



Report to: General Committee

Report Date: June 15, 2009

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**SUBJECT:** Sewer Blockage and Back-up Policies  
**PREPARED BY:** Robert Flindall, Ext. 2445  
Waterworks Manager of Operations & Maintenance

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**RECOMMENDATION:**

- 1) That Council receive the report titled "Sewer Blockage and Back-up Policies" dated June 15, 2009;
- 2) And that Council approve and endorse the "Mainline Sewer Blockage and Back-up Policy" attached as Attachment "A" to this report;
- 3) And that Council approve and endorse the updated "Municipal Sewer Service Connection Maintenance Policy" attached as Attachment "B" to this report;
- 4) And that Council approve and endorse the "Cost Sharing Undertaking for the Clearing of Blockages in the Municipal Sewer Service Connection" attached as Attachment "C" to this report;
- 5) And that the Town's Policy on Clearing Drain Blockages (2.1 & 5.5) adopted by Resolution of Council at Meeting No.8 on April 16, 2002, be rescinded and replaced by the "Mainline Sewer Blockage and Back-up Policy" and the "Municipal Sewer Service Connection Maintenance Policy";
- 6) And that Staff be directed that all communication with property owners with respect to property damage and liability for damages arising from sewer blockages and back-ups must be conducted through the Clerk's Department;
- 7) And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

**EXECUTIVE SUMMARY:**

The Town of Markham has adopted policies and operational practices to be followed when a blockage or back-up from the municipal sewer system causes basement flooding and damage on private property. These policies and practices are clarified and updated in this report.

The Town of Markham owns and operates two municipal sewer systems. One is the sanitary sewer collection system that collects residential and industrial wastewater (sanitary sewage) and delivers it to the centralized transmission piping and on to treatment facilities. The second is the storm sewer system that collects surface water drainage and delivers it to the stormwater management ponds, watercourses, and rivers. Both systems provide service connection pipes, or service laterals, from the mainline sewer up to the property line or the municipal right-of-way. At this point, property owners connect private plumbing systems to the appropriate municipal sewer system.

The policies outlined in this report apply to both the sanitary sewer system and the storm sewer system.

### **1. General Policy Provisions**

#### **Communication Regarding Insurance Claims**

All communication with property owners with respect to property damage and insurance claims associated with sewer blockages and back-up is to be made through the Clerk's Department. This is necessary to ensure that insurance claims are processed consistently and in a timely manner.

#### **Claims for Damages to be Submitted to Insurance Companies**

Town staff will inform the property owner that any claims for damages on private property resulting from a sewer back-up are to be submitted by the owner to their own insurance company. If the owner intends to claim against the Town, they will be advised to submit copies of such claims to the Clerk's Department. The Town's insurance company will be informed by the Clerk's Department when the notice of claim is submitted to the Town.

#### **Claims for Damages Investigated**

Notwithstanding that the Town may undertake repairs to remove blockages in the mainline sewer or the sewer service connection, the Town in no way assumes any liability or responsibility for any damages to private property. Responsibility for damages to private property will be determined by the Town's insurance adjuster after the adjuster's investigation is completed.

### **2. Mainline Sewer Blockage and Back-up Policy**

The proposed policy and procedures related to mainline sewer blockages and back-ups is set out in Attachment "A" to this report. The key aspects of the policy are as follows:

#### **Responsibility to Respond and Restore Service**

When blockages occur for any reason within the mainline sewer, the Town's responsibility is to remove the blockage and to ensure that the mainline sewer is flowing freely. Reports of sewer backups and sewer blockages will be investigated by the Town of Markham staff as an immediate priority within 24 hours. Service will be restored within a reasonable period of time. The Town does not guarantee uninterrupted provision of service for removal of waste water.

#### **Responsibility to Inform the Private Owner**

When a mainline sewer back-up occurs, and sewage discharges into the environment or enters private property through a service connection, Town Staff will inform the property owner that any water, sewage or material that has originated from or been in contact with the municipal sewer system may pose a health risk.

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### **3. Municipal Sewer Service Connection Maintenance Policy**

The proposed policy and procedures related to the maintenance of the municipal sewer service connection are set out in Attachment "B" to this report. The key aspects of the policy are as follows:

#### **Municipal Sewer Service Connection Limits**

The municipal sewer service connection is defined as the sewer pipe lateral from the mainline sewer up to the property line of the abutting property. The municipal sewer service connection ends at the property line. Sewage discharging from private property enters the municipal sewer system at this point. The sewer pipes from the property line into the buildings or structures on the abutting property are part of the private plumbing system.

#### **Costs for Inspection, Clearing Blockages, and Repairing Damages to Private Plumbing Systems**

The costs of inspection, clearing or removing blockages, and repairing damages that occur for any reason within the private plumbing system are the property owner or occupant's responsibility.

#### **Blockages Caused by Grease, Food Waste, Solids**

Blockages caused by the accumulation of grease, food waste, or other solid substances or materials at any location in the private plumbing system or in the municipal sewer service connection pipe are deemed to be caused by the activities of the building occupants, and the costs of clearing the blockage, all inspections and repairs are the property owner or occupant's responsibility.

#### **Blockages Caused by Structural Defects or Damages**

The costs of clearing or removing blockages in the municipal sewer service connection pipe are assumed to be the property owner or occupant's responsibility, unless video inspection of the pipes indicates the blockage resulted from structural defect or damage to the municipal sewer service connection. The costs of clearing or removing blockages caused by structural defects or damages within the private plumbing system are property owner or occupant's responsibility.

#### **Blockages Caused by Tree Roots**

Responsibility for clearing blockages caused by intrusion of tree roots into sewer pipes is divided by the ownership of the sewer system and the private plumbing system regardless of the location of the tree. The Town is responsible for clearing roots that infiltrate the municipal service connection pipe and for any structural repairs to the municipal service connection. The property owner is responsible for clearing tree roots that infiltrate the private plumbing system and for repairs to the private plumbing system and all costs associated with same.

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**Application of the Town Tree By-law #68-92**

The Town's Tree By-law #68-92 prohibits the removal of trees located on the municipal right-of-way. Infiltration of roots into the municipal sewer service connection pipe or into the pipes within the private plumbing system results from a defect in the pipe or the pipe joints. The Town will not remove or permit the removal a tree in order to prevent further root infiltration. The "Municipal Sewer Service Connection Maintenance Policy" requires the pipes to be repaired or maintained to prevent such root infiltration.

**PURPOSE:**

The purpose of this report is to recommend updated policies for staff to follow when responding to blocked mainline sewers and blocked sewer service connections. The proposed "Mainline Sewer Blockage and Back-up Policy" and "Municipal Sewer Service Connection Maintenance Policy" clarify the responsibilities of both the Town and the private property owner for sewer maintenance and private plumbing maintenance, and the actions to be taken when a sewer blockage or back-up occurs.

**BACKGROUND:**

When sewer blockages and back-ups occur private property can be damaged and the property owner often requests that the Town provide compensation for his/her/its costs. It is important for the Town to maintain a clear policy related to sewer maintenance; responsibility for damages resulting from sewer blockages and back-ups; and the communication protocol with affected property owners, internal staff, and members of Council.

Back-ups in the mainline sewer can be caused by blockage of the pipe, inadequate slope, pumping station failures, or sewer inflows and infiltration that exceed the design capacity of the sewer. When back-ups occur, sewage can be forced through the service connection into private property, causing property damage and health hazards. Many properties can be affected simultaneously when this occurs, and the cost and inconvenience to property owners can be significant.

Over the past three years, the Town of Markham has experienced an average of 21 sewer back-ups per year in the mainline sanitary sewers. The most common causes of back-ups are blockages in the mainline sewer that are due to build-up of grease and debris on the pipe walls caused by discharges from private property. Other causes of blockages include accidental blockage by construction materials during road repair and asphalt resurfacing, illegal dumping, root infiltration, and human errors.

During severe rainstorm events, the storm sewers and sanitary sewers can become overwhelmed resulting in back-ups and potentially causing damage to private property. These back-ups are not the result of a blockage in the sewer, but rather the design capacity of sewer has been exceeded.

Blockages and back-ups in the sanitary sewer service connection pipe and private plumbing systems are more common. The average number of reported blockages of sanitary service connection laterals is 230 per year. Approximately 80% of the blockages reported are located within the private plumbing system or are otherwise determined to be the owner's responsibility to correct. Only 40-50 blockages per year result from defects in the Town's portion of the sewer service connection. Additional blockages in service connection pipes or private plumbing systems may occur, but they are not reported to the Town.

The primary causes of blockages in the sanitary sewer service connections are: build-up of grease, intrusion of tree roots, and broken or collapsed pipes. When a blockage occurs in a service connection, only the connected property will be affected. Normally, the homeowner is aware that the blockage has occurred and minimal damages result.

Blockages in the storm sewer service connection are more rarely reported to the Town. In most cases, the property owner will not be aware that there is any problem in the storm sewer service connection or the building's foundation drains unless they have persistent basement flooding.

## **OPTIONS/ DISCUSSION:**

### **1. Mainline Sewer Blockage and Back-up Policy**

To minimize risk and costs to the Town associated with back-ups from blockages in the mainline sewer, it is advisable for the Town to have a clear policy and procedures for staff to follow and communicate to the public. A policy has been prepared which clarifies the responsibilities of the Town and the private property owner, and the procedures to be followed when a mainline sewer back-up or blockage occurs resulting in sewage discharge onto private property. The proposed policy is included in Attachment 'A' to this report.

The key aspect of the policy is that when a sewer back-up occurs and private property is damaged, the private property owner must submit any claims for damages to their own insurance company. The owner will be requested to provide a copy of any claim to the Clerk's Department of the Town. The Town's insurance company will be informed by the Clerk's Department when notice of a claim is submitted to the Town. The Town's insurance company will investigate any claim, if warranted. Actions on, or settlement of any claims, will be coordinated by the respective insurance adjusters of the property owner and the Town.

All communication with property owners with respect to property damage and insurance claims associated with sewer blockages and back-up is to be made through the Clerk's Department. This is necessary to ensure that insurance claims are processed consistently and in a timely manner.

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## **2. Municipal Sewer Service Connection Maintenance Policy**

Although the Town has adopted a policy on the maintenance of municipal sewer service connections and clearing of blockages in the sewer connection (Clearing Drain Blockages Policy No. 2.1 & 5.5, adopted by Resolution of Council at Meeting No.8 April 16, 2002), this policy requires updating and clarification. The updated and expanded policies proposed in this report will apply to both the Town's sanitary sewer system and the storm sewer system.

On April 16, 2002, the Town of Markham Council adopted a policy dealing with the financial responsibilities for clearing blocked service connection laterals and for any necessary repairs to the service connection pipes. The existing policy is as follows:

*Town's Policy on Clearing Drain Blockages (2.1 & 5.5)*

*"If the blockage occurs between the house and the property line, then it is determined to be a private matter and it is the homeowner's responsibility for all repairs and damages. If the blockage occurs on the Town's property between the property line and the mainline sewer or within the mainline sewer itself, then the Town will assume responsibility for repairs. The exception to the Town's responsibility is in cases where the blockage is caused by the accumulation of grease from the home, in which case it becomes the homeowner's responsibility for all repairs and damages."*

Operational experience over the past six years has confirmed that this policy is normally well understood by property owners with respect to the split in financial responsibility based on property ownership and usage of the municipal sewer service connection. What is not well understood is the process for determining responsibility, undertaking repairs, and payment of claims resulting from damages. In addition, further clarification with respect to the Town's policy on blockages caused by tree roots is required. A revised Policy has been prepared which further clarifies responsibilities and procedures. This policy is set out in Attachment 'B' to this report.

The one of the key aspects of the revised policy is that the division of property and responsibility between the Town and the private owner is more clearly defined. With the clear definition of property ownership, it is much more straightforward to determine whether the Town or the private owner is responsible to undertake repairs to the service connection pipes. The policy clearly defines the responsibility of the Town and the private owner with respect to costs associated with investigating the cause and location of blockages.

Review of current practices within the Province of Ontario for damages to sewer service connection pipes caused by tree roots has confirmed that the standard applied by insurance adjusters is "location of the damage". This means that the location or ownership of the tree does not govern the responsibility for repairs or damages. Responsibility is determined by the ownership of the sewer service connection pipe where the damage has occurred and the roots entered the pipe. It is the owner's

responsibility to maintain the pipes within the private plumbing system, and it is the Town's responsibility to maintain the pipes within the municipal property.

When a blockage is suspected within the municipal sewer service connection, the staff member investigating the problem will advise the property owner that the Town has adopted a policy that defines the responsibility for all costs related to the inspection and removal of blockages in the municipal sewer service connection and private plumbing.

A second key aspect of the policy is that when a blockage occurs and private property is damaged, the private property owner or occupant must submit any claims for damages to their own insurance company. The owner will be requested to provide a copy of any claim to the Clerk's Department of the Town. The Town's insurance company will be informed by the Clerk's Department when notice of a claim is submitted to the Town. The Town's insurance company will investigate any claim, if warranted. Responsibility for damages to private property will be determined by the Town's insurance adjuster after the adjuster's investigation is completed.

All communication with property owners with respect to property damage and insurance claims associated with sewer blockages and back-up is to be made through the Clerk's Department. This is necessary to ensure that insurance claims are processed consistently and in a timely manner.

Town staff currently provide property owners with a list of private contractors that have been retained to perform removal of blockages and inspection of the municipal sewer service connection. A reputable, skilled and licensed plumbing contractor is required to ensure that the Town is only charged for work undertaken to clear blockages that are the Town's responsibility, and to ensure that excellent customer service is provided to the private property owner. In addition, the contractor must be familiar with the Town's policy and must be able to effectively communicate the policy to the private owner.

At present Waterworks has two contractors on the list, and they are providing excellent service at a reasonable cost. The cost to the Town for these services is approximately \$20,000 per year for clearing approximately 40-50 blockages on the municipal portion of the sewer service connection.

If the owner/occupant chooses to use the Town's designated contractor, the contractor will remove the blockage and determine the cause of the blockage. If the contractor believes the blockage is within the municipal sewer service connection, the contractor will conduct a CCTV video inspection to confirm the cause and location of the blockage. If the video inspection does not find a structural cause for the blockage (i.e. root infiltration or structural failure) within the municipal portion, then the cause of the blockage will be deemed to be accumulation of grease or debris from the private plumbing system. Removal of blockages caused by the accumulation of grease or debris is the responsibility of the private owner, and the contractor will recover its costs to remove the blockage and to conduct the inspection and remove the blockage from the

owner or occupant. A set fee will be provided for the basic service of clearing the blockage and for CCTV video inspection through an accessible clean-out connection.

The contractor will be required to submit a written report to the Town for every blockage that they attend to. If the Town's designated contractor determines that the blockage is on the municipal side of the connection, the contractor will conduct a CCTV inspection through an accessible floor clean-out. The contractor will submit the video and written report to the Town, and the Town will schedule any necessary follow-up repairs to correct deficiencies in the municipal sewer service connection. The contractor will collect the fee for this service from the Town if the problem is determined to be the Town's responsibility. Similarly, the Town will only reimburse the cost of repairs and inspections performed by private contractors, other than the Town's designated contractor, if the provisions of the policy are met including the provide of written report and a CCTV inspection satisfactory to Town staff.

The condition of the service connection and the nature of any repairs undertaken are recorded in the Town's Hansen asset and maintenance management system for future reference and scheduling of follow-up repairs.

The policies and procedures set out in this report formalize and extend the existing practices. Completion of the Request for Quotations and Statement of Qualifications for contracting of approved drainage contractors to clear blockages in sanitary service connections will provide ongoing service certainty the Town.

### **3. Public Information Program to Discourage Discharge of Grease and Food Waste**

One of the main causes of sewer blockages in the mainline sanitary sewer and the sewer connections is the accumulation of grease. Commercial establishments and restaurants contribute large quantities of grease to the sewer when this material is not properly separated and disposed of, and when grease interceptors are not adequately maintained. The liquid grease in sewage solidifies and attaches itself to the pipe walls leading to decreased pipe capacity and blockages.

Residential properties can also be major contributors to the grease problem. Grease enters the sewer system when it is washed off dishes and cooking utensils, or when residents pour liquid oils and grease down the drain. Similarly, food waste disposers ("garberators") can cause problems in the sewer system and reduce capacity in the pipes when solids and grease from the shredded waste settle out and adhere to the pipe walls. Waterworks staff have previously reported on the detrimental effects of food waste disposers on the sanitary sewer system (Report No. 36 – General Committee, Item (14) November 15, 2005)

Waterworks recommends that an enhanced public awareness program be initiated to help alleviate problems associated with grease build-up in the municipal sewers. The program will inform the public and commercial business owners that improper disposal of grease and the use of food waste shredders can lead to sewer blockages and back-ups. The program will also communicate to the public that such discharges of grease and



shredded food waste contravenes the Town's Sewer Use By-law #436-86. The program will offer practical suggestions and solutions for the home owner and business owner aimed at reducing the discharge of grease and food waste into the sanitary sewer system.

**FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)**

Not Applicable. The updated policies and procedures do not affected existing budget requirements or cost of service.

**HUMAN RESOURCES CONSIDERATIONS**

Not Applicable

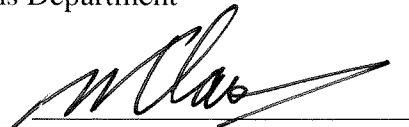
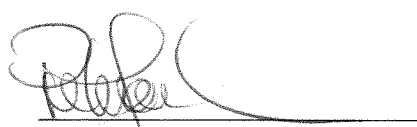
**ALIGNMENT WITH STRATEGIC PRIORITIES:****Municipal Services**

The policies described support an appropriate level of service to the public by defining the responsibility of the Town with respect to maintenance of the municipal sewer system. The policies described also clarify the responsibility of the property owner to maintain the private plumbing system on their own property.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

The following departments and business units were consulted during the preparation of this report and their comments have been considered and incorporated into the report and attached policies:

- Clerk's Department
- Legal Services Department
- Finance – Expenditure Control and Purchasing
- Finance – Financial Strategy and Investments
- Operations Department


**RECOMMENDED****BY:**  
Jerry Klaus,  
General Manager, Waterworks  
Peter Loukes, P.Eng.  
Director, Operations Dept.  
Brenda Librecz  
Commissioner, Community & Fire Services**ATTACHMENTS:**

Attachment A - Mainline Sewer Blockage and Back-up Policy

Attachment B - Municipal Sewer Service Connection Maintenance Policy

Attachment C - Cost Sharing Undertaking for the clearing of Blockages in the Municipal Sewer Service Connection

Attachment D - Mainline Sewer Back-up and Basement Flooding Investigation

	<b>Section: Operations Department -</b>
	<b>Waterworks</b>
	<b>Policy Number:</b>
	<b>Effective Date:</b>
	<b>Revision Date:</b>
<b>Subject: Mainline Sewer Blockage and Back-up Policy</b>	
<b>Approved by: Council</b>	

## 1 Introduction

The Town of Markham owns and operates two municipal sewer systems. One is the sanitary sewer collection system that collects residential and industrial wastewater (sanitary sewage) and delivers it to the centralized transmission and treatment facilities. The second is the storm sewer system that collects rainwater and melted snow and delivers it stormwater management ponds, watercourses, and rivers. Both systems provide sewer service connection pipes, or service laterals, from the mainline sewer up to the property line of the abutting property. At that point, the property owner can connect the private plumbing system to the municipal sewer system.

When a blockage occurs in the mainline sewer, the water level in the sewer system may rise to the point that sewage backs up into private property through the municipal sewer service connections. Similarly, if the quantity of flow increases beyond the capacity of the sewer a surcharge condition can occur resulting in sewage back-ups into private property. In these situations, Staff are called upon to investigate and determine the nature of the back-up and the location of the blockage. It is important for the Town to maintain a clear policy with respect to responsibility for damage to private property resulting from blockages or sewage back-ups in the mainline sewer. It is also important that the Town maintain a clear policy and establish a communication protocol with affected property owners, internal staff and Members of Council.

It is important that the Town maintain a clear policy with respect to the ownership of the various parts of the sewer service connection and private plumbing. It is also important for the Town to maintain a clear policy with respect to damage to private property resulting from blocked sewer service connections, and to establish a communication protocol with affected property owners, internal staff and Members of Council.

## 2 Purpose

The purpose of this policy is to clarify responsibility for damage to private property resulting from blockages or back-ups within the mainline sanitary sewer or storm sewer and to establish a communication protocol with affected property owners, internal staff, and members of Council.



**Section: Operations Department -  
Waterworks**

**Policy Number:**

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**Subject: Mainline Sewer Blockage and Back-up Policy**

**Approved by: Council**

### **3 Scope**

- 3.1 This policy applies to all Town employees, authorized individuals, members of Council and the Mayor who may be required to respond to reports of mainline sewer blockages or back-ups, or to communicate with property owners/tenants that have been affected by a back-up of sewage into private property.

### **4 Responsibility**

- 4.1 It is the responsibility of all Town employees to comply with all requirements of this policy.

### **5 Policy**

- 5.1 The Town will maintain the municipal sewer system in a fit state of repair. Identified deficiencies will be corrected as soon as practical within the constraints of the annual Capital Expenditure and Operating Expenditure budgets.
- 5.2 Reports of sewer backups and sewer blockages will be investigated by the Town of Markham staff as an immediate priority within 24 hours.
- 5.3 Town staff will inform the property owner/occupant that any water, sewage or material that has originated from or been in contact with the drainage system may pose a health risk. The property owner/occupant will be advised that any affected property should be cleaned and disinfected or disposed of. The property owner/occupant will be advised to contact his/her/its own insurance company to arrange for professional cleaners to conduct any necessary work. Town Staff will not contact the professional cleaners or contract directly for this service on behalf of the owner.
- 5.4 Town staff will inform the property owner that any claims for damages resulting from the sewer back-up on private property are to be submitted by the owner to their own insurance company. If the owner intends to claim against the Town, they will be advised to submit copies of such claims to the Clerk's Department. The Town's insurance company will be informed by the Clerk's Department when the notice of claim is submitted to the Town.



**Section: Operations Department -  
Waterworks**

**Policy Number:**

**Effective Date:**

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**Subject: Mainline Sewer Blockage and Back-up Policy**

**Approved by: Council**

Information regarding this policy and the insurance claim procedure will be printed on a notice provided to the property owner by the Town Staff investigating the blocked sewer or sewer back-up. Notwithstanding that the Town may undertake repairs to blockages to the mainline sewer, the Town in no way assumes any liability or responsibility for any damages to private property as a result of any sewer back-up. Responsibility for damages to private property will be determined by the Town's insurance adjuster after the adjuster's investigation is completed.

All communication with property owners with respect to sewer blockages and back-ups, and any property damage or responsibility for damages is to be made through the Clerk's Department.

- 5.5 When blockages occur for any reason within the mainline sewer, the Town's responsibility is to remove the blockage and to ensure that the sewer is flowing freely. Town staff or a contractor designated by the Town will clear blockages, if possible, using mechanical means. If the mechanical means cannot clear the blockage, or if further repairs are required, the Town will remove the blockage by excavating the mainline sewer within a reasonable time depending on the severity of the blockage, accessibility, and availability of by-pass pumping.

The Town does not guarantee uninterrupted provision of service for removal of waste water.

- 5.6 Staff will prepare an initial Mainline Sewer Blockage and Back-up Report within two (2) business days of the occurrence of a mainline sewer back-up into private property. A copy of the report will be submitted to the Clerk's Department whenever damages on private property have occurred as a result of the mainline sewer blockage and backup. Copies of these reports will be retained by the responsible department in accordance with the provisions of the Town's record retention by-law.
- 5.7 The responsible department will prepare a final Mainline Sewer Blockage and Repair Report within a reasonable amount of time once any repairs or corrective actions have been completed. A copy of the report will be submitted to the Clerks Department whenever damages on private property have occurred as a result of the mainline sewer blockage and backup. Copies of these reports will be retained by the responsible department in accordance with the provisions of the Town's record retention by-law.



**Section: Operations Department -  
Waterworks**

**Policy Number:**

**Effective Date:**

**Revision Date:**

**Subject: Mainline Sewer Blockage and Back-up Policy**


**Approved by: Council**

## **6 Mainline Sewer Backups Resulting from Sewer Flushing Activities**

- 6.1 During routine flushing and cleaning of sewers it is possible that high pressure water may be forced into the private sanitary service connection. This can cause water in toilets and drains to spill out. When this occurs the Town will investigate immediately.

### **File Location**

Q:\Commission Share\Operations and Asset Management\Reports\2009\Waterworks\Sewer Backup Policy\Revised Report May 2009\Mainline Sewer Blockage and Back-up Policy-Attachment A (RF April 29, 2009).doc

	<b>Section: Waterworks</b> <b>Policy Number:</b> <b>Effective Date:</b> <b>Revision Date:</b>
<b>Subject: Municipal Sewer Service Connection Maintenance Policy</b>	
<b>Approved by: Council</b>	

## 1 Introduction

The Town of Markham owns and operates two municipal sewer systems. One is the sanitary sewer collection system that collects residential and industrial wastewater (sanitary sewage) and delivers it to the centralized transmission and treatment facilities. The second is the storm sewer system that collects rainwater and melted snow and delivers it stormwater management ponds, watercourses, and rivers. Both systems provide sewer service connection pipes, or service laterals, from the mainline sewer up to the property line of the abutting property. At that point, the property owner can connect the private plumbing system to the municipal sewer system.

When a blockage occurs in the sewer service connection or the, Town staff are called upon to investigate and determine the nature and location of the blockage. The municipal sewer service connection is defined as the sewer pipe from the mainline sewer up to the property line. The municipal sewer service connection ends at the property line. Sewage discharge from the property enters the municipal sewer system at this point. The sewer pipes from the property line in to the building are part of the private plumbing system.

It is important that the Town maintain a clear policy with respect to the ownership of the various parts of the sewer service connection and private plumbing. It is also important for the Town to maintain a clear policy with respect to damage to private property resulting from blocked sewer service connections, and to establish a communication protocol with affected property owners, internal staff and members of Council.

## 2 Purpose

The purpose of this policy is to clarify the ownership of the various parts of the municipal sewer service connection and provide clear direction with respect to damage to private property resulting from blocked sewer service connections and to establish a communication protocol with affected property owners, internal staff and members of Council.

## 3 Scope

- 3.2 The policy applies to all Town employees, authorized individuals, Members of Council and the Mayor who may be required to respond to reports of blocked sewer service connection pipes, or communicate with property owners/tenants that have been affected by a blocked sewer service connection.



**Section: Waterworks**

**Policy Number:**

**Effective Date:**

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**Subject: Municipal Sewer Service Connection Maintenance Policy**

**Approved by: Council**

## **1 Introduction**

The Town of Markham owns and operates two municipal sewer systems. One is the sanitary sewer collection system that collects residential and industrial wastewater (sanitary sewage) and delivers it to the centralized transmission and treatment facilities. The second is the storm sewer system that collects rainwater and melted snow and delivers it stormwater management ponds, watercourses, and rivers. Both systems provide sewer service connection pipes, or service laterals, from the mainline sewer up to the property line of the abutting property. At that point, the property owner can connect the private plumbing system to the municipal sewer system.

When a blockage occurs in the sewer service connection or the, Town staff are called upon to investigate and determine the nature and location of the blockage. The municipal sewer service connection is defined as the sewer pipe from the mainline sewer up to the property line. The municipal sewer service connection ends at the property line. Sewage discharge from the property enters the municipal sewer system at this point. The sewer pipes from the property line in to the building are part of the private plumbing system.

It is important that the Town maintain a clear policy with respect to the ownership of the various parts of the sewer service connection and private plumbing. It is also important for the Town to maintain a clear policy with respect to damage to private property resulting from blocked sewer service connections, and to establish a communication protocol with affected property owners, internal staff and members of Council.

## **2 Purpose**

The purpose of this policy is to clarify the ownership of the various parts of the municipal sewer service connection and provide clear direction with respect to damage to private property resulting from blocked sewer service connections and to establish a communication protocol with affected property owners, internal staff and members of Council.

## **3 Scope**

- 3.2 The policy applies to all Town employees, authorized individuals, Members of Council and the Mayor who may be required to respond to reports of blocked sewer service connection pipes, or communicate with property owners/tenants that have been affected by a blocked sewer service connection.



**Section: Waterworks**

**Policy Number:**

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**Subject: Municipal Sewer Service Connection Maintenance Policy**

**Approved by: Council**

#### **4 Responsibility**

- 4.1 It is the responsibility of all Town employees and contractors to comply with all requirements of this Policy.

#### **5 Policy**

- 5.1 Reports of sewer backups and sewer service connection blockages will be investigated by the Town of Markham Waterworks staff as an immediate priority response within 24 hours or as soon as possible thereafter.
- 5.2 Town staff will inform the property owner that any water, sewage or material that has originated from or been in contact with the drainage system may pose a health risk. The property owner/occupant will be advised to contact their own insurance company to arrange for professional cleaners to conduct any necessary work. Town Staff will not contact the professional cleaners or contract directly for this service on behalf of the owner.

Town staff will inform the property owner that any claims for damages resulting from the sewer back-up on private property are to be submitted by the owner to their own insurance company. If the owner intends to claim against the Town, they will be advised to submit copies of such claims to the Clerk's Department. The Town's insurance company will be informed by the Clerk's Department when the notice of claim is submitted to the Town.

Information regarding this policy and the insurance claim procedure will be printed on a notice provided to the property owner by the Town Staff investigating the blocked sewer or sewer service connection blockages. Notwithstanding that the Town may undertake repairs to blockages to the mainline sewer or sewer service connection, the Town in no way assumes any liability or responsibility for any damages to private property as a result of any sewer back-up. Responsibility for damages to private property will be determined by the Town's insurance adjuster after the adjuster's investigation is completed.

- 5.4 All communication with property owners, internal staff, members of Council and the Mayor following a back-up of sewage and any property damage or responsibility for damages will be made through the Clerk's Department.
- 5.5 When a blockage is suspected within the municipal sewer service connection the Town Staff investigating the problem will advise the property owner/occupant that this policy defines the responsibility for all costs related to the inspection of the municipal sewer service connection and any activities or repairs required to correct the blockage or back-up.





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- 5.6 For most residential properties a buried “test tee” is located at the property line on the sewer connection, and this “test tee” represents the separation point between the municipal sewer service connection and the private plumbing system. For larger commercial properties an inspection manhole is normally located adjacent the property line on private property and this manhole represents the separation point between the private plumbing system and the municipally owned service connection. In cases where the “test tee” or property line manhole does not exist, the property boundary line must be located by measuring from legal survey property bars or stakes.
- 5.7 The cost of inspection, clearing and repairing blockages that occur for any reason within the private plumbing system is the property owner’s responsibility.
- 5.8 Blockages caused by the accumulation of grease, food waste or other solid materials at any location in the municipal sewer service connection or private plumbing are deemed to be caused by the activities of the building occupants. The cost of clearing the blockage, and all inspection costs and repairs to the municipal sewer service connection are the property owner’s responsibility for this type of blockage.
- 5.9 Responsibility for clearing blockages caused by intrusion of tree roots into sewer pipes is divided by the ownership of the systems regardless of the location or ownership of the tree. The Town is responsible to clear roots that infiltrate the municipal sewer service connection and for repairs to the municipal sewer service connection pipe. The property owner is responsible to clear tree roots that infiltrate private plumbing and for repairs to the private plumbing system.
- By-law #68-72 prohibits the removal of healthy trees located on the municipal right-of-way. Infiltration of roots into the municipal sewer service connection pipe or into the pipes within the private plumbing system is the result of a defect in the pipe or the pipe joints. The Town will not remove a healthy tree in order to prevent further root infiltration. The cost of cutting tree roots within the private plumbing system, and the cost of any repairs to the private plumbing pipes or pipe joints to eliminate root intrusions is the responsibility of the private owner. The Town is responsible for the repairs to the pipes and pipe joints within the municipal sewer service connection only.
- 5.10 The cost of inspection, clearing and repairing blockages that occur within the municipal sewer service connection located between the property line and the mainline sewer due to structural damage other than the accumulation of grease, food waste and solids, is the Town’s responsibility.
- 5.11 In all cases where a blockage of the municipal sewer service connection or private plumbing occurs, Town staff will advise the property owner that they have the



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option to hire their own contractor to clear the blockage, or that they have the option of hiring the Town's designated contractor to clear the blockage and inspect the municipal sewer service connection and private plumbing.

Property owners will be required to sign and accept a cost sharing undertaking prior to the Town staff, or the contractor designated by the Town, clearing the blockage. Details of the costs for clearing blockages and CCTV Video inspection are defined in this policy.

- 5.12 The Town may reimburse property owners for the portion of costs incurred by other private contractors up to a maximum amount approved by the General Manager of Waterworks. The maximum reimbursement amount will be reviewed annually and based on available service cost information available from the Town's Purchasing Department. Reimbursement of costs will be subject to the conditions of this policy, submission of a valid paid invoice, and submission of an acceptable video inspection record which satisfies Town Waterworks Staff that the repair is the Town's responsibility. No reimbursement will be made for the removal of blockages caused by the accumulation of grease, food waste or other solids or tree root intrusion deemed to be the property owner's responsibility.
- 5.13 If the property owner chooses to use the Town's designated contractor to clear the blockage, the owner will be charged a set fee for clearing the blockage based on Town's Service Contract with the contractor. The property owner can additionally choose to have the lateral inspected by CCTV method by the contractor. The owner will be charged a set fee for the CCTV inspection based on Town's Service Contract with the contractor. The Town's designated contractor will be responsible for collecting the fee directly from the private owner.
- 5.14 If the CCTV video inspection is conducted and reveals that the cause of the blockage is within the Town's responsibility as defined by this policy, the Town's designated contractor will not charge the private owner for the services provided. The Town's designated contractor will be reimbursed by the Town based on the conditions of Town's Service Contract with the contractor.
- 5.15 If the private owner does not request a CCTV inspection and the Town's designated contractor suspects the cause of the blockage is within the Town's responsibility as defined by this policy, the Town's designated contractor will conduct a CCTV inspection through an accessible clean-out connection in the floor of the building. The report from the CCTV inspection will be submitted to the Town for review. There is no cost to the private owner for CCTV inspection in these circumstances as the inspection is being undertaken for the Town's records.



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- 5.16 Clearing of the blockage by the Town's designated contractor will only be conducted by mechanical means through an accessible clean-out connection in the floor.
- 5.17 CCTV video inspections by Town staff, or the contractor designated by the Town will only be conducted through an accessible clean-out connection in the floor. It is the responsibility of the property owner to provide and maintain access to the floor clean-out connection. The Town will not undertake or accept inspections made through drain stacks, vents or floor drains.
- 5.18 The location and cause of the blockage will be recorded in a written report to be kept on file in the Waterworks Department. The property owner can request a copy of this report by making a Freedom of Information Request made through the Clerks Department.
- 5.19 If the blockage occurs on Town property and the repairs to correct the blockage are determined to be within the sphere of the Town's responsibility in accordance with this policy, and if the mechanical means cannot clear the blockage from the clean-out connection, the Town will remove the blockage by excavating the sewer connection within the Municipal right-of-way within a reasonable amount of time.
- 5.20 Following clearance of the blockage, the Town will undertake repairs to the defective municipal sewer service connection at the earliest possible date, or in accordance with the capital rehabilitation program schedule depending on the nature and severity of defects(s).
- 5.21 The responsible department will prepare a Municipal Sewer Service Connection Blockage and Repair Report within a reasonable amount of time. This report will be kept on file. A copy of the report will be submitted to the Clerks Department whenever damages on private property have occurred as a result of the sanitary service connection blockage and backup.

**File Location**

Q:\Commission Share\Operations and Asset Management\Reports\2009\Waterworks\Sewer Backup Policy\Revised Report May 2009\Sewer Connection Maintenance Policy Attachment B (RF April 29, 2009).doc


**COST SHARING UNDERTAKING FOR THE CLEARING OF  
BLOCKAGES IN THE MUNICIPAL SEWER SERVICE CONNECTION**

I \_\_\_\_\_, (*insert name of property owner/occupant*)  
am the owner/occupant of the property municipally known as:

\_\_\_\_\_ (*insert address of property affected*)  
(hereinafter referred to as the "Property Owner"), and as such hereby acknowledge and agree to the following conditions provided herein:

**UNDERTAKING**

If the blockage is found to be within the Private Plumbing System or is determined to be the owner/occupants responsibility as defined above, I undertake and agree to be responsible for the costs for investigating, repairing and clearing the blockage and any other works associated with same.

\_\_\_\_\_  
Signature of Property Owner/Occupant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name of Property Owner/Occupant

\_\_\_\_\_  
Address and Telephone Number of Property Owner/Occupant

\_\_\_\_\_  
Address and Telephone Number of Property Owner (where the occupant is not the owner)

\_\_\_\_\_  
Town Customer Service Request Number

\_\_\_\_\_  
Town Staff / Operator (Signature & Name)

1. The Town of Markham has adopted Policy No. (*insert new #*). This policy defines and applies to the Town and the Property Owner's responsibilities for undertaking repairs when a blockage occurs or is suspected in the sewer service connection.
2. The private portion of the sewer service connection is that portion of the sewer pipe from the property line to the building (hereinafter referred to as the "Private Plumbing System"). The municipal portion of the sewer service connection is defined as that portion of the sewer pipe from the property line to the mainline sewer (hereinafter referred to as the "Municipal Sewer Service Connection").
3. The Property Owner shall be responsible for all costs for inspection, clearing blockages and repairing blockages within the Private Plumbing System that occur for any reason.
4. Blockages caused by the accumulation of grease, food waste or other solid materials at any location in the sewer service connection or private plumbing system are deemed to be caused by the activities of the building occupants. The cost of inspection, clearing and repairing these blockages shall be the Property Owner's responsibility.



**COST SHARING UNDERTAKING FOR THE CLEARING OF  
BLOCKAGES IN THE MUNICIPAL SEWER SERVICE CONNECTION**

5. Responsibility for the costs of repairs to remove blockages caused by intrusion of tree roots into the sewer service connection will be governed by the location of the tree root intrusion into the pipes regardless of the source of the roots or the ownership or location of the tree. If the roots infiltrate into the Private Plumbing System then the property owner shall be responsible for all costs and repairs and if the roots infiltrate into the Municipal Sewer Service Connection then the Town shall be responsible for all costs and repairs.
6. The cost of inspection, clearing and repairing blockages that occur within the Municipal Sewer Service Connection due to structural defects other than blockages caused by the accumulation of grease, food waste or solids, shall be the Town's responsibility.
7. **The Property Owner shall be responsible for retaining a licensed drainage contractor to inspect, repair and remove all blockages that occur within any location of the sewer service connection or Private Plumbing System. The Property Owner has the option of retaining a contractor that has been pre-approved by the Town ("Town Designated Drainage Contractor"). The Town in no way warrants or guarantees any of the works performed by the Town's Designated Drainage Contractor.**
8. **All costs shall be paid by the Property Owner directly to the Town's Designated Drainage Contractor if the blockage is determined to be the Property Owner's responsibility in accordance with the Town's Policy. All costs shall be paid by the Property Owner directly to the any other licensed drainage contractor retained by the Property Owner regardless of responsibility. The Town will only reimburse the Property Owner for those costs which are determined to be the Town's responsibility in accordance with section 9.**
9. The Town will only assume responsibility for or reimburse for costs for repairs, blockage removal and camera inspections undertaken by the Property Owner within the Municipal Sewer Service Connection in accordance with the terms set out in this undertaking and the Town's policy subject to the following conditions:
  - (a) if the works are performed by the Town's Designated Drainage Contractor:
    - (i) submission of a record of camera inspection which has been conducted through an accessible floor clean-out connection that verifies to the satisfaction of the Town's Waterworks Staff that the repairs are the Town's; or
  - (b) if the works are performed by a licensed drainage contractor, other than the Town's Drainage Contractor:
    - (i) reimbursement may be provided up to a maximum amount of \$dollars (*to be reviewed annually*);
    - (ii) submission of a valid paid invoice; and
    - (iii) submission a record of a camera inspection which has been conducted through an accessible floor clean-out connection that verifies to the satisfaction of the Town's Waterworks Staff that the repairs are the Town's responsibility.
10. The Property Owner grants the right and permission to the Town, including any employees, agents or contractors acting on the Town's behalf, to enter the property noted above to perform any works associated with repairs or blockages within the Municipal Sewer Service Connection, including permission to inspect and report on the condition of the Municipal Sewer Service Connection and the Private Plumbing System.



## Notice to Owner or Occupant

### MAINLINE SEWER BACK-UP AND BASEMENT FLOODING INVESTIGATION

#### TO THE RESIDENT OR OWNER:

The Town of Markham is investigating a report of a sewer back-up in your area. As we work to determine the cause, we are taking measures to relieve the back-up and remove any blockages found in the mainline sewer.

#### Has Your Basement Flooded?

Health and safety should be your number one concern. Items that have been in contact with sewage should be thoroughly cleaned and disinfected. You may wish to contact an independent contractor to do the initial clean-up and disinfection. There are several local firms that perform this work listed in the telephone directory. You should seek advice from your insurance company before hiring any professional cleaners.

#### Have You Called Your Insurance Company?

All claims for damages to private property are handled and investigated through your insurance company and, if required, the Town's insurance company. If flooding is the result of a blockage in or damage to the private plumbing system, leaking foundation walls or poor lot drainage, the property owner is responsible for all repairs and damages. If the flooding is the result of a blocked sanitary or storm sewer, the Town will repair the mainline sewer as soon as possible and restore normal service. Notwithstanding that the Town has or will investigate and undertake repairs to the mainline sewer, the Town does not assume any liability or responsibility for damages caused to private property.

All claims for damages are handled through your insurance company. Contact your property insurance company immediately to report any damage and obtain further direction. Many insurance policies cover the costs associated with sewage back-ups, however, coverage is not always automatic; please refer to your policy.

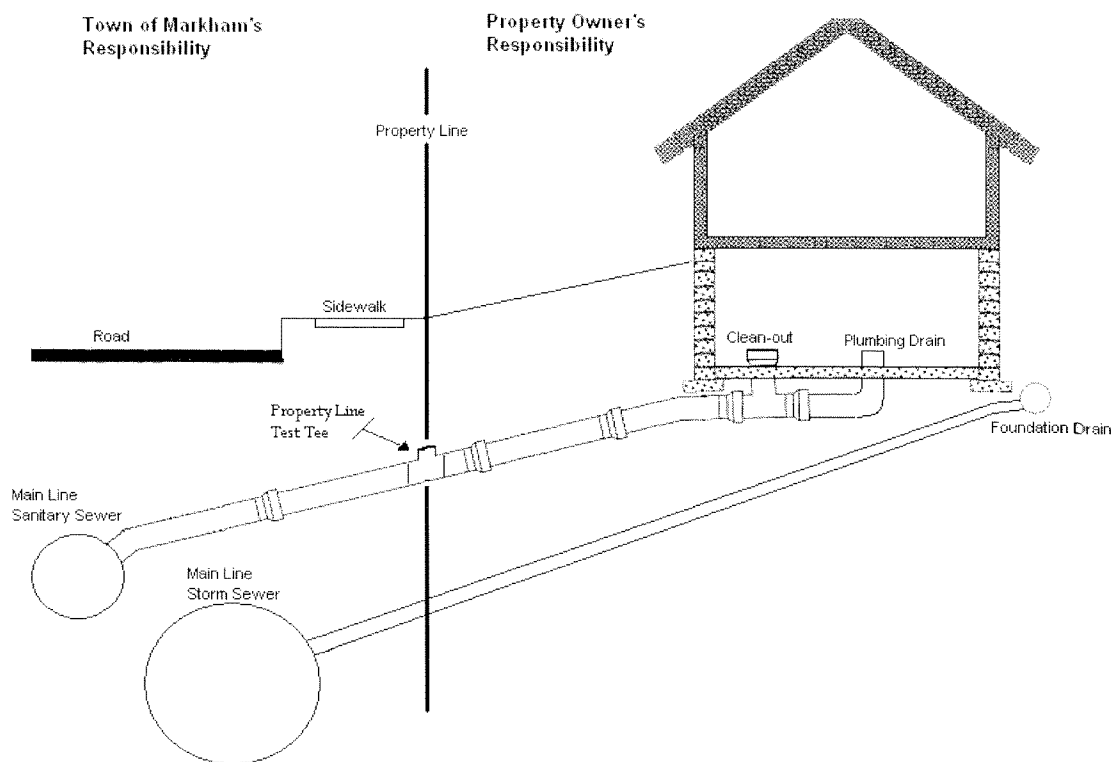
It's important for you to inform the Town of Markham that you've made a claim with your insurance company, as they may contact the Town to request an investigation report. Once your insurance company has received your claim, please that notify the Town that you have been affected by a sewer back-up by letter to the Town Clerk, Town of Markham, 101 Town Centre Boulevard, Markham, L3R 9W3 or by fax to 905-479-7771.

(please see over)

**Your letter to the Town should include:**

1. your name, address, and telephone number;
2. date and time of the sewer back-up incident;
3. extent of damage to your premises;
4. copies of any pictures taken, if possible; and
5. name, address, and telephone number of your insurance company;

**Municipal Sewer Service Connection Schematic:**



If you have any questions, please contact the Clerk's Department at 905-477-7000.

**File Location**

Q:\Commission Share\Operations and Asset Management\Reports\2009\Waterworks\Sewer Backup Policy\Revised Report May 2009\Notice Mainline Sewer Backup Basement Flooding - Attachment D (RF April 29, 2009).doc

*The Corporation of the Town of Markham*

101 Town Centre Boulevard, Markham, Ontario, L3R 9W3 • tel. 905.477.7000 • [www.markham.ca](http://www.markham.ca)