the status of the Township Road District storm sewer is verified as functioning and satisfactory, the property owner shall be informed as soon as possible. Corrective action by the homeowner can then begin without delay.

#### Individual Storm Sewer Service Line

- 1. Under no circumstances will the Township Road district be responsible for expenses incurred in the rodding, flushing or cutting of an individual storm sewer service line for the purpose of locating or removing an obstruction.
- 2. Individual storm sewer line deficiencies such as settlement or breakage which occur at the tap (wye or tee connection) to the main trunk line within the public right-of-way or utility easement will be corrected by the Township Road District. In certain instances, the Township Road District may authorize the property owner's contractor to make such repairs, subject to Township Road District inspection.

#### Sewer Inspections

1. All new individual commercial, industrial and institutional storm sewer service lines from 5-feet outside of the building to the public storm sewers, including the tap, will be inspected by the Foreman or Highway Commissioner. That part of the sewer

- inside the building to 5-feet outside of the foundation is inspected by the Cook County Building and Zoning Inspector.
- 2. All new residential storm sewer service lines from the building to existing or new sewer stubs will be inspected by the Foreman or Highway Commissioner.
- 3. All private repair work on existing individual storm sewer service lines within the public right-of-way or utility easement will be inspected by the Foreman or Highway Commissioner. In no way shall inspection services be construed to represent any type of express or implied warranty on workmanship or material.

#### **Damage Claims**

1. Claims for compensation for damage sustained as a result of sewer flooding shall be denied in writing using the basic form letter attached hereto (Exhibit "A").

#### **Driveway Construction**

- 1. Any property owner constructing a new driveway access shall obtained from the Township Road District a permit.
- 2. Proper drainage is one of the major concerns in driveway construction. When it comes to road deterioration, water is your number one enemy. Unless properly constructed, driveways can block roadside drainage and hasten roadway deterioration, icy conditions in the winter and create unsafe hydroplaning conditions. Ponding water will seep into the road base, keeping the area soft and saturated and allowing traffic loads to cause pavement breakdown. Culverts or inlets to storm sewer systems may be required at driveways to allow continuous water flow within the roadside ditch to the ditch outlet or into a main trunk line. All new construction on storm sewer lines, whether individual or main trunk lines in the right-of-way or utility easement will be at the cost of the property owner.