Town of Penfield
Stormwater Management Policy

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Town of Penfield
3100 Atlantic Avenue
Penfield, New York 14526
## Town of Penfield
### Stormwater Management Policy

### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Penfield Drainage – Introduction</td>
<td>2</td>
</tr>
<tr>
<td>2. Responsibilities</td>
<td>3</td>
</tr>
<tr>
<td>3. Floodplain Management</td>
<td>4</td>
</tr>
<tr>
<td>4. Detention / Retention Facility Planning</td>
<td>5</td>
</tr>
<tr>
<td>5. Intermunicipal Planning</td>
<td>5</td>
</tr>
<tr>
<td>6. Townwide Drainage District and Drainage Levy</td>
<td>6</td>
</tr>
<tr>
<td>7. Regional Watershed Studies</td>
<td>6</td>
</tr>
<tr>
<td>8. Development Standards</td>
<td>7</td>
</tr>
<tr>
<td>9. Resolution of Drainage Concerns</td>
<td>7</td>
</tr>
<tr>
<td>10. Drainage Control Law</td>
<td>10</td>
</tr>
</tbody>
</table>
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1) Penfield Drainage - Introduction

The Town of Penfield is situated in the lower reaches of the Irondequoit Creek Watershed. The watershed encompasses approximately 169 square miles and flows through 7 towns and 4 villages that are all upstream of Penfield. This watershed drains directly to Irondequoit Bay and ultimately to Lake Ontario.

In addition to the Irondequoit Creek Watershed, which includes the Allens Creek Watershed, Tufa Glen Watershed, Ross Brook Watershed and the Hipp Brook Watershed, the town also includes parts of the Shipbuilders Creek Watershed and Four-Mile Creek Watershed that drain directly to Lake Ontario. The Commission Ditch Watershed and the Finger Lakes Watershed are located in the southeastern portion of the town and drain to the south. The watersheds are shown in Exhibit 1.

The town recognizes the ongoing need for comprehensive drainage planning and requires all new development to mitigate their adverse impacts to the flow rates and water quality, insure that drainage throughout the community is properly maintained, and insure that development changes to the watershed do not become a detriment to town residents or their properties.

Over the last 25 years, the Town Board has made commitments to ensure that town residents and their properties are protected from storm events identified as 10, 25, 50 and 100 year storms by participating in the National Flood Insurance Program (NFIP) which is administered by the Federal Emergency Management Agency in 1980. This commitment involved revisions to the Town Zoning Ordinance in 1981 which resulted in the prohibition of development in the Floodway and 10 year storm elevation, while regulating development in the 100 year storm elevation, all of which are identified on the NFIP maps.

During the mid-1980's and early 1990's, the town directed the development of comprehensive drainage studies for all of its sub-basins with recommendations to mitigate concerns in each sub-basin. These studies are periodically updated to reflect changing conditions particularly relating to new development proposals. In the early 1990's the Town Board created the Watershed Management Committee (WMC) to keep these studies up to date and to address drainage concerns raised by town residents and town staff. In addition to addressing storm water quantity issues, the town has entered into a formal inter-municipal agreements with other communities located within the Irondequoit Creek Watershed to solve both water quantity and quality issues within the watershed on a regional basis rather than on a town by town basis which has historically been the case. In 1999, the Town of Penfield entered into agreements with the U.S.
Army Corp of Engineers and the County of Monroe to undertake a study to determine the most appropriate and cost effective method of resolving periodic flooding concerns in the Panorama Valley floodplain. This study, once complete will provide the involved agencies a plan to resolve the town's most prominent flooding concern and may lead to the construction of major flood control measures.

2) Responsibilities

a) The **Town Board** is responsible for determining the overall drainage needs of the community and approving an annual drainage tax levy sufficient to ensure that those needs are met. The Town Board levies a townwide drainage tax that is collected on an annual basis to address regional drainage concerns. These types of projects include cleaning ditches of major tributaries within the town, replacement of culverts under town roads, implementation and maintenance of regionalized storm water management facilities and development of strategic plans for regionalized drainage issues.

b) The **Town Staff** is responsible for making recommendations to the Town Board (through the Town Engineer) as to which projects and plans should be undertaken (on a priority basis) based upon an annual inspection of drainage channels and structures, and the potential for any loss to residents or to the structural integrity of the facilities. These recommendations are adopted by the Town Board through the creation of a capital project within the town's annual budget. Town staff is responsible to inspect drainage problems and make recommendations to the Town Engineer.

c) The **Town Engineer** is responsible for acting as a clearinghouse for drainage concerns and making recommendations to the Town Board to identify, evaluate and solve those problems in the most efficient and cost effective manner possible. The Town Engineer is also responsible for ensuring that positive drainage is maintained throughout all construction processes and drainage generated by new development does not adversely impact adjacent or downstream properties. The Town Engineer shall also provide guidance to the Planning Board for the review of drainage issues related to all projects under their review. The Town Engineer shall oversee the design and construction of all drainage improvement projects that may involve town staff or contractors.

d) The **Highway Superintendent** is primarily responsible for the maintenance of drainage along and through town roads. This includes, but is not limited to, removal of obstructions, the construction or reconstruction of culverts, pavement surfaces, or other drainage appurtenances. The Highway Department assists the Town Engineer in the completion of drainage improvement projects and maintenance work.

e) The **Director of Parks and Facilities** is responsible for the maintenance of town dedicated facilities, including parks and detention ponds. The Parks and Facilities
Department assists the Town Engineer and the Highway Department in the completion of drainage improvement projects and maintenance work.

f) The Watershed Management Committee (WMC) is a Town Board appointed committee charged with reviewing the town drainage studies and recommending updates as needed to address major watershed changes. The WMC also makes recommendations to the Town Board, through the Town Engineer, for major drainage improvement projects. The WMC provides a process to investigate and address resident’s drainage concerns, at the request of the Town Engineer or the Town Board. The WMC makes recommendations to the Town Board for modifications to the town’s Drainage Policy and Drainage Law.

3) Floodplain Management

a) The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) for every community in the nation. FEMA has set regulations and guidelines for communities permitting development within floodplains throughout the United State of America.

b) National Flood Insurance Program (NFIP) is the program administered by FEMA to provide assistance to property owners who have constructed within areas subject to a high probability of flooding. Those eligible for assistance must obtain flood insurance from the federal government (through a private insurance agent). Residents whose property is not identified as being within a floodplain (identified on the NFIP maps dated February 28, 1981) are not eligible for flood insurance.

The NFIP is regionally administered by New York State Department of Environmental Conservation which is responsible for ensuring that each municipality within its regions are making every effort to comply with federal requirements for minimizing development with in federally designated floodplains. The NYSDEC provides technical and educational assistance to municipalities to ensure local officials are kept abreast of floodproofing measures, new legislation regarding the NFIP and assessment of each communities’ effort to mitigate flood hazards.

The NFIP is locally administered by Town of Penfield. The Director of Building & Planning Services serves as the Floodplain Management Administrator. All NFIP maps and information regarding floodplain management and requirements for development in the town’s floodplains may be obtained at the Department of Building & Planning Services. The town is responsible for demonstrating an ongoing commitment to the NFIP to prohibit new development within floodways and areas with a 10 year flood elevation. The town discourages the granting of any variances for new development in these prohibited areas and does not allow additions to existing development unless it is demonstrated that the project:
  • Can be mitigated through the creation of compensatory storage areas
• The proposed structure (including basements) can be elevated one foot (1') above the base flood elevation
• Sponsor commits to paying increased premiums for potential property damage.
• Installs all appropriate mitigation measures as required to comply with FEMA rules or provide verification of approval from FEMA for relief from these regulations.

The Town of Penfield is obligated to submit a biannual report to FEMA identifying the town’s compliance with NFIP requirements within its floodplains during the reporting period.

c) The **Penfield Zoning Ordinance** and the **Drainage Control Law** are the rules by which the town administers permitted, regulated and prohibited activities within the Town of Penfield, particularly within floodplains which are identified as an Environmental Protection Overlay District (EPOD). This section of the Zoning Ordinance became effective on March 9, 1981 after the Federal Emergency Management Agency (FEMA) completed its floodplain mapping of the Town of Penfield. This mapping program identified all properties located in areas with a high probability of flooding in 10, 50, 100 and 500 year storm events.

4) Detention / Retention Facility Planning

It is a primary goal of the Town of Penfield to promote the creation of regionalized detention or retention facilities, to mitigate any increases in runoff rates and to improve stormwater quality. In some cases, the town may elect not to require detention due to location in the watershed or other local factors. In these cases, the town may require the developer to contribute to regional improvements at other locations.

The town’s goal is to implement recommendations from the individual watershed drainage studies for the location and capacity of the facilities or improvements. Where the discharge of any stormwater management facility discharges to a major watercourse, these facilities shall incorporate water quality features, in cooperation with recommendations of the Monroe County Soil and Water Conservation District and/or the Monroe County Health Department.

The town staff or any appropriate advisory board shall determine the need for the dedication of lands adjacent to these facilities for park or community recreational uses.

5) Intermunicipal Planning

The Town of Penfield endeavors to work with neighboring communities to develop strategies and policies that do not have a detrimental impact to downstream communities. The town strives to maintain active communication with all its neighbors.
and encourages partnering efforts to jointly solve common stormwater and water quality issues in all watersheds.

The Town of Penfield actively participates in intermunicipal planning to address regional concerns within its sub-basins. The town participated in the formation of the Irondequoit Watershed Collaborative (IWC). The IWC is a collaborative made up of towns and villages situated in the Irondequoit Creek watershed. The purpose of the IWC is to identity methods by which those municipalities can work together to solve problems within the watershed relating to water quantity and quality. Some of these methods may include, but are not limited to, seeking joint funding to develop storm water modeling for the watershed, seeking joint funding to develop retention/detention areas in appropriate locations to minimize property damage during flood events, and to increase water quality within the watershed.

6) Townwide Drainage District and Drainage Levy

The Town Board, which serves as the administrator for the Townwide Drainage District, provides for and approves the funding of all drainage issues. On an annual basis, each parcel in the town is assessed a drainage levy to provide the town with sufficient funds to address the need for periodic maintenance of existing facilities and to construct regional drainage improvement projects, as identified by town staff and the WMC. The criteria used to evaluate which projects should be considered is as follows:

- The project will have a positive impact to public health and safety.
- The project will minimize or eliminate the potential for property damage.
- The project will have a regional impact on drainage systems (such as major ditch and creek cleaning).
- The project will improve drainage facilities within the town’s right of way.
- The project will further the construction of watershed management facilities as outlined in the town’s watershed studies.

The drainage levy is used to update the town’s drainage studies, including engineering analysis of all changes to the watershed and the completion of any implementation measures recommended in the previous studies.

7) Regional Watershed Studies:

In the late 1980’s, the Town of Penfield completed a comprehensive study of each watershed within the town limits. These studies involved a computer model of the features of each watershed, including culverts, ponds, and wetlands. The result of each study was a list of recommendations for detention and/or culvert or channel improvements. These studies provide the town with long range goals for each watershed and assist staff in implementing these goals through development and town sponsored improvement projects.
8) Development Standards

The *Development Design and Construction Specifications* was adopted by the Town Board and provides the administrative and design guidelines for all new development. This is revised as needed to insure the protection of all existing and future residents.

9) Resolution of Drainage Concerns

Pursuant to New York State Highway and Town Law, the Town of Penfield cannot undertake drainage improvements on private property except where an easement exists or the protection of life or property requires emergency efforts. The town reserves the right to determine when an easement is necessary to install or maintain drainage facilities. The town may require a property owner to sign a release to permit access onto private property to facilitate these projects.

a) General: Residents, business owners, and developers have drainage concerns regarding their property or an adjoining property. Once these concerns are brought to the town’s attention, the process by which these are addressed shall follow a specific set of criteria. This section is intended to define those specific criteria for addressing these issues.

b) Categories of Stormwater Drainage: Drainage issues can generally be separated into three separate categories:
   - Townwide
   - Localized
   - Site Specific

i) Townwide Drainage

Townwide stormwater drainage relates to the conveyance of surface water, including but not limited to creeks, streams, wetlands, roadway culverts or storm sewers. These facilities are maintained by the Town of Penfield or the operating authority of the roadway. Except for roadway drainage structures, these facilities may or not be located on town owned land or are under an easement to the town. Where there is no easement, the town will require an easement to be granted upon any development project that requires town approval.

General activities associated with managing of Regionalized drainage facilities includes, but is not limited to, the following:

- Cleaning drainage ditches, removing debris from streams or creeks
- Stream bank stabilization or reinforcement
- Keeping town drainage studies current
- Conduct sub-basin studies, where required
- Apply for NYSDEC / U.S. Army Corps permits, where required.
- Planning and Implementation of improvements to mitigate flooding and reduce floodplain acreage.
- General maintenance of regional detention / retention facilities to insure that storage and flow is not impeded.
- Raise and lower water levels in ponds, as required for function.

The maintenance of these channels may be done by the town forces, or their contractors, as needed for emergency services or as part of an annual maintenance program. The town will make every effort to obtain a release prior to entering on private property to complete these services.

ii) Localized Drainage

Localized stormwater drainage relates to the conveyance and storage of stormwater from a subdivision or a large group of properties, including minor swales, creeks, streams, control structures, detention facilities, retention facilities, and storm sewers. These facilities are typically owned by the town or are under easement to the town.

General activities associated with managing of localized drainage facilities includes, but is not limited to, the following:

- Cleaning or removal of excessive growth from drainage ditches
- Grass cutting and removal of debris from a neighborhood detention / retention facilities.
- Planning and implementing improvements associated with new development.
- Storm sewer cleaning or improvement projects.

iii) Site Specific Drainage

Site specific drainage relates to the conveyance of stormwater from a single or a small group of properties, including minor swales and storm sewers. These facilities are typically not owned by the town and are not under easement to the town.

The town does not manage or maintain these site-specific drainage facilities, unless it is part of an overall regional or localized problem. Property owners are expected to maintain these facilities. Typical causes for these types of problems include, but is not limited to, the following:

- Poor lot grading
- Low home elevation
- Overgrown landscaping
- Installation of fences, landscaping, gardens, pools, or sheds into drainage swales
- Changes to runoff characteristics
- Settlement of the land around a structure
- Clogged catch basins or field inlets
- Improper sump or lateral installations or connections

c) Evaluation Process

Upon receipt of a drainage concern, the town staff will log the concern into the drainage database. The concern is transferred to the appropriate department for investigation. This typically involves a site visit to review the existing conditions, a review of available drawings, and, if needed, a topographic survey. The affected property owners will be kept appraised of the status of the investigation and notified of the outcome, when all options have been studied and a recommendation is offered. The following conditions shall be considered in the determination of the best alternative for the situation:

a) Is the concern a Regional, Localized or Site Specific issue?
b) Does the concern affect a structural or life safety issue?
c) Has this been a reoccurring problem?
d) Does an easement exist?
e) What conditions led to the problem?
f) How many parcels are affected by the concern?
g) Is a NYSDEC or U.S. Army Corps of Engineers permit required?

The Town Board shall be responsible for any final determinations related to appeals from residents. The Town Board may involve the Watershed Management Committee for input on certain drainage issues.

If the Town of Penfield determines it is appropriate to complete site specific drainage improvements, the following conditions must be agreed to by the affected property owner(s):

- Property owners grant permission for property access to contractors/town staff.
- A drainage easement is granted to the Town of Penfield for piping and structures.
- The property owner shall be responsible to replace or relocate any landscaping or structures disturbed by the work. **These shall not be installed within the easement.**
- The property owner will agree to permit future connections by adjoining property owners.
- The property owner will hold the Town of Penfield, its agents and employees harmless for any damage as a result of the work.
10) Drainage Control Law:

This document is intended to provide direction to town staff and residents. The Town of Penfield Drainage Control Law, Local Law No. 1, provides the enforcement of this policy.