

MUNICIPALITY OF NORTH GRENVILLE EQUITY, DIVERSITY, AND INCLUSION ADVISORY COMMITTEE AGENDA

Thursday, February 13, 2025, 6:00 p.m. - 8:00 p.m. Held in Meeting Room 1, 285 County Road 44

Pages

A. Open Meeting

B. Land Acknowledgement

The Municipality of North Grenville acknowledges that the Municipality operates on the territory of the Anishnabek.

We recognize all First Nations, Métis, and Inuit peoples who now call North Grenville their home. We respect and support the need for cultivating a strong relationship, and we commit to Indigenous-informed decision making to foster the path towards reconciliation.

C. Human Rights Statement

The Municipality of North Grenville is committed to:

- providing an environment for residents and employees that is free from harassment and discrimination at all municipal sponsored activities;
- neither tolerating nor condoning behaviour that undermines the dignity or self-esteem of individuals or the integrity of relationships; and
- promoting mutual respect, understanding and co-operation as the basis of interaction among all residents and employees.

Harassment and discrimination on the basis of a prohibited ground are violations of the Ontario Human Rights Code and are illegal. The Municipality of North Grenville will not tolerate any form of harassment or discrimination, as defined by the Ontario Human Rights Code, at municipal sponsored activities.

(Adapted from the Elementary Teachers' Federation of Ontario, https://www.etfo.ca/about-us/governance/human-rights-statement)

D.	Approval of the Agenda			
E.	Disclosure of Interest			
F.	Appro	Approve Minutes of Previous Meeting		
	1.	Committee Meeting Minutes - January 16, 2025	1	
G.	Dele	gations		
	1.	Kemptville District Hospital Crystal Clear Code of Conduct Policy Katie Hogue and Stephanie Phillips	6	
Н.	Decis	sion Items		
I.	Correspondence/Information Items/Reports			
	1.	EDI Fund Review	30	
	2.	Policy Review and Matrix	37	
	3.	New Resident Package Review	438	
	4.	Calendar Update	443	
	5.	EDI Strategy/Work Plan Update	445	
	6.	NG Times Article		
		Manpreet Shahi		
J.	Other Business			
	1.	Items for Next Meeting - Thursday, March 13, 2025		

- K. Public Questions
- L. Adjournment



MUNICIPALITY OF NORTH GRENVILLE EQUITY, DIVERSITY, AND INCLUSION ADVISORY COMMITTEE

January 16, 2025, 6:00 p.m. Held in Meeting Room 1, 285 County Road 44

MEMBERS PRESENT Samantha Lavitt

Anne Leach

Christina Meagher-Charbel

Philip Seymour Diane Dewing Lynne Tyler

Co-Chair Mayor Nancy Peckford Councillor Doreen O'Sullivan Councillor Kristin Strackerjan

Scott Godwin

MEMBERS ABSENT Manpreet Shahi

STAFF PRESENT Senterre McKenna, Committee Clerk

Hillary Geneau, Director Of Corporate Services

A. Open Meeting

Co-Chair Lynne Tyler called the meeting to order at 6:02 p.m.

B. Land Acknowledgement

The land acknowledgement was read by Anne Leach.

C. Human Rights Statement

The human rights statement was read by Doreen O'Sullivan.

D. Approval of the Agenda

Moved By Diane Dewing

Seconded By Christina Meagher-Charbel

Be it resolved that the agenda for January 16, 2025, be approved as amended.

E. Disclosure of Interest

None.

F. Approve Minutes of Previous Meeting

Moved By Scott Godwin

Seconded By Christina Meagher-Charbel

Be it resolved that:

The following meeting minutes be approved as circulated:

1. December 12, 2024

CARRIED

1. Committee Meeting Minutes - December 12, 2024

G. Delegations

None.

Kemptville District Hospital Crystal Clear Code of Conduct Policy
 The delegation was moved to next meeting.

H. Decision Items

1. 2025 Meeting Schedule

13 Feb 2025

13 Mar 2025

10 Apr 2025

08 May 2025

12 Jun 2025

10 Jul 2025 no meeting

14 Aug 2025 no meeting

11 Sep 2025

09 Oct 2025

13 Nov 2025

11 Dec 2025

The Members agreed to these dates for the 2025 schedule.

I. Correspondence/Information Items/Reports

1. Working Group for EDI Initiatives Requiring Immediate Action

Hillary Geneau reviewed the working group requirements with the Members:

- Three Councillors cannot attend
- A quorum of the committee cannot be met
- The group must report back to the AC for staff action
- No staff support will be provided

A discussion followed regarding the letter from the Advisory Committee to the NG Times. Doreen O'Sullivan mentioned that she was informed the request for the letter should come from the Communications department.

Regarding the NG Times article, Doreen also noted that she had reached out to Jeff Baribeau.

2. Calendar Update

Hillary reviewed the calendar change with the Members, highlighting that the events are now categorized under "Significant Events," which is a new category. She pointed out that some items share the same color as the significant events, and the Members wanted to ensure they wouldn't be grouped together with those items.

She will reach out to Comms to confirm and clarify.

3. EDI Strategy/Workplan

The EDI/Strategy workplan was approved by Council through December 3rd. Hillary Geneau shared the new format and noted that it is a living document, updated after each meeting. Some members requested a link to the file after each meeting. T

he workplan is divided into three sections:

- 1. Embedding EDI in Municipal Policy
- 2. Dedicating EDI Resources
- 3. Establishing EDI Partnership Strategies

The creation of the matrix may take some time. Hillary recommended reviewing several key policies and will forward them to the group for consideration.

Samantha Lavitt mentioned that the only OHIP-covered centers in the region have closed, including ProPHysio at KDMH and the Winchester location. The Health, Wellness, Fitness, and Active Transportation Advisory Committee and the Accessibility Advisory Committee will need to review this information as well. Hillary Geneau will discuss this with those two Committees.

Suggestion was made to update the Welcome Packages and the Tourism "Explore NG" brochure with some inclusive information about the community and this committee. An online version is currently being created. Members would like EDI information included, especially for those renting in North Grenville. Nancy Peckford requested data on how this information reaches new residents. Hillary Geneau confirmed that the communication team is working on a digital version. Lynne Tyler pointed out that this is the right time to make any amendments.

J. Other Business

February is Black History Month and Members discussed how the advisory committee should contribute. Diane Dewing suggested using the bulletin board in the lobby to display significant notes about historical figures in North Grenville. Hillary Geneau mentioned that the Communication team is actively involved in creating posts online. She asked that any relevant information be shared with her directly.

1. Items for Next Meeting

Next meeting is 13 Feb 2025.

- KDH Delegation
- Embedding EDI in Municipal Policy, Hillary Geneau, director of Corporate Services
- EDI Fund
- New Resident Package/Welcome Package Review
- Calendar Update
- NG Times Article, Manpreet Shahi

K. Public Questions

None.

L. Adjournment

Moved By Anne Leach

Seconded By Doreen O'Sullivan

Be it resolved that:

The meeting be adjourned at 7:46 p.m.

CARRIED

	Kemptville District Hospital Policy		
Departmen	Department: ADMINISTRATION Policy Number:		
Unit:	ADMINISTRATION AND HUMAN RESORCES	Date Approved:	
Subject:	CRYSTAL CLEAR CODE OF CONDUCT	Revision Dates:	
Approval:			
	Vice President Corporate Affairs		

POLICY BACKGROUND

Crystal Gracie was an Anisinaabe kwe (Ojibway Women) and Registered Band Member of Shawanaga First Nation, Ontario. Crystal was diagnosed as a young adult with hereditary angio-edema type 3 and sarcoidosis, which contributed to complicated flare-ups of widespread body pain, and life-threatening airway compromise. Crystal self-identified as Indigenous First Nation when accessing the healthcare system. Crystal received excellent care, however she also faced multi-leveled stigma and racism at various points of healthcare access and delivery in Toronto, North Simcoe Muskoka and Parry Sound, ON. Crystal's journey onto the Spirit World (passed away), occurred on March 25, 2022, at the age of 31. Connie Foster, her mother, advocate, and nurse practitioner, spearheaded the idea to enact a code of conduct to address stigma and racism interactions. A working group with representation from North Muskoka and Parry Sound was struck to collaborate on the process and details to move this initiative forward that included First Nation engagement and support.

The Leadership of the Kemptville District Hospital have agreed to adopt and implement the **Crystal Clear** Code of Conduct. This policy stands to ensure that there is a process set in place that all healthcare services delivered and accessed under the umbrella of the Kemptville District Hospital are safe from stigma and racism. The policy accompanies a reporting process and steps set in place to address reports of stigma and racism with the foundation of the policy rooted in education. This accountability and responsibility are across the entire organization and are implemented to ensure that the understanding of the policy and expected code of conduct is **Crystal Clear**.

1.0 POLICY STATEMENT

- 1.1 Kemptville District Hospital (KDH) values diversity and the human rights of others. Furthermore, it promotes the health and dignity of the person; courteous conduct; and mutual respect, fairness, and equality.
- 1.2 KDH will continue to actively work to redress the legacy of residential schools and advance the process of Canadian reconciliation through standing in support of the 94 calls to action from the Truth and Reconciliation Commission.
- 1.3 KDH makes the following pledge:
 - "We offer our promise that we will actively seek the truth and we will share the knowledge and the good words that will help to bring our cultures, our organizations, and our communities closer together. My organization is committed to measurable progress in our Journey to Reconciliation."
- 1.4 KDH is committed to identifying, preventing, and eliminating systemic racism and stigma in all aspects of the relationships and interactions between employees, physicians, volunteers, staff, board members, students, visitors, patients, and clients. This commitment will be fulfilled through leading by example in the advancement of racial

and social equity through ongoing policy development, education, and disciplinary action. KDH recognizes it is strengthened by targeted measures to identify, remove, prevent, and mitigate any systemic racism and discriminative barriers in any interaction facing specifically, but not limited to, Black, First Nation, Inuit, Metis (FNIM)¹; and People of Colour, and/or gender diverse, delivering, receiving, and/or supporting care throughout the organization.

- 1.5 Every person has the responsibility to conduct themselves in a manner that provides a safe environment free from vexatious, offensive, or disrespectful behaviour. Further, every person has the responsibility to report behaviour that may be perceived as an approach that contributes to an unsafe working and/or healing environment. It is every person's responsibility to actively work to de-stigmatize and promote equitable approaches within our organization.
- 1.6 Complaints of harassment, discrimination, and/or inappropriate conduct will be addressed promptly. If the complaint is substantiated, the person who was responsible for the behaviour may be subject to corrective training and/or disciplinary action up to and including termination of employment. Where appropriate mandatory reporting to employee's affiliated colleges, professional regulatory body. Further, reporting to the Ontario Human Rights Commission will be enacted if appropriate.
- 1.7 All employees, physicians, volunteers, staff, and students must follow the S-22 VIOLENCE AND HARASSMENT PREVENTION IN THE WORKPLACE policy, as signed off annually in Surge Learning.

1.8 Confidentiality

- 1.8.1 All complaints received pursuant to this policy shall be considered strictly confidential. Every attempt will be made to ensure that the identities of the complainant and the alleged harasser will be held in complete confidence and will remain anonymous. Disclosure may happen when necessary to aid in an investigation, required due to legal requirements, or to take disciplinary and/or corrective action. The parties of the complainant are also expected to maintain confidentiality. Failure to maintain confidentiality by a party or parties of the complaint may also be subject to disciplinary and/or corrective action.
- 1.8.2 All employees, physicians, volunteers, staff, and students must follow the HR 2III-A-09 Confidentiality of Personal and Hospital Related Information Policy as signed in the HR Form 217 Pledge of Confidentiality.
- This policy establishes the Equity, Diversity, Inclusion (EDI) & Ethics Committee which shall serve as a resource to health service providers, patients, families, and members of the community when issues of equity and/or ethical issues arise.

2.0 **DEFINITIONS**

Extensive definitions can be found in 8.0 Glossary of Terms to provide a fuller understanding of antistigma and anti-racism terms.

Additional definitions include:

2.1 Workplace Harassment

Workplace Harassment is disrespectful and inappropriate behavior defined by the Occupational Health and Safety Act (OHSA), as:

- (a) engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonable to be known to be unwelcome, or
- (b) workplace sexual harassment.

2.2 Workplace Sexual Harassment

- (a) engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome, or
- (b) making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

2.3 Harassment/Discrimination under the Human Rights Code

The *Code* [Ontario Human Rights Code] states that every person has a right to equal treatment with respect to employment without discrimination or harassment because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, record of offences, marital status, family status or disability.

2.4 Bullying

Bullying is a form of harassing behavior defined as; the repeated and continuous, malicious mistreatment of one individual by another that is generally associated with a power imbalance and the behaviour is driven by the offender's desire to control their target.

2.5 <u>Inappropriate Unwanted Touch</u>

Inappropriate touching may not always be "sexual". Many individuals are uncomfortable with touch from anyone other than close family contacts. Unwanted touch can include, but is not limited to, the following examples: hugs, neck massages, slaps on the back even in jest.

2.6 Vexatious

Merriam-Webster Dictionary defines *vexatious* as "causing vexation; distressing" and/or "intended to harass."

2.7 Stigma

"A complex and powerful social process of labeling, othering, stereotyping and devaluation that leads to status loss and discrimination" ([1] Nyblade, L., Stockton, M. A., Giger, K., Bond, V., Ekstrand, M. L., McLean, R., Mitchell, E. M. H., Nelson, L. E., Sapag, J.C., Siraprapasiri, T., Turan, J. & Wouters, E. (2019). Stigma in health facilities: why it matters and how we can change it. *BMC Medicine*, 17(25), 1-15.)

3.0 EQUIPMENT

N/A

4.0 PROCEDURE

4.1 Employees, Physicians, Volunteers, Students, Senior Leadership, and Board Members

- 4.1.1 All staff, physicians, volunteers, students, senior leadership, and board members will be required to complete the following annual Surge Learning Modules:
 - a) Cultural Competence and Indigenous Cultural Safety Training (5 Modules)
 - b) Privacy and Confidentiality Policy and Training
 - c) Crystal Clear Code of Conduct Policy
 - d) Prevention of Workplace Violence and Harassment Policy and Training
 - e) Workplace Bullying (6 Modules)
- 4.2 Every situation is unique, but whenever possible, informal resolution of an issue as soon as possible is advisable.
- 4.3 Our expectation is that all employees, physicians, volunteers, students, visitors, patients, clients, senior leadership, and board members accept constructive criticism with humility and an approach that opens them to education opportunities to broaden understanding of more appropriate approaches and conduct. We are all committed to being life-long learners and must be willing to enter discussions about barriers to equity (i.e. racism and stigma) in the workplace as our collective responsibly to ensuring workplace safety and client-centred care.
- Employees are encouraged to follow the process as outlined to try to resolve a problem under policy. (Note that the Employee and Family Assistance Program (EFAP), your union (if applicable), your supervisor, **KDH Equity & Ethics Committee**, or the Human Resources Department may also be helpful in facilitating resolution of the problem).

4.5 Informal Process – Level 1 to 4

Refer to Respect in the Workplace – S-22 VIOLENCE AND HARASSMENT PREVENTION IN THE WORKPLACE policy and I-22 COMPLAINT PROCESS.

4.5.1 <u>Informal Process – Level 1</u>

Be proactive. Try to resolve the problem on your own. Do not wait until a recurrence or assume the problem will go away. If the situation is appropriate and you feel safe to do so, approach the individual who made you feel uncomfortable; explain how it affected you, in confidence. Often, an individual may not be aware that their behaviour is offensive and/or creating an unsafe work environment, and most will change the behaviour once they are aware of the problem. If another individual approaches you regarding an issue of respect; careful listening, respectful discussion, humility, and honesty will often lead to a resolution.

4.5.2 Informal Process – Level 2

If you have attempted to resolve the problem without success or if you are not comfortable addressing the problem on your own, discuss the problem and possible solutions with your immediate supervisor. Confidentiality considerations should be discussed and agreed upon.

4.5.3 <u>Informal Process – Level 3</u>

If for any reason you are unable to discuss the problem with your immediate supervisor, or the unwanted behaviour involves your supervisor, other avenues are available to help you resolve the problem. You may contact another appropriate level of management up to and including Senior Leadership. The Importance of confidentiality will be addressed.

4.5.4 <u>Informal Process – Level 4</u>

If you have attempted to resolve the problem and it has failed to correct the situation, then assistance through Human Resources, **KDH Equity & Ethics Committee**, the EFAP and/or your union may be necessary. Confidentiality will be reinforced with all individuals involved and the potential to elevate to a formal process will be discussed.

4.6 Formal Process

- 4.6.1 Should an employee believe they are the subject of stigmatizing and/or discriminating behaviour including prejudice and overt bias, stereotyping, racial/stigmatizing profiling, and/or subtle forms of stigmatizing discrimination (i.e "microagression") it is important, but not mandatory, that they utilize the Informal Process (4.5), to make it known to that person, either verbally or in writing, that such behaviour is not acceptable. However, confronting the alleged harasser is not legally required, and failure to do so will not be construed as diminishing the credibility of the complaint.
- 4.6.2 No one shall be subject to disciplinary action for reporting or giving evidence of alleged stigmatizing and/or discriminating behaviour provided that the report is made in good faith.
- 4.6.3 If the alleged stigmatizing and/or discriminating behaviour is such that an employee is fearful of reprisals from the alleged harasser, or the suspected stigmatizing and/or discriminate behaviour has made them so uncomfortable that they do not wish to have any further contact with the alleged harasser, they have the option to report this complaint to their immediate supervisor/manager, **KDH Equity & Ethics Committee**, or Human Resources Department. If the alleged harassment involves a member of the Human Resources Department, then the individual has the right to file their complaint with the Chief Executive Officer's office, and **KDH Equity & Ethics Committee** directly. Employees may, at any time, file a complaint directly to the Ontario Human Rights Tribunal should the alleged harassing behaviour meet the definition of discrimination.
- 4.6.4 When a complaint is lodged with an immediate supervisor/manager, the immediate supervisor/manager must inform the **KDH Equity & Ethics Committee**, and Head of Human Resource, or delegate, of such complaint so that the Manager of Human Resources, or delegate, may cause an investigation to be initiated.
- 4.6.5 The complainant will be advised by the Head of Human Resources, or delegate, of all their options and the time limits that may apply.
- 4.6.6 The complainant is strongly advised to make and retain written notes of the event(s) upon which the complaint is based. These notes should include a record of what happen, dates, times, location, and names of witnesses if available, and should be provided to the Head of Human Resources, or delegate, upon the disclosure of their complaint. The KDH Stigma and/or Discrimination Complaint Form (HR Form X.X) should be used as a tool to document a complaint. Further, an incident report should be input in the RIMS incident tracking system, and categorized as harassment in the form of stigmatization and/or racism to track appropriately.
- 4.6.7 All complaints will be investigated in an unbiased, impartial, and timely manner. KDH, at its discretion (in consultation with KDH Equity& Ethics Committee), may secure the services of a qualified third party to investigate the complaint in cases in which the appearance of prejudice may cause concern. All participants in

- the complaint process will be advised of the identity of the third party secured and their qualifications.
- 4.6.8 The investigation will include interviewing the complainant, the alleged harasser, and any other persons who may provide information relevant to the complaint. KDH is committed to working with the complainant and the **KDH Equity & Ethics Committee** to include culturally appropriate methods of conflict resolution where appropriate (e.g., healing circle). In all but exceptional circumstances, investigations will be initiated immediately and concluded within sixty (30) calendar days. If the investigation is going to extend beyond thirty (30) calendar days, the complainant will be notified.
- 4.6.9 When an employee is accused, they shall be informed of the complaint by the Head of Human Resources, or delegate and shall be entitled to a copy of the complaint and/or accusations. Due to the sensitive nature of complaints some information may need to be redacted.
- 4.6.10 KDH's Crystal Clear Code of Conduct policy must be explained clearly to the alleged harasser by the Manager of Human Resources, or delegate, and informed that the consequences of infringement of the policy may include disciplinary action, up to and including termination of employment depending on the severity of the situation and circumstances.
- 4.6.11 When the investigative process is complete, the complainant and the alleged harasser will be informed via each having an individual outcome meeting and writing of the outcome of the investigation, the recommended resolution of the complaint as well as any corrective action taken by the employer.
- 4.6.12 If the complainant finds the resolution to be unsatisfactory, they may request the Manager Human Resources, or delegate, submit the complaint to the KDH Equity & Ethics Committee and/or Chief Executive Officer of Kemptville District Hospital for further review.
- 4.6.13 Formal complaints of harassment made to the Head of Human Resources, or delegate, are documented and stored in a separate locked file in the Human Resources Department. Should an investigation be conducted into allegations of harassment and disciplinary action is an outcome, written documentation of the disciplinary action taken will be maintained on the employee's personnel file.

4.7 Patients, Visitors, and Clients

Every situation is unique, but whenever possible, informal resolution of an issue as soon as possible is preferable.

Receiving Questions and/or Complaints

- Step 1. When a staff member receives a stigma and/or racism related <u>question</u> that is easy to answer, they should answer it. If they are unable to answer it, the staff member must report to clinical or administrative supervisor immediately. The staff member must also file an electronic incident report.
- Step 2. If a clinical or administrative member receives a stigma and/or racism related complaint that they are able to answer or address on their own, they should do so. In cases where it is determined that there may be immediate risk, the staff member must report to the clinical or administrative supervisor immediately.

- Step 3. If the staff member is unable to answer the question:
 - 3.1 Tell the patient that they will forward the complaint to the **KDH Equity** & Ethics Committee. The patient will receive acknowledgement within one business day. KDH will respond formally with the results of the investigation within 30 days.
 - 3.2 Tell the patient that they will give the question the **KDH Equity & Ethics Committee.** KDH will respond formally with decision within 30 days.
 - 3.3 Give the inquiry to the **KDH Equity & Ethics Committee** and a member of leadership.
- <u>Step 4</u>. When receiving the question or complaint the **KDH Equity & Ethics Committee** a member of leadership must:
 - 4.1 Contact the person within one business day and ask for clarification if the question or complaint is unclear;
 - 4.2 Log that the inquiry or complaint was received using the Inquiries and Complaints Log and in RIMS incident reporting system.
- <u>Step 5</u>. When responding to the question or complaint, the **KDH Equity Committee**, KDH leadership must:
 - 5.1 Write a response to the question or complaint;
 - 5.2 Circulate the response to the other members of the unit/department if required;
 - 5.3 Acknowledge the question or complaint within one business day or inform the person that the inquiry may take up to 30 days;
 - 5.4 Update the *Inquiries and Complaints Log* when the response is sent.
- 4.8 Our expectation is that all employees, physicians, volunteers, staff, visitors, patients, clients, senior leadership, and board members accept constructive criticism with humility and an approach that opens them to education opportunities to broaden understanding of more appropriate approaches and conduct with patients, visitors, and clients. We are all committed to being life-long learners and must be willing to enter discussions about racism and stigma as barriers to care as our own responsibly to ensuring patient/client/visitor safety and patient/client-centred care.
 - 4.8.1 Additional considerations and processes for formal questions/complaints from patients, visitors, and clients:

4.8.1.1

Should a patient, visitor, or client feel they are the subject of stigmatizing and/or racist behaviour including prejudice and overt bias, stereotyping, racial/stigmatizing profiling, and/or subtle forms of racial/stigmatizing discrimination it is important, but not mandatory, that they speak with a staff member on their care team to make it known to that person, either verbally or in writing, that such behaviour is not acceptable. However, confronting the alleged harasser is not legally required, and failure to do so will not be construed as diminishing the credibility of the complaint.

4.8.1.2

No patients, visitors, or clients will be subject to any repercussions to the care that is being delivered. A patient, client, or visitor may request a change in care provider/team if they feel the relationship with the harasser is compromising care. The KDH Department Team and Chief Nursing Executive (and/or delegate) will work with the individual and/or individual's substitute decision maker submitting the request to adjust care team within reasonable availability of staffing capacity, space, etc. Further, no employees, physicians, volunteers, staff, visitors, patients, clients, senior leadership, and/or board members shall be subject to disciplinary action for giving evidence of alleged stigmatizing and/or racist behaviour provided that the report is made in good faith.

4.8.1.3

If the alleged stigmatizing and/or racist behaviour is such that a patient, visitors and/or client is fearful of reprisals from the alleged harasser, or the suspected stigmatizing and/or racist behaviour has made them so uncomfortable that they do not wish to have any further contact with the alleged harasser, they have the option to report this complaint to the Chief Executive Officer, and **KDH Equity & Ethics Committee.** Patients, visitors, or clients may, at any time, file a complaint directly to the Ontario Human Rights Tribunal should the alleged harassing behaviour meet the definition of discrimination.

Patients, visitors, or clients may also, at any time, file a complaint directly to the Patient Ombudsman: https://patientombudsman.ca/

For FNIM-specific concerns an Early Resolution Indigenous Specialist is available through the Patient Ombudsman program:

https://patientombudsman.ca/Indigenous-Engagement/Service-for-Indigenous-patients

4.8.1.4

When a complaint is lodged with an immediate supervisor/manager, the immediate supervisor/manager must inform the Chief Executive Officer, KDH Equity Committee, and Head of Human Resources, or delegate, of such complaint so that the Manager of Human Resources, or delegate, may cause an investigation to be initiated.

4.8.1.5

The complainant will be advised by the Head of Human Resource, or delegate, of all their options and the time limits that may apply.

4.8.1.6

The complainant is strongly advised to make and retain written notes of the event(s) upon which the complaint is based. These notes should include a record of what happen, dates, times, location, and names of witnesses if available, and should be provided to the Head of Human Resources, or delegate, upon the disclosure of their complaint. Human Resources Stigma Racism Complaint Form (HR Form X.XX) should be used as a tool to document a complaint.

4.8.1.7

All complaints will be investigated in an unbiased, impartial, and timely manner. KDH, at its discretion (in consultation with KDH Equity Committee), may secure the services of a qualified third party to investigate the complaint in cases in which the appearance of prejudice may cause concern. All participants in the complaint process will be advised of the identity of the third party secured and their qualifications.

4.8.1.8

The investigation will include interviewing the complainant, the alleged harasser, and any other persons who may provide information relevant to the complaint. KDH is committed to working with the complainant and the **KDH Equity & Ethics Committee** to include culturally appropriate methods of conflict resolution where appropriate (e.g., healing circle). In all but exceptional circumstances, investigations will be initiated immediately and concluded within sixty (60) calendar days.

4.8.1.9

When an employee, physician, volunteer, senior leadership member, or board member is named as a harasser, they shall be informed of the complaint by the Head of Human Resources, or delegate and shall be entitled to a copy of the complaint.

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When an employee, physician, volunteer, senior leadership member, or board member is named as a harasser, KDH's Crystal Clear policy must be explained clearly to the alleged harasser by the Head of Human Resources, or delegate, and informed that the consequences of infringement of the policy may include disciplinary action, up to and including termination of employment depending on the severity of the situation and circumstances.

4.8.1.11

When the investigative process is complete, the complainant and the alleged harasser will be informed in writing of the outcome of the investigation, the recommended resolution of the complaint as well as any corrective action taken by the employer.

4.8.1.12

If the complainant finds the resolution to be unsatisfactory, they may request the Sr. Manager of People Services, or delegate, submit the complaint to the Chief Executive Officer, and **KDH Equity & Ethics Committee** for their review.

4.8.1.13

Formal complaints of harassment made to the Sr. Manager of People Services, or delegate, are documented and stored in a separate locked file in the Human Resources Department. Should an investigation be conducted into allegations of harassment and disciplinary action is an outcome, written documentation of the disciplinary action taken will be maintained on the employee's personnel file.

5.0 OUTCOMES

- All patients and families, staff, physicians, visitors, students, and volunteers will have a safe care and work environment that is free from stigma or racism. They will have a formal process to follow if they have concerns relating to equity, stigma, and/or racism.
- All staff, physicians, students, and volunteers will have annual mandatory education on cultural safety and be required to sign off annually on the Crystal Clear Code of Conduct Policy.

6.0 REFERENCES

6.1 Canadian Race Relations Foundation. Glossary of Terms. https://www.crrf-fcrr.ca/en/resources/glossary-a-terms-en-gb-1

- 6.2 College of Nurses of Ontario (2019). Practice Standard: Code of Conduct. https://www.cno.org/globalassets/docs/prac/49040 code-of-conduct.pdf
- 6.3 College of Physicians and Surgeons (2023). Respect for Human Rights. https://www.cpso.on.ca/About/Privacy,-Accessibility-Human-Rights-Codes/Respect-for-Human-Rights
- 6.4 Gunn, B.L. (unknown). Ignored to Death: Systemic Racism in the Canadian Healthcare System. University of Manitoba. https://www.nourishleadership.ca/resources-1/2021/4/9/ignored-to-death-systemic-racism-in-the-canadian-healthcare-system
- 6.5 Human Rights Code, R.S.O. 1990, c.H.19
- 6.6 Merriam-Webster Online Dictionary.
- 6.7 Occupational Health and Safety Act, R.S.O. 1990, c.O.1
- Ontario Health (2022). Ontario Health's Equity, Inclusion, Diversity and Anti-racism Framework. https://www.ontariohealth.ca/sites/ontariohealth/files/2020-12/Equity%20Framework.pdf
- 6.9 Ontario Health (2023). Annual Business Plan. https://www.ontariohealth.ca/sites/ontariohealth/files/2022-05/OHBusinessPlan22_23.pdf
- 6.10 Ontario Human Rights Commission (2009). Policy and guidelines on racism and racial discrimination. https://www3.ohrc.on.ca/sites/default/files/attachments/Policy_and_guidelines_on_racism_and_racial_discrimination.pdf
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- 6.12 Truth and Reconciliation Commission of Canada (2015). Truth and Reconciliation Commission of Canada: Calls to Action. https://publications.gc.ca/collections/collection_2015/trc/IR4-8-2015-eng.pdf
- 6.13 Vancouver Coastal Health (2018). Indigenous Cultural Safety Policy. https://www.vch.ca/sites/default/files/import/documents/Indigenous-cultural-safety-policy-booklet.pdf

7.0 RELATED POLICIES AND DOCUMENTS

- 7.1 HR 2III-A-09 Confidentiality of Personal and Hospital Related Information Policy
- 7.2 HR Form 217 Pledge of Confidentiality
- 7.3 I-22 Complaint policy- general
- 7.4 S-22 Violence and Harassment prevention in the workplace policy

8.0 GLOSSARY OF TERMS

Adapted from Canadian Race Relations Foundation Glossary of Terms https://www.crrf-fcrr.ca/en/resources/glossary-a-terms-en-gb-1

Ableism may be conscious or unconscious, and may be embedded in institutions, system or the broader culture of a society. It can limit the opportunities of persons with disabili and reduce their inclusion in the life of their communities. Aboriginal Peoples The descendants of the original inhabitants of North America. "Aboriginal Peoples" car used to collectively describe three groups recognized in the Constitution Act, 1982: First Nation/Indians, Inuit, and Métis". These are separate peoples with unique histories, languages, cultural practices, spiritual beliefs, and political goals. The word "Aboriginal is an umbrella term for all three peoples, and is not interchangeable with "First Nations" but can be used interchangeably with "Indigenous peoples", a collective name for the original peoples of North America and their descendants. It should also not be used whe referring to only one or two of the three recognized groups. Aboriginal Rights Aboriginal Rights Aboriginal Rights Aboriginal Rights refer to practices, traditions and customs that distinguish the unique culture of each First Nation and were practiced prior to European contact; rights that Aboriginal peoples of Canada hold as a result of long-standing ancestral use and occupancy of the land. Examples include the right to hunt, trap, and fish on ancestral Aboriginal rights will vary from group to group depending on the customs, practices, at traditions that have formed their distinctive cultures. Aboriginal rights are protected une s.35 of the Constitution Act, 1982. Aboriginal Self-Government Aboriginal Self-government is the formal structure through which communities may control the administration of their people, land, resources, and related programs and policies, through agreements with federal and provincial governments. Self-government agreements address: the structure and accountability of Aboriginal governments to woi in partnership with other governments and the private sector to promote economic development and improve social reliatio		
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legislation.	Adverse Impact	affect groups such as visible minorities and women. Though a practice may appear neutral,
An active effort to improve the employment or educational opportunities of members of minority groups and women through explicit actions, policies or programs. See "Employment Equity"	Affirmative Action	

<u>Ageism</u>	Ageism refers to two concepts: a socially constructed way of thinking about older persons based on negative attitudes and stereotypes about aging and a tendency to structure society based on an assumption that everyone is young, thereby failing to respond appropriately to the real needs of older persons. Ageism also includes discrimination that is more systemic in nature, such as in the design and implementation of services, programs and
	facilities. Age discrimination involves treating persons in an unequal fashion due to age in a way that is contrary to human rights law.
Ally	A member of a different group who works to end a form of discrimination for a particular individual or designated group.
Ancestry	A line of people from whom one is descended; family or ethnic descent.
Anti-Black Racism	Policies and practices rooted in Canadian institutions such as, education, health care, and justice that mirror and reinforce beliefs, attitudes, prejudice, stereotyping and/or discrimination towards people of African descent.
Anti-Oppression	Strategies, theories, and actions that challenge social and historical inequalities/injustices that have become part of our systems and institutions and allow certain groups to dominate over others.
Anti-Racism	An active and consistent process of change to eliminate individual, institutional and systemic racism.
Anti-Racist Education	Anti-racist education is based in the notion of race and racial discrimination as being embedded within the policies and practices of institutional structures. Its goal is to aid students to understand the nature and characteristics of these discriminatory barriers, and to develop work to dismantle them.
Antisemitism	Antisemitism is a certain perception of Jews, which may be expressed as hatred or blame. Rhetorical and physical manifestations of antisemitism are directed toward Jewish or non-Jewish individuals and/or their property, toward Jewish community institutions and religious facilities. The IHRA definition provides examples, which may serve as illustrations, found <a "white"="" africa="" africans="" allowed="" and="" apartheid"="" at="" black="" blacks,="" citizens="" control="" dominate,="" emphasizing="" enjoy="" enriching="" expense.="" government,="" grand="" href="https://examples.com/here-blanks-new-mailto-blanks-new-</td></tr><tr><td>Apartheid</td><td>An Afrikaans word created to describe the South African system of institutionalized segregation to maintain white domination. From the 1960's to 1991, a plan of " implemented,="" in="" many="" of="" official="" only="" oppress,="" order="" other="" participate="" police="" policy="" privileges.<="" repression.="" separated="" separation="" so-called="" south="" state="" td="" territorial="" the="" their="" to="" vote="" was="" were="" while="" white="" whites="">
<u>Attitude</u>	An individual's state of mind which makes them react in certain ways towards social events or objects; a consistent pattern of thoughts, beliefs, emotions, and reactions.
Band	A community of status Indians recognized by the federal government under the Indian Act. There are over 600 recognized Indian bands in Canada. Bands often have land set apart for their collective use (see "Reserve"). Each band has its own governing council, usually consisting of a chief and several councillors. The members of a band share common values, traditions, and practices rooted in their ancestral heritage. Today, many Indian bands prefer to use the word "First Nation" to describe their communities.
<u>Barrier</u>	An overt or covert obstacle which must be overcome for equality and progress to be possible.

Bias	A subjective opinion, preference, prejudice, or inclination, often formed without reasonable justification, which influences the ability of an individuals or group to evaluate a particular situation objectively or accurately. See "Reasonable apprehension of bias"
<u>Bigot</u>	Someone who is intolerantly devoted to their biased opinion, prejudices or beliefs towards people with perceived differences.
<u>Bilingualism</u>	Refers to an official policy of Canada, with two official languages (English and French). The ability to utilize two languages with equal fluency.
<u>Bill C-31</u>	The pre-legislation name of the 1985 Act to Amend the Indian Act. This Act eliminated certain discriminatory provisions of the Indian Act. The Bill had three major goals: to address gender discrimination of the Indian Act, to restore Indian status to those who had been forcibly enfranchised due to previous discriminatory provisions, and to allow bands to control their own band membership as a step towards self-government.
Black/African Canadians	People of African descent and those who define themselves as such, who are now residents/citizens of Canada.
Bona Fide Occupational Requirement	A workplace prerequisite that is directly related to the requirements of a specific job and which employers may consider when making decisions on the hiring and retention of employees.
<u>Censorship</u>	The act of implementing a policy or program designed to suppress, either in whole or in part, the production of, or access to, information, such as sources, literature, the performing arts, music, theatre/movies, letters, documents, or ideologies which are considered unacceptable or dangerous for political, moral, or religious reasons.
<u>Classism</u>	A prejudice against or in favor of people belonging to a particular social class, resulting in differential treatment.
<u>Colonialism</u>	The policy or practice of acquiring full or partial political control over another country, occupying it with settlers, and exploiting it economically. In the late 15 th century, the British and French explored, fought over, and colonized places within North America which constitutes present day Canada.
<u>Colourism</u>	A prejudice or discrimination against individuals with a dark skin tone, typically among people of the same ethnic or racial group; a form of oppression that is expressed through the differential treatment of individuals and groups based on skin color. Typically, favoritism is demonstrated toward those of lighter complexions while those of darker complexions experience rejection and mistreatment.
Conciliation	An informal communications process aimed at getting two or more parties to establish meaningful dialogue, narrow down issues in dispute, and suggest cooperative ways of resolving conflict.
Convention Refugees	At the 1951 United Nations Convention, a single definition of the term "refugee" was determined and agreed upon. A convention refugee is defined as "Someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion." See Geneva Convention Relating to the Status of Refugees, 28 July, 1951, and Protocol signed at New York 31 January 1967
Creed	A professed system and confession of faith, including both beliefs and observances or worship. A belief in a god or gods or a single supreme being or deity is not a requisite.

Cultural Assimilation	The full adoption by an individual or group of the culture, values and patterns of a different social, religious, linguistic or national ethos, resulting in the diminution or elimination of attitudinal and behavioural characteristics of the original individual or group. Can be voluntary or forced.
Cultural Group	Members of a group having the same beliefs, behavioural norms, values, language, ways of thinking about and viewing the world.
Cultural Racism	Portrayal of Aboriginals, Blacks, people of colour and different ethnicities in the media, school texts, literature as inherently "inferior", "savage", "bad", "primitive". The premise by a host society that devalues and stereotypes minority populations.
Culture	The mix of ideas, beliefs, values, behavioural and social norms, knowledge and traditions held by a group of individuals who share a historical, geographic, religious, racial, linguistic, ethnic and/ or social context,. This mix is passed on from one generation to another, resulting in a set of expectations for appropriate behaviour in seemingly similar contexts.
Designated Groups	Social groups whose individual members have been historically denied equal access to employment, education, social services, housing, etc. because of membership in the group. In the Employment Equity Act, the four designated groups are: women, aboriginal peoples, persons with disabilities, and members of visible minorities.
<u>Discrimination</u>	The denial of equal treatment and opportunity to individuals or groups because of personal characteristics and membership in specific groups, with respect to education, accommodation, health care, employment, access to services, goods, and facilities. This behaviour results from distinguishing people on that basis without regard to individual merit, resulting in unequal outcomes for persons who are perceived as different. Differential treatment that may occur on the basis of any of the protected grounds enumerated in human rights law.
<u>Diversity</u>	A term used to encompass the acceptance and respect of various dimensions including race, gender, sexual orientation, ethnicity, socio-economic status, religious beliefs, age, physical abilities, political beliefs, or other ideologies.
Dominant Group	Defined as the group that controls the major elements of a society's norms and values. The dominant group is often but not always the majority.
Emigration	The process of leaving one's home or country in order to settle in another place or country, for personal, economic, political, religious or social reasons.
Employment Equity	A program designed to remove barriers to equality in employment for reasons unrelated to ability, by identifying and eliminating discriminatory policies and practices, remedying the effects of past discrimination, and ensuring appropriate representation of the designated groups (women; Aboriginal peoples; persons with disabilities; and visible minorities). Employment Equity can be used as an active effort to improve the employment or educational opportunities of members of minority groups and women through explicit actions, policies or programs.
Environmental Racism	A systemic form of racism in which toxic wastes are introduced into or near marginalized communities. People of colour, indigenous peoples, working class, and poor communities suffer disproportionately from environmental hazards and the location of dangerous, toxic facilities such as incinerators and toxic waste dumps. Pollution of lands, air and waterways, often causes chronic illness to the inhabitants and change in their lifestyle.
Equal Opportunity Program	In the United States and other jurisdictions, an explicit set of policies, guidelines and actions devised to eradicate discriminatory practices and to ensure access to and full

	participation in educational and employment opportunities, housing, health care, services, goods and facilities available to the general community. In Canada these goals are addressed through national and provincial human rights codes, the Employment Equity Act and the Charter of Rights and Freedoms.
Equity	A condition or state of fair, inclusive, and respectful treatment of all people. Equity does not mean treating people the same without regard for individual differences.
Ethnic Group	Refers to a group of people having a common heritage or ancestry, or a shared historical past, often with identifiable physical, cultural, linguistic and/or religious characteristics.
Ethnicity	The multiplicity of beliefs, behaviours and traditions held in common by a group of people bound by particular linguistic, historical, geographical, religious and/or racial homogeneity. Ethnic diversity is the variation of such groups and the presence of a number of ethnic groups within one society or nation.
Ethnocentrism	The tendency to view others using one's own group and customs as the standard for judgment, and the tendency to see one's group and customs as the best.

<u>Eurocentrism</u>	Presupposes the supremacy of Western civilization, specifically Europe and Europeans, in world culture. Eurocentrism centres history according to European and Western perceptions and experiences.
First Nation	A term that came into common usage in the 1980's, to replace the term "Indian," which some people find offensive – it has no legal definition. "First Nation peoples" or "First Nations" refers to the Indian peoples of Canada, both status and non-status, who are descendants of the original inhabitants of Canada who lived here for millennia before explorers arrived from Europe, and can also refer to a community of people as a replacement term for "band" (see "Band"). First Nation peoples are one of the distinct cultural groups of Aboriginal peoples in Canada. There are 52 First Nations cultures in Canada, and more than 50 languages. The term "First Nation" is not interchangeable with "Aboriginal," because it does not include Métis or Inuit.
Genocide	The United Nations defines genocide as any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group: killing members of the group; causing serious bodily or mental harm to members of the group; deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; imposing measures intended to prevent births within the group; forcibly transferring children of the group to another group.
<u>Harassment</u>	Harassment is a form of discrimination. It involves any unwanted physical or verbal behaviour that offends or humiliates you, whether subtle or overt. Generally, harassment is a behaviour that persists over time. Serious one-time incidents can also sometimes be considered harassment.
Hate Crime	The Criminal Code of Canada defines Hate Crime as an offence committed to intimidate, harm or terrify not only a person, but an entire group of people to which the victim belongs. Crimes are motivated by hate, prejudice or bias on the basis of grounds such as colour, race, religion, ethnic origin or sexual orientation, gender identity or expression, or mental or physical disability. In such cases, the sentencing principles of the Code (section 718.2) can be enforced to impose an increased sentence. As noted in a separate entry, Hate Propaganda offenses are covered under specific sections of the Code.

Hate Group	An organization that – based on its official statements or principles, the statements of its leaders, or its activities – has beliefs or practices that attack or malign an entire class of people, typically for their immutable characteristics. These organizations spread propaganda intended to incite hatred toward certain groups of people; advocate violence against certain groups on the basis of sexual orientation, race, colour, religion etc.; claim that their identity (racial, religious etc.) is 'superior' to that of other people; do not value the human rights of other people.
Hate Propaganda	Negative ideologies and beliefs transmitted in written, verbal, or electronic form in order to create, promote, perpetuate, or exacerbate antagonistic, hateful, and belligerent attitudes and action or contempt against a specific group or groups of people. The Criminal Code defines Hate Propaganda as "any writing, sign or visible representation that advocates or promotes genocide or the communication of which by any person would constitute an offence under section 319."
<u>Holocaust</u>	With a capital "H", this term is generally understood to refer to the state-sponsored genocide of 6 million Jewish men, women and children by the Nazis and their collaborators between 1933 and 1945. International Holocaust Memorial Day honours the memory of these victims as well as five million other people, including Roma and homosexuals. With a lowercase "h", a holocaust is the destruction or slaughter on a mass scale, especially caused by fire or nuclear war.
Holodomor (Ukrainian: to kill by starvation)	The term given to the man-made famine in Ukraine (1932-1933) that resulted in the deaths of as many as 10 million Ukrainians from starvation and related birth defects. The Holodomor is recognized as an act of genocide by the government of Canada.
<u>Homophobia</u>	Encompasses a range of negative attitudes and feelings toward homosexuality or people who are identified or perceived as being lesbian, gay, bisexual or transgender (LGBTQ2S). It has been defined as contempt, prejudice, aversion, hatred or antipathy. Homophobia is observable in critical and hostile behavior such as discrimination and violence
Human Rights	In Canada, human rights are protected by federal, provincial and territorial laws. The Canadian Human Rights Act and provincial/territorial human rights codes protect individuals from discrimination and harassment in employment, accommodation and the provision of services. The <i>Canadian Charter of Rights and Freedoms</i> protects every Canadian's right to be treated equally under the law. The Charter guarantees fundamental freedoms such as (a) freedom of conscience and religion; freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication; freedom of peaceful assembly; and freedom of association.
<u>Immigrant</u>	One who moves from their native country to another with the intention of settling permanently for the purpose of forging a better life or for better opportunities. This may be for a variety of personal, political, religious, social or economic reasons.
Inclusion	The extent to which diverse members of a group (society/organization) feel valued and respected.
Inclusive Education	Education that is based on the principles of acceptance and inclusion of all students. Students see themselves reflected in their curriculum, their physical surroundings, and the broader environment, in which diversity is honoured and all individuals are respected.

Inclusive Language	The deliberate selection of vocabulary that avoids explicit or implicit exclusion of particular groups and that avoids the use of false generic terms, usually with reference to gender.
Indian	A term historically used to identify and erase the differences among the Indigenous peoples of South, Central, and North America. The term "Indian" has been recognized as derogatory and incorrect in its history and usage, but its use in Canada persists because of the continuing legislated definitions of "Indian" contained in The Indian Act (1876), and, more recently, in the enshrinement of Aboriginal Rights under the Canadian Constitution Act of 1982. While some Indigenous people in Canada do self-identify as "Indian," the use of the term "Indian" by non-Indigenous people is generally confined to discussions of legislative definitions and concerns. Three categories apply to Indians in Canada: status Indians, non-status Indians, and treaty Indians. A Status (or Registered) Indian is the legal identity of a First Nations person who is registered as an "Indian" under the Indian Act. Treaty Indians are persons who are registered under the Indian Act and can prove descent from a Band that signed a treaty. A non-status Indian is someone who considers themselves to be a First Nations person, or a member of a First Nation, but who the Government of Canada does not recognize as an Indian under the Indian Act, either because they are unable to prove their Indian status or have lost their status rights. Non-status Indians do not receive
Indian Act	the same rights and benefits conferred upon status Indians under the Indian Act. First passed in 1876 and amended several times since, the Indian Act governs the federal government's legal and political relationship with status Indians across Canada, setting out federal government obligations and regulating the management of reserve lands, Indian monies, and other resources. The Indian Act also currently requires the Minister of Aboriginal Affairs and Northern Development to approve or disallow by-laws enacted in First Nations communities.
<u>Indigenous</u>	First used in the 1970's, when Aboriginal peoples worldwide were fighting for representation at the U.N., this term is now frequently used by academics and in international contexts (e.g., the United Nations Declaration of the Rights of Indigenous Peoples). Indigenous is understood to mean the communities, peoples, and nations that have a historical continuity with pre-invasion, pre-settler, or precolonial societies that developed on their territories, as distinct from the other societies now prevailing on those territories (or parts of them). Can be used more or less interchangeably with "Aboriginal," except when referring specifically to a Canadian legal context, in which case "Aboriginal" is preferred, as it is the term used in the Constitution.
Individual Racism	Individual Racism is structured by an ideology (set of ideas, values and beliefs) that frames one's negative attitudes towards others; and is reflected in the willful, conscious/unconscious, direct/indirect, or intentional/unintentional words or actions of individuals. This is one of the three levels that make up Systemic Racism .
Institutional Racism	Institutional Racism exists in organizations or institutions where the established rules, policies, and regulations are both informed by, and inform, the norms, values, and principles of institutions. These in turn, systematically produce differential treatment of, or discriminatory practices towards various groups based on race. It is enacted by individuals within organizations, who because of their socialization, training and allegiance to the organization abide by and enforce these rules, policies and regulations. It essentially maintains a system of social control that favours the dominant groups in society (status quo). This is one of the three levels that make up Systemic Racism .

<u>Institutions</u>	Institutions, according to Samuel P. Huntington, are "stable, valued, recurring patterns of behavior". Further, institutions can refer to mechanisms of social order e.g. government, business, unions, schools, churches, courts, police), which govern the behaviour of a set of individuals within a given community.
<u>Integration</u>	The process of amalgamating diverse groups within a single social context, usually applied to inter-racial interaction in housing, education, political and socioeconomic spheres or activity. People who are integrated still retain their cultural identity. Integration is the implemented policy that ends segregation.
Intercultural Communication	Information exchange wherein the sender and receiver are of different cultural, ethnic or linguistic backgrounds.
<u>Interculturalism</u>	In the province of Quebec, an alternative to multiculturalism. Interculturalism accepts the primacy of francophone culture and then works to integrate other minorities into a common public culture, while respecting their diversity.
Internalized Dominance	Where individuals are unconsciously conditioned to believe they are superior or inferior in status, affecting social interaction. Internalized domination or dominance is likely to involve feelings of superiority, normalcy and self-righteousness, together with guilt, fear, projection and denial of demonstrated inequity.
Internalized Oppression	Patterns of mistreatment of racialized groups and acceptance of the negative messages of the dominant group become established in their cultures and members assume roles as victims.
<u>Intersectionality</u>	The experience of the interconnected nature of ethnicity, race, creed, gender, socio- economic position etc., (cultural, institutional and social), and the way they are imbedded within existing systems and define how one is valued.
<u>Intolerance</u>	Bigotry or narrow mindedness which results in refusal to respect or acknowledge persons of different backgrounds.
<u>Inuit</u>	A circumpolar people who live primarily in four regions of Canada: the Nunavut Territory, Nunavik (northern Quebec), Nunatsiavut (Newfoundland and Labrador), and the Inuvialuit Settlement Region (western Arctic). "Inuit" means "people" in the Inuit language of Inuktitut; when referring to one person use the word "Inuk," which means "person." Inuit are one of the ethno-cultural groups comprising the Aboriginal peoples of Canada. The Inuit are not to be confused with the Innu, who are a First Nations group living in southeastern Quebec and southern Labrador.
<u>Islamophobia</u>	Fear, hatred of, or prejudice against the Islamic religion or Muslims.
Lateral Violence	Displaced violence directed against one's peers rather than adversaries. This construct is one way of explaining minority-on-minority violence in developed nations. It is a cycle of abuse and its roots lie in factors such as: colonisation, oppression, intergenerational trauma and the ongoing experiences of racism and discrimination. See: Vertical Violence
<u>Majority</u>	The numerically largest group within a society. The majority may be (but is not necessarily) the dominant group that successfully shapes or controls other groups through social, economic, cultural, political, military or religious power.

<u>Marginalization</u>	With reference to race and culture, the experience of persons outside the dominant group who face barriers to full and equal participating members of society. Refers also to the process of being "left out" of or silenced in a social group.
<u>Mediation</u>	The intervention into a dispute or negotiation by an acceptable impartial and neutral third party who has no authoritative decision-making power, to facilitate voluntarily and acceptable settlement of issues in dispute between parties. In a race relations context, its aim is to reach a signed agreement setting out specific steps to be taken by each side to restore social harmony and peaceful relations.
Métis	The Métis people originated in the 1700's when French and Scottish fur traders married Aboriginal women, such as the Cree, and Anishinabe (Ojibway). Their descendants formed a distinct culture, collective consciousness and nationhood in the Northwest. Distinct Métis communities developed along the fur trade routes. Today, it is sometimes used as a generic term to describe people of mixed European and Aboriginal ancestry, but in a legal context, it only refers to descendants of specific historic communities (e.g., the inhabitants of the Red River Colony in today's Manitoba) or specific groups (e.g., the Paddle Prairie Métis Settlement, a contemporary community in today's Alberta) or the people who received land grants or scrip from Canadian government. The term is sometimes contentious, as each Métis organization defines membership using different terms. Canada has the only constitution in the world that recognizes a mixed-race culture, the Métis as a rights-bearing Aboriginal people. The Métis National Council website defines Métis as "a person who self-identifies as Métis, is distinct from other Aboriginal Peoples, is of historic Métis Nation ancestry and who is accepted by the Métis Nation."
Minority Group	Refers to a group of people within a society that is either small in numbers and may have little or no access to social, economic, political, or religious power. Minority rights are protected by the Canadian Charter of Rights and Freedoms, the Human Rights Acts and Codes, and the UN Convention on the Rights of Minorities.
Multicultural/Multiracial Education	A broad term which may refer to a set of structured learning activities and curricula designed to create and enhance understanding of and respect for cultural diversity. The term often connotes inclusion of racial, ethnic, religious, linguistic, national, international, and political diversity, and is also inclusive of the culture, heritage, history, beliefs and values of the various peoples within a pluralistic society.
Multiculturalism	Federal policy announced in 1971 and enshrined in law in the Multiculturalism Act of 1988. It promotes the acknowledgment and respect of diverse ethnicities, cultures, races, religious, and supports the freedom of these groups to preserve their heritage "while working to achieve the equality of all Canadians."
<u>Native</u>	A general term for a person originating from a particular place. This term is somewhat ambiguous because many people of immigrant ancestry who have been born in North America claim to be "native" Canadians or Americans. The capitalization of the word is used to refer to the descendants of Indigenous peoples, but does not denote a specific Aboriginal identity (such as First Nations, Métis, or Inuit). In reference to Aboriginal peoples, it is generally thought of as outdated.
<u>Network</u>	Refers to a group of people with common interests who share information formally or informally.

Non-Status Indian	An Aboriginal person who is not recognized as "Indian" under The Indian Act. This term does not apply to Inuit or Métis persons as they are not included under The Indian Act.
	Non-Status Indians commonly refer to people who identify themselves as Indians but who are not entitled to registration on the Indian Register pursuant to the Indian Act. Some may however be members of a First Nation band.
Patriarchy	The norms, values, beliefs, structures and systems that grant power, privilege and superiority to men, and thereby marginalize and subordinate women.
People of Colour	A term which applies to non-White racial or ethnic groups; generally used by racialized peoples as an alternative to the term "visible minority." The word is not used to refer to Aboriginal peoples, as they are considered distinct societies under the Canadian Constitution. When including Indigenous peoples, it is correct to say "people of colour and Aboriginal / Indigenous peoples."
<u>Pluralism</u>	A state in society where some degree of cultural, linguistic, ethnic, religious or other group distinctiveness is maintained and valued. Pluralism is promoted by policies of multiculturalism and race relations, the Human Rights Codes and the Canadian Charter of Rights and Freedoms.
Porajmos (Roma: The Devouring)	The term given to the murder of as many as 500,000 Roma people during World War II by the Nazi regime and its collaborators. The Porajmos is recognized as an act of genocide by the government of Canada.
<u>Power</u>	The ability to influence others and impose one's beliefs.
<u>Prejudice</u>	A state of mind; a set of attitudes held, consciously or unconsciously, often in the absence of legitimate or sufficient evidence.
	A prejudiced person is considered irrational and very resistant to change, because concrete evidence that contradicts the prejudice is usually dismissed as exceptional. Frequently prejudices are not recognized as false or unsound assumptions or stereotypes, and, through repetition, become accepted as common sense notions.
	The terms "racism" and "prejudice" are sometimes used interchangeably but they are not the same. A primary difference between the two is that racism relies on a level of institutional power in order impose its dominance.
<u>Privilege</u>	The experience of unearned freedoms, rights, benefits, advantages, access and/or opportunities afforded some people because of their group membership or social context.
Race	Modern scholarship views racial categories as socially constructed, that is, race is not intrinsic to human beings but rather an identity created, often by socially dominant groups, to establish meaning in a social context. This often involves the subjugation of groups defined as racially inferior, as in the one-drop rule used in the 19th-century United States to exclude those with any amount of African ancestry from the dominant racial grouping, defined as "white". Such racial identities reflect the cultural attitudes of imperial powers dominant during the age of European colonial expansion. This view rejects the notion that race is biologically defined
Race Relations	The pattern of interaction, in an inter-racial setting, between people who are racially different. In its theoretical and practical usage, the term has also implied harmonious relations, i.e., races getting along.

	Two key components for positive race relations are the elimination of racial intolerance arising from prejudicial attitudes, and the removal of racial disadvantage arising from the systemic nature of racism.
Racial Discrimination	According to the International Convention on the Elimination of All Forms of Racial Discrimination (to which Canada is a signatory), racial discrimination is "any distinction, exclusion, restriction or preference based on race, colour, descent, or national or ethnic origin, which nullifies or impairs the recognition, enjoyment or exercise of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life."
Racial Profiling	Any action undertaken for reasons of safety, security or public protection that relies on assumptions about race, colour, ethnicity, ancestry, religion, or place of origin rather than on reasonable suspicion, to single out an individual for greater scrutiny or differential treatment. Profiling can occur because of a combination of the above factors, and age and/or gender can influence the experience of profiling. In contrast to criminal profiling, racial profiling is based on stereotypical assumptions because of one's race, colour, ethnicity, etc rather than relying on actual behaviour or on information about suspected activity by someone who meets the description of a specific individual.
Racialization	The process through which groups come to be socially constructed as races, based on characteristics such as race, ethnicity, language, economics, religion, culture, politics, etc.
Racism	Racism is a belief that one group is superior to others performed through any individual action, or institutional practice which treats people differently because of their colour or ethnicity. This distinction is often used to justify discrimination. There are three types of racism: Institutional, Systemic, and Individual.
Racist	Refers to an individual, institution, or organization whose beliefs and/or actions imply (intentionally or unintentionally) that certain races have distinctive negative or inferior characteristics. Also refers to racial discrimination inherent in the policies, practices and procedures of institutions, corporations, and organizations which, though applied to everyone equally and may seem fair, result in exclusion or act as barriers to the advancement of marginalized groups.
Reasonable Apprehension of Bias	A legal term used to determine whether or not the decision of a judge may have been influenced by bias. The test is whether a reasonable person properly informed would apprehend that there was conscious or unconscious bias on the part of the judge.
Reserve	A reserve is a parcel of land where legal title is held by the Crown (Government of Canada), for the use and benefit of a particular First Nation. An Addition to Reserve is a parcel of land added to the existing reserve land of a First Nation or that creates a new reserve. Land can be added adjacent to the existing reserve land (contiguous) or separated from the existing reserve land (non-contiguous). An Addition to reserve can be added in rural or urban settings. The term "reservation" is only used in the United States and does not apply in Canada.
<u>Segregation</u>	The social, physical, political and economic separation of diverse groups of people, based on racial or ethnic groups. This particularly refers to ideological and structural barriers to civil liberties, equal opportunity and participation by minorities within the larger society.

Settler/Settler Colonialism	Within the context of race relations, the term refers to the non-indigenous population of a country. Settler colonialism functions through the replacement of indigenous populations with an invasive settler society that, over time, develops a distinctive identity and sovereignty. In Canada and in other countries, the ascendancy of settler culture has resulted in the demotion and displacement of indigenous communities, resulting in benefits that are unearned.
<u>Sexism</u>	Prejudice or discrimination based on sex, usually though not necessarily against women; behaviours, conditions or attitudes that foster stereotypes of social roles based on sex. Sexism may be conscious or unconscious, and may be embedded in institutions, systems or the broader culture of a society. It can limit the opportunities of persons with disabilities and reduce their inclusion in the life of their communities.
Shoah (from Hebrew, meaning 'catastrophe')	The term for the state sponsored murder of 6 million Jews by the Nazi regime (1933-1945) and their collaborators. It differs from "Holocaust" (which in some uses refers to Roma, homosexuals and others) in that it is used specifically with reference to the Jewish victims of Nazism.
Social Justice	A concept premised upon the belief that each individual and group within society is to be given equal opportunity, fairness, civil liberties, and participation in the social, educational, economic, institutional and moral freedoms and responsibilities valued by the society.
Social Oppression	Social oppression refers to oppression that is achieved through social means and that is social in scope—it affects whole categories of people. This kind of oppression includes the systematic mistreatment, exploitation, and abuse of a group (or groups) of people by another group (or groups). It occurs whenever one group holds power over another in society through the control of social institutions, along with society's laws, customs, and norms. The outcome of social oppression is that groups in society are sorted into different positions within the social hierarchies of race, class, gender, sexuality, and ability. Those in the controlling, or dominant group, benefit from the oppression of other groups through heightened privileges relative to others, greater access to rights and resources, a better quality of life, and overall greater life chances. Those who experience the brunt of oppression have fewer rights, less access to resources, less political power, lower economic potential, worse health and higher mortality rates, and lower overall life chances.
<u>Stereotype</u>	A preconceived generalization of a group of people. This generalization ascribes the same characteristic(s) to all members of the group, regardless of their individual differences.
<u>Stéréotype</u>	Une généralisation préconçue d'un groupe de personnes. Cette généralisation attribue les mêmes caractéristiques à tous les membres du groupe, indépendamment de leurs différences individuelles.
Structural/Societal Racism	Structural or Societal Racism pertains to the ideologies upon which society is structured. These ideologies are inscribed through rules, policies and laws; and represents the ways in which the deep rooted inequities of society produce differentiation, categorization, and stratification of society's members based on race. Participation in economic, political, social, cultural, judicial and educational institutions also structure this stratification (Carl James, 2010). This is one of the three levels that make up Systemic Racism .
Systemic Discrimination	The institutionalization of discrimination through policies and practices which may appear neutral on the surface but which have an exclusionary impact on particular

	groups. This occurs in institutions and organizations, including government, where the policies, practices and procedures (e.g. employment systems – job requirements, hiring practices, promotion procedures, etc.) exclude and/or act as barriers to racialized groups.
Systemic Faithism	Refers to the ways that cultural and societal norms, systems, structures, and institutions directly or indirectly, consciously or unwittingly, promote, sustain or entrench differential (dis)advantage for individuals and groups based on their faith (understood broadly to include religious and non-religious belief systems).
Systemic Racism	This is an <i>interlocking and reciprocal</i> relationship between the individual, institutional and structural levels which function as <i>a system of racism</i> . These various levels of racism operate together in a lockstep model and function together as whole system. These levels are: Individual (within interactions between people) Institutional (within institutions and systems of power) Structural or societal (among institutional and across society) Please see Individual Racism, Institutional Racism, and Structural/Societal Racism
<u>Tolerance</u>	A liberal attitude toward those whose race, religion, nationality, etc. is different from one's own. Since it has the connotation of 'to put up with', the term "acceptance" is now preferred.
<u>Treaty</u>	A negotiated agreement between a First Nation and the federal and provincial governments that spells out the rights of the First Nation with respect to lands and resources over a specified area. It may also define the self-government authority of a First Nation. The Government of Canada and the courts understand treaties between the Crown and Aboriginal peoples to be solemn agreements that set out promises, obligations, and benefits for both parties.
Treaty Indian	Status Indians belonging to a First Nation/band whose ancestors signed a treaty with the Crown, and, as a result, are entitled to treaty benefits.
Vertical Violence	A term used to describe abusive behaviours towards those in less powerful positions. Vertical violence is a broad term which may include bullying, harassment, intimidation or acts of physical violence. It may occur in the workplace, in schools or in social settings. See: Lateral Violence
Visible Minority	Term used to describe people who are not white. Although it is a legal term widely used in human rights legislation and various policies, currently the terms racialized minority or people of colour are preferred by people labelled as 'visible minorities'.
White	A social colour. The term is used to refer to people belonging to the majority group in Canada. It is recognized that there are many different people who are "White" but who face discrimination because of their class, gender, ethnicity, religion, age, language, or geographical origin. Grouping these people as "White" is not to deny the very real forms of discrimination that people of certain ancestry, such as Italian, Portuguese, Jewish, Armenian, Greek, etc., face because of these factors.
White Privilege	The inherent advantages possessed by a white person on the basis of their race in a society characterized by racial inequality and injustice. This concept does not imply that a white person has not worked for their accomplishments but rather, that they have not faced barriers encountered by others.

KEMPTVILLE DISTRICT HOSPITAL Administration Policy

Xenophobia	Fear and hatred of strangers or foreigners or of anything that is strange or foreign.
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Committee Agenda Report

Committee Name: Equity, Diversity, and Inclusion Advisory Committee (EDIAC)

Meeting Date: Thursday, February 13, 2025

Submitted By: Hillary Geneau, Director of Corporate Services

Topic: EDI Fund Review

Background:

In 2024 the EDIAC created the Equity, Diversity, and Inclusion (EDI) Fund and issued the first round of funding. The EDIAC agreed to review the EDI Fund following its first year of use.

Some considerations from the first round of funding include:

- The Committee had agreed to remove all identifying information so the applications could be reviewed in open session. Does the Committee want to proceed like this again?
- The Committee agreed members would complete the evaluation matrix before attending the meeting and at the meeting scores would be aggregated. If this is to be done again, it is suggested the score cards be sent to staff in advance to make the process at the meeting easier.
- Staff had reviewed applications for eligibility prior to the evaluation meeting. Two (2) businesses and duplicates were noted by staff. For one business in particular it was unclear if their initiative could be considered social enterprise or non-profit activities conducted on behalf of the business.
- Those that received funding the previous year are able to apply again as long as they have completed their reporting for the previous year.
- Three (3) members of the Committee had to recuse themselves as they were on the Board of/volunteered for those applying.

How does this relate to the Committee:

One of the actions included in the Equity Diversity, and Inclusion (EDI) Strategy is:

Connect with equity-deserving groups in meaningful ways, including supporting and promoting events and outreach effort

How does this relate to the community strategic plan:

Strategic Pillar 5: A Caring Community

Strategic Priority 5.3: Continue to Improve Equity, Diversity, Inclusion, and Reconciliation

Outcome:

Review and provide feedback on updating the EDI Fund Policy.



Policy Title: Equity, Diversity, and Inclusion Fund Policy

Policy Number: CS-002-2024

Category: Corporate

Department: Corporate Services

Related Policies:

Approved By: Council

Effective Date: July 10, 2024

Revision Date:

Policy Statement:

The Municipality of North Grenville recognizes valuable contributions through the efforts of individuals, community organizations, and agencies on behalf of the residents of the Municipality. The policy's objective is to treat all parties fairly and consistently and to share resources throughout the community as effectively and efficiently as possible. Funding is intended to provide modest levels of support and assistance to individuals, community organizations, and agencies.

This Equity, Diversity, and Inclusion (EDI) Fund Policy establishes funding eligibility, outlines the application process, evaluation criteria, and outlines reporting requirements. Preference will be given to initiatives that demonstrate community support, efficient use of resources, sound business practices, enhance volunteer knowledge, and develop skills and self-reliance.

Purpose:

The EDI Fund will support initiatives that:

- Promote the values of EDI.
- Strengthen EDI in the community.
- Support the Municipality's goals related to EDI.
- Build capacity and sustainability of EDI related work in the community.

This Policy establishes a fair and objective process for administering the EDI Fund. The purpose is to provide a clear and concise guideline for applicants, identifying eligible recipients, projects, and project expenses; to outline reporting requirements; and to define a scoring matrix for use by evaluators to allocate funding.

Application:

The EDI Fund is allocated through the process established in this Policy. The total amount available for the Fund is approved through the annual operating budget process.

Policy:

1. General Funding Terms

- 1.1. Applications should demonstrate active funding efforts to support the continuation of a program, project, or event. Typically, the maximum amount per project will be \$3,000, although grants may be awarded in extraordinary circumstances for amounts over \$3,000.
- 1.2. The applicant must spend grant funding for the sole purpose to which it was awarded and normally within a 12-month period. Extensions will be granted at the discretion of the Chief Administrative Officer. If the intended purpose of the project, program, or event changes, information as to a substitute project, program, or event should be communicated to the Director of Corporate Services to be presented to Council for consideration.
- 1.3. Approval of grant funding in any one year, or over several years, is not to be interpreted as a commitment to future funding.

2. Eligibility Criteria

- 2.1. The Municipality of North Grenville will not provide funding to an individual or group that supports or promotes views, ideas or presentations which promote or are likely to promote discrimination, contempt, or hatred to any person on the basis of race, national or ethnic origin, color, religion, age, sex, marital status, family status, sexual preference, or disability, gratuitous sex and violence or denigration of the human condition.
- 2.2. The following organizations are eligible for funding:
 - 2.2.1. Applicants may be an individual, community organization, or agency.
 - 2.2.2. The initiative must take place in North Grenville.
 - 2.2.3. Applicants must be in, and conduct most of their activities/business within, the geographical borders of the municipality; and/or at least 51% of the membership must live in North Grenville.
- 2.3. The following are not eligible for funding:
 - 2.3.1. Organizations and/or charities whose mandate does not support residents of the Municipality.
 - 2.3.2. Businesses.
 - 2.3.3. Organizations with political affiliations.

- 2.3.4. School Boards and educational institutions.
- 2.3.5. Programs within legislative mandates of other governments including municipal departments.
- 2.3.6. Regional, provincial, or national organizations, unless a local chapter serving residents.
- 2.3.7. Organizations who have not completed the final report for the previous funding year.
- 2.4. Businesses are generally ineligible; however, the Municipality may fund social enterprise or non-profit activities conducted by, or on behalf of the business.
- 2.5. This list of eligible/ineligible applicants is not to be considered complete; the Municipality, at its sole discretion, may approve annual allocation of grant funding to organizations/agencies that have the capacity to deliver projects, events, and program in keeping with the spirit of this policy.

3. Eligible Expenses

- 3.1. The following are eligible expenses:
 - 3.1.1. Funding requests should be for events, projects, or programs that support, sustain, promote, inform, educate, celebrate, or preserve EDI values and/or provide access or such other initiatives as may be approved by Council.
 - 3.1.2. Capital projects and associated expenses.
 - 3.1.3. Funding for operating expenses of the organization may be considered, but only where the expense directly contributes to the implementation of eligible projects, events, or programs. Examples include event coordinator, development and distribution of marketing materials, or website development.
- 3.2. The following are not eligible expenses:
 - 3.2.1. Expenses incurred prior to funding approval may not be eligible.
 - 3.2.2. Accumulated deficits or funding shortfalls.
 - 3.2.3. Any cost determined to not be in keeping with the spirit of the EDI Fund Policy, at the discretion of Council.
 - 3.2.4. The purpose of the project/program cannot be for the generation of personal profit. Personal Profit is defined as: The personal use of income remaining after reconciling all fixed expenses. (To obtain small business funding go to Invest North Grenville https://www.northgrenville.ca/economicdevelopment)
- 3.3. If an organization wishes to put forth a project on municipal property, consultation with the appropriate municipal staff must occur prior to any funding request. Included in this consultation should be details on project design, budget (including any impact to municipal resources; human, financial, IT, or otherwise), and legal/insurance considerations. Staff will advise on the appropriate funding mechanism (operating budget, capital budget, community grant funded).

4. Intake and Deadlines

- 4.1. There will be one (1) intake period per year. Application deadline will be published annually by the Municipality of North Grenville. Additional intakes may be considered if funding is available.
- 4.2. All grant applications shall be submitted to the Director of Corporate Services, on or before the deadline of the grant process each year. Applications must be submitted before the end of the business day (5:00 p.m. local time) to be considered eligible.
- 4.3. Any applications received after the due date will not be considered.

5. Application Process

- 5.1. Applications and supporting documentation must be completed and submitted in full prior to the EDI Fund application deadline.
- 5.2. The Application Form includes the following sections:
 - Applicant Information (proof of status may be required)
 - Project Description
 - EDI Impact
 - o Individual/Organization Capacity
 - Budget
 - Supporting Documentation
 - Quotations
 - Permissions/permits
 - Letters of support
 - References
 - Other supporting documentation (e.g., site plans, maps, etc.)
- 5.3. Applications should be submitted using the online application form (found at www.northgrenville.ca). Applicants may also download a PDF application form and submit their application via email to wision@northgrenville.on.ca or deliver in person or by mail to:

Municipality of North Grenville P.O. Box 130, 285 County Road 44 Kemptville, ON, K0G 1J0 Attn: Director of Corporate Services

5.4. As part of the Municipality's commitment to meeting accessibility legislation, the Application Form will be made available in accessible formats, and will be provided upon request.

6. Evaluation and Approval Process

- 6.1. Applications are reviewed by the Director of Corporate Services to ensure they meet eligibility requirements and are complete.
- 6.2. All identifying information (names, addresses) will be removed by staff from applications to promote a fair adjudicating process.

- 6.3. The Equity, Diversity, and Inclusion Advisory Committee (EDIAC) will review applications at an open Committee meeting and provide Council with recommendations. Council will then approve applications and funding amounts.
- 6.4. If a member of the Equity, Diversity, and Inclusion Advisory Committee is an applicant for funding of this Fund or has a pecuniary interest, they must recuse themselves from all decision-making process related to any application.
- 6.5. An Evaluation Matrix will be used by the EDIAC as a tool to assess applications. Scores from the evaluators will be averaged and funding recommendations will be made based on the application scores.

Evaluation Matrix			
Criteria	Description	Points to Consider	Score
Project Description	The project, program or event will serve the local interests of the residents of the Municipality.	 Solid vision, direction, goals, and objectives Achievable timeline Aligns with municipal priorities Serves local interests 	/20 points
EDI Impact	The project, program or event addresses and contributes to EDI	Demonstrated need/value/benefit Equity-deserving groups served	/40 points
Individual/Org anizational Capacity and Sustainability	The ability of the applicant to meet goals and create a sustainable initiative	Evidence of a clear mandate Solid leadership structure Adequate staff/volunteers Financial stability and accountability and evidence of effective long and short-term financial planning Reasonable financial goals Evidence of partnerships The project has broad support from the community The organization has funding from multiple sources An appropriate sustainability plan is provided	/20 points
Other Considerations	The project, program or event has other innovative or other benefits	Project is not duplicatingIs innovative or creative	/10 points
Total			/90 points

6.6. Applicants will be notified of outcome via email by the Director of Corporate Services or designate. Included with the notification is a copy of the application,

final report template, agreement to be signed, and EDI Fund logo for recognition purposes.

7. Final Report

- 7.1. The completed final report is due within 12-months of the award of funds. Where a project takes place 12-months after the award of funds, the final report shall be submitted a month after the project is completed. Final reports and supporting documents (copies of invoices/proof of payment) must be submitted to the Director of Corporate Services. A copy of the reporting form is provided with notice of award and agreement.
- 7.2. Any organization that does not complete the final report will be ineligible for funding for the following budget year, unless otherwise approved by Council. During that time, the Director of Corporate Services will work with the organization to ensure reporting is completed in order to become eligible for future funding years.

Responsibilities:

The EDI Fund is administered by the Corporate Services department through the Director of Corporate Services.

Compliance:

The Corporate Services department will ensure policy compliance by all parties.

Policy Communication:

This policy shall be posted on the Municipality's website as public information. All relevant application timelines and forms will also be posted at www.northgrenville.ca.

Related Documents/Legislation:

The Corporate Services department will maintain records in accordance with the Records Retention Policy.

Authorization:

This Policy was authorized by Resolution Number C-2024-222 adopted by Council at its meeting held on July 10, 2024.

Revision History

Document Owner	Revised Date	Reason for Changes

Contact:

Any questions or concerns regarding this Policy shall be directed to the Director of Corporate Services.

THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE

BY-LAW NO. 76-17

A By-Law to Amend Naming of Corporate Assets By-Law 72-12

WHEREAS the Council of the Corporation of the Municipality of North Grenville passed By-Law 72-12 to adopt a policy with respect to the naming of corporate assets;

AND WHEREAS the Council of the Corporation of the Municipality of North Grenville deems it expedient to amend Schedule "A" to By-Law 72-12;

NOW THEREFORE the Council of the Corporation of the Municipality of North Grenville enacts as follows:

1. Schedule "A", Section 7. to By-Law 72-12 shall be amended as follows:

Remove:

"In the case of posthumous recognition, the naming shall occur no earlier than the first anniversary of their death."

Replace with:

- "In the case of posthumous recognition, the naming shall occur no earlier than three months after their death."
- 2. The Clerk of the Municipality of North Grenville is hereby authorized to make any minor modifications or corrections of an administrative, numeric, grammatic, semantic or descriptive nature or kind to the by-law and schedule(s) as may be deemed necessary after the passage of this by-law, where such modifications or corrections do not alter the intent of the by-law.
- 3. This by-law comes into effect on the date of passing.

PASSED AND ENACTED THIS 24TH DAY OF JULY, 2017.

DAVID GORDON

Mayor

CAHL POMINVILLE

Clerk

THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE

BY-LAW NO. 72-12

A By-Law to Establish a Naming Rights Policy

WHEREAS the Council of the Corporation of the Municipality of North Grenville deems it necessary to adopt a policy with respect to the naming of corporate assets;

NOW THEREFORE the Council of the Corporation of the Municipality of North Grenville enacts as follows:

- 1. The Naming of Corporate Assets Policy, as outlined in Schedule "A" attached hereto, is adopted by Council.
- 2. This by-law shall be known as the "Naming of Corporate Assets By-Law".
- 3. This by-law shall come into force and take effect on the date of its passing

PASSED AND ENACTED THIS 13TH DAY OF NOVEMBER, 2012.

DAVID GORDON

Mayor

CAHL POMINVILLE

Clerk



THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE

SCHEDULE "A" TO BY-LAW NO. 72-12



POLICY

Date:

November 13, 2012

Subject:

Naming of Corporate Assets

PURPOSE:

This policy is to encompass the naming of any corporate asset including parks, open spaces, facilities, streets, roads and other municipal buildings or properties. The final decision for naming of corporate assets will rest with Council, including naming opportunities as a result of gifts and sponsorships. The naming of a particular corporate asset is important for public awareness, promotion and emergency access. Therefore, naming will not contravene any policy of the Municipality nor reflect negatively on the Municipal public image.

INTENT:

The intent of this policy is to:

- provide a framework for responding to specific requests for dedication of infrastructure or facilities;
- provide direction of how to apply for approval to name, rename or dedicate municipal property, streets/roads, buildings or park elements;
- recognize on an exception basis, significant contributions that organizations or individuals have made to the public life and the well-being of the people of the Municipality.

POLICY STATEMENTS

- 1. There are three main types of naming situations this policy intends to address:
 - opening of a new corporate asset or reopening of a corporate asset following refurbishment
 - honouring individuals or groups
 - providing recognition gifts, sponsorships and joint ventures
- 2. Recommendations for naming will be considered within the following categories:
 - a) Natural Features names reflecting prominent natural features of the general area in which the asset is located.
 - b) Geographic Location names reflecting the geographic location of the asset within the Municipality.
 - c) Historic Place Name names reflecting a prominent historic location within the Municipality.
 - d) Outstanding Resident/Group name of Municipal resident or group, past or present, who have contributed to the Municipality and/or well-being of its residents.
- 3. Preference will be given to names that:
 - give a sense of place, continuity and belonging reflecting the geographic location, community, neighbourhood or street/road where the corporate asset is located and/or;
 - recognize the historical significance of the area and/or;

- reflect unique characteristics of the site and/or;
- reflect the type of service offered and/or;
- are in keeping with a selected theme and/or;
- honour individuals, living or deceased, who have made a significant contribution to the community.
- 4. Names will not be chosen that;
 - cause confusion due to duplication or names sounding similar to existing locations within the Municipality;
 - lend themselves to inappropriate short forms or modifications;
 - are discriminatory or derogatory considering race, gender, creed, political affiliation or other similar factors; and/or
 - recognize the birth, marriage or anniversary of specific individuals (this can be done through individual dedications of benches and trees).
- 5. Names of persons, organizations, corporations, foundations or their families will be considered when they have made a significant contribution to the Municipality by:
 - enhancing the quality of life and well-being of the Municipality
 - contributing to the historical or cultural preservation of the Municipality
 - financial contribution toward the naming right, acquisition, development or conveyance of land or building
 - achieving excellence in their endeavours and representing the Municipality in a meritorious manner.
- 6. Naming in honour of elected or appointed officials, Municipal administrative officials or staff shall occur following retirement or term of office.
- 7. Where the name of an individual is recommended after a Closed Session discussion, consent shall be obtained from the individual or their next of kin prior to Council's public consideration. In the case of posthumous recognition, the naming shall occur no earlier than the first anniversary of their death.
- 8. Where the naming opportunity is the result of a sponsorship or gift, the following factors must be considered:
 - the significance of the contribution made relative to the construction and/or operating costs of the item being named;
 - the cost of establishing the naming option (i.e., cost of the signage to be paid by the applicant unless the Municipality has made the request for the name change); and
 - a naming agreement will be entered into in the case of a sponsorship or gift and will address such conditions as: approval of signage design and cost distribution, sign maintenance responsibilities, length of time for naming (permanent, renewable or for a specific period), notice of termination due to renovation, destruction, or sale of the asset by the Municipality, additional fees if applicable, and any other matter agreed to by the parties on a caseby-case basis.
- 9. Existing names will not be changed without consideration of the historical significance of the existing name, the impact on the individual or organization previously named, the cost and impact of changing existing signage, rebuilding community recognition and updating records (i.e., letterhead, databases, promotional materials. Each application will be considered on a case-by-case basis.

APPLICATION REVIEW & APPROVAL PROCESS

- 1. Applicant(s) shall submit a written request for civic naming to the Municipal Clerk. The written request shall provide the following:
 - background information concerning the rationale for consideration of the request;
 - biographical information if named after an organization or individual; and
 - documentation including letters from organizations and individuals providing support for the request.

- 2. Each applicant for naming/renaming shall undergo a process which will:
 - review the application for conformity with this policy
 - circulate the application to the appropriate internal stakeholders for comment on the suitability of the application
 - discuss in a Closed Session any naming in recognition of an individual prior to discussing it with the individual or next of kin
 - consult with external stakeholders in the community to the level of support or identify possible objections to the requested civic naming
 - determine whether or not a special event is planned to coincide with the formal naming.



Policy Title: CORPORATE COMMUNICATIONS POLICY

Policy Number:

Category: Client Services

Department: CAO's office

Related Policies:

Approved By: Council

Effective Date: November 2024

Revision Date:

Policy Statement:

The Municipality of North Grenville is committed to fostering open, transparent, and timely communication with residents, staff, and stakeholders. We aim to ensure that all communications are clear, accessible, and respectful, while reflecting our values of accountability and inclusiveness.

Our communication efforts will:

- Promote transparency by providing accurate and timely information.
- Encourage community engagement.
- Uphold the integrity and reputation of the Municipality in all forms of communication.
- Adhere to applicable laws, policies, and best practices, ensuring confidentiality and privacy where required.

All communication, whether internal or external, will reflect the Municipality's commitment to serving the community with professionalism, integrity, and respect.

This policy is to ensure the Municipality's brand is clear, cohesive and concise. It is consistent with the <u>Municipality of North Grenville 10-year Community Strategic Plan</u> and the vision, mission and values identified within.

The Municipality's Corporate Communications Department ("Communications") is responsible for the day-to-day management of the Municipality's corporate communications. They collaborate with senior leadership, department staff and elected officials to deliver on strategic goals.

Purpose:

The Communications Policy aims to guide how the Municipality of North Grenville communicates to ensure credible, consistent information and a unified brand message for its audiences. The policy's goals are to:

- Align municipal communications with industry best practices.
- Enhance internal consistency and professionalism in branding, messaging, and communication activities.
- Clarify the roles of the Corporate Communications Department and departmental representatives.
- Ensure efficient use of staff time and resources for external communications.
- Strengthen the Municipality's brand, storytelling, and community presence.
- Foster trust between the community and the Municipality through effective communication.

This policy is informed by best practices from organizations like the Canadian Public Relations Society and the International Association of Business Communicators, along with insights from municipal communications leaders across Ontario.

Overarching Corporate Communications Goals

- Foster a well-informed and engaged community.
- Promote a positive and inclusive community culture.
- Instill a sense of pride and belonging among residents.
- Strengthen partnerships within the community to achieve shared goals.

Guiding Principles

The Municipality's external communications will embody key principles to ensure effectiveness and alignment with our mission. Communications will be proactive, positive, and transparent, fostering respect and inclusivity in every message. We aim to be collaborative and consistent, presenting information that is engaging, and accessible to all. Data-driven and outcome-oriented, our approach also embraces a unified, one-team mindset to strengthen community connections and trust.

Application:

This policy applies to anyone involved in creating, delivering, or approving internal and external communications for the Municipality of North Grenville, including municipal staff, consultants, contractors, partners, volunteers, stakeholders, and elected or appointed officials. While the messaging of elected officials may reflect their political views, Corporate Communications will collaborate with the Mayor's Office and Councillors as needed. However, elected officials are responsible for their own communications, including fundraisers, events, newsletters, and social media. All activities should align with the values in North Grenville's 10-year Community Strategic Plan and Code of Conduct.

Exempt:

Excluded from this policy are the following:

- Freedom of Information requests: responsibility of the requirements of the Freedom of Information and Protection of Privacy Act (FIPPA) and the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA).
- General public email and telephone inquiries: responsibility of department staff.
- Council reports and webcasts: responsibility of Directors as determined by CAO.
- Council personal or political communication: All individual members of Council, including the Mayor, are responsible for their own communication and must abide by the *Municipal Act*, 2001 and other such stipulations.

Definitions:

Brand: the Municipality's consistent, professional and distinct identity through the use of an official corporate logo, visual imagery, font choice.

Campaigning: means engaging in activities with the goal of affecting – positively or negatively – a candidate for municipal office.

Community: means residents of North Grenville and others who work or visit

Member of the Media: A journalist, or member of the media, is someone who gathers, assesses and presents news and information to the public using traditional news media (print, radio, and television), online news sites, and blogs or podcasts where authors are identified, interviews are conducted with an open mind, and accepted principles and ethics of journalism are followed.

Media Release: means a factual written summary of information issued to the Media for the purpose of making an announcement or relaying important municipal information.

Municipal Spokesperson: means the individual who is authorized by this Policy to represent the Municipality in response to a media request for an interview in written communications, in-person interviews, or if approached in the workplace, at a function or at an event. Spokespeople are expected to respond to media inquiries that come through the Corporate Communications Department, promptly and to respect requested deadlines from journalists where possible.

Public Notice means a factual written summary of information that is posted on the municipal website for the purpose of sharing information or relaying important municipal information.

Social Media: means the web-based technologies and sites, including blogging, microblogging, photo sharing, video sharing, and networking, which allow users to interact with each other by sharing information, opinions, knowledge, photographs, and interests.

Stakeholder: refers to a business owner, municipal neighbour, other level of government, board, advisory committee, authority, agency, association, and anyone with an interest in municipal affairs or is impacted by a Municipal program, service or decision.

Subject Matter Expert: is a person who is an authority in a particular area or topic to present information on specific programs or projects with which they are more familiar.

Municipal Publications: refers to any official materials produced or distributed by a municipality to inform, engage, or serve the public. This includes, but is not limited to:

- Printed materials like brochures, newsletters, flyers, reports, and guides
- Digital content on the municipal website, social media platforms, or email newsletters
- Multimedia content such as promotional videos, press releases, and public service announcements
- Any other communications intended for public consumption under the municipality's branding and communication channels

Policy:

General Responsibilities

The Municipality's Corporate Communications Department manages a comprehensive array of services essential for effective communication and brand consistency. These services include:

- **Strategic Communications**: Conducting research, planning, implementation, and evaluation to ensure impactful communications.
- **Content Development**: Writing, editing, and ensuring clarity and accessibility in all corporate materials.
- **Brand Management**: Overseeing marketing, design, creative services, and adherence to brand standards.
- **Strategic Guidance**: Providing advice on messaging and positioning for effective communication.
- External Communications: Coordinating all outward-facing messaging.
- **Digital Engagement**: Managing corporate social media accounts, website content, and digital outreach.
- Media Relations: Supporting media engagement, including spokesperson preparation and coaching.
- **Council Support**: Assisting Council communications to align with corporate priorities, objectives, and values.
- Reputation & Crisis Management: Preparing for and managing reputation, issues, and crises.
- **Community Engagement**: Assisting departments with public engagement initiatives.
- **Internal Communications**: Developing strategies for employee communication and engagement.

All communications intended for public release—including media engagement, social media, public relations, marketing, video production, and promotional materials—must be approved by the Director of Client Services or designated staff.

Roles and Responsibilities:

Mayor:

- Serve as the official spokesperson for Council or appoint a delegate, representing Council's decisions accurately and impartially.
- Approve quotes and communications from the Mayor's office.

Adhere to elected officials' roles and responsibilities as outlined.

Chief Administrative Officer (CAO):

- Direct the overall strategic vision for the organization, guiding communications priorities and messaging.
- Act as the official spokesperson for the Municipality or appoint a delegate as necessary.
- Approve key communications materials as required.

Directors:

- Foster collaboration across departments to strengthen communication.
- Set department-specific communications strategies that align with project priorities and organizational goals.
- Ensure department staff adhere to the Communications Policy and allow adequate time for coordination with the Corporate Communications Department.
- Approve communications materials and share accomplishments or positive news stories with the Corporate Communications Department.

Department Staff:

- Collaborate across departments and integrate communications considerations into all projects and initiatives, especially those that may be sensitive or highprofile.
- Work with relevant staff and adhere to timelines for planning and executing effective communications, alerting Directors and the Corporate Communications Department to potential issues.
- Adhere to logo usage and Visual Brand Standards.
- Comply with legal requirements on information access, privacy, copyright, and accessibility (MFIPPA, Copyright Act, AODA).
- Act as subject matter experts and share good news stories or accomplishments with the Corporate Communications Department for promotion.

Elected Officials:

- Uphold the values of the Municipality's 10-year Community Strategic Plan.
- Maintain confidentiality and privacy, particularly regarding closed session information or sensitive details about other Councillors, staff, or constituents.
- Refer all customer service inquiries to official Municipal channels for proper handling.

This framework ensures unified and effective communication across all levels of the Municipality, building public trust and reinforcing a consistent, positive brand image.

Municipal Advisory Committees

Municipal advisory committees are official representatives of the municipality, and all communications from these committees must align with the municipality's policies and reflect its official positions. To maintain consistency, professionalism, and transparency, no committee member may issue statements, share opinions, or otherwise communicate on behalf of the municipality without prior approval. All external communications, including public statements, press releases, or social media posts related to committee activities, must be reviewed and approved by both the municipal council and the communications department. Drafts of any proposed communications must be submitted through the designated staff liaison for review and authorization. Official committee business must be conducted exclusively through municipal-provided communication tools, such as official email accounts, to ensure compliance with public records laws. The use of personal devices or accounts for committee communications is strictly prohibited. Any unauthorized communications or failure to comply with this policy may result in disciplinary action, including potential removal from the advisory committee.

Communications Planning

Effective communication requires advance planning. The Corporate Communications Department will be involved at the start of each project to maximize its impact. To maintain coordination, Directors or Department Representatives will meet monthly with Corporate Communications to discuss ongoing and upcoming communication needs.

External communications planning at the Municipality occurs in three ways:

- 1. Annual Planning
- New Program/Initiative Planning
- 3. Ad Hoc or Last-Minute Planning

Year Planning

The following is the procedure to be followed for Year Planning:

- 1. Following budget approval, the Communications Department will organize monthly Communication Planning meetings to review all upcoming projects, campaigns, and annual items.
- 2. Corporate Communications creates a Communications Brief for each project, initiative, and campaign discussed.
- 3. A planning calendar for the year is developed and shared with departments for confirmation.
- 4. Six weeks before the project begins, the Communication team meets with Department Representatives to draft a Communications Plan.

- 5. Four weeks before the project starts, the department reviews and approves or requests changes to the draft.
- 6. Final materials are prepared with necessary departmental approvals.
- 7. Departments notify the Communication team of any changes before project launch.
- 8. Communications implements the plan, monitors success, and adjusts as required.
- 9. Two weeks post-campaign, the Communication team reviews metrics and lessons learned and discusses them in the next planning meeting.

New Program and Initiative Planning

If a new program or initiative emerges that was not planned or expected following the annual budget process, the following procedure is followed:

- 1. At least four weeks before launch, the Department Representative completes a Communications Brief and sends it to Communications.
- 2. The upcoming initiative is discussed at the next Communications Planning Meeting, as needed. The communication team may set up a separate meeting if the next scheduled Communications Planning Meeting does not provide enough time to plan the initiative.
- 3. The communications team adds the campaign or initiative to the planning calendar and drafts a Communications Plan for approval by the Department Representative and/or Director.
- 4. The communications team rolls out the plan as approved.
- 5. At least two weeks following the end of the campaign, the communications team adds a follow-up to the Communication Plan with success metrics, relevant analytics, and notes lessons learned or opportunities to improve future campaigns if applicable. This evaluation will be discussed at the next monthly Communication Planning meeting with the department.

Ad Hoc, Last-Minute Planning

In some circumstances, communications needs cannot be anticipated. In such cases:

- 1. Department Representatives will reach out to the communications team as soon as a communication need is identified.
- 2. Together, the department and the communications team determine a reasonable approach, messaging and tactics needed.
- 3. The communications team rolls out the plan as approved.
- 4. At least two weeks following the end of the initiative, the communications team adds a follow-up to the Communication Plan with success metrics, relevant analytics, and notes lessons learned or opportunities to improve future campaigns if applicable. This evaluation will be discussed at the next monthly Communication Planning meeting with the department.

Roles and Responsibilities

Corporate Communications:

- Lead annual planning with departments and create/update the communications calendar.
- Develop Communications Briefs and draft plans in collaboration with departments.
- Create and design content per brand, plain language, and AODA standards.
- Manage the approval process with Department Directors/Representatives.
- Publish content according to the approved plan.
- Track success and analyze outcomes.
- Conduct project wrap-up meetings to review lessons learned and improvements.
- Decide on the inclusion of third-party content on Municipal platforms.

CAO and Department Directors:

- Provide strategic direction as needed.
- Attend planning meetings and ensure the timely completion of Communications Briefs.
- Approve items and set department priorities in the annual calendar.
- · Review and approve plans and materials.

Department Representatives:

- Attend monthly planning meetings and assist in communication plan development.
- Complete Communications Briefs for new programs and services.
- Coordinate with Communications as per policy.
- Review and approve content for accuracy.

Visual identity

The Municipality's branding reflects both the programs it delivers and how it presents itself to the public. A clear, consistent visual identity helps the community recognize and access Municipal services, policies, and initiatives. To maintain a unified brand, the Municipality of North Grenville logo must appear on all corporate materials, adhering to the Corporate Identity Standards Manual. Communications provides design support and strategies to uphold this identity.

Key elements of the Visual Brand Standards include:

- Logo usage and placement
- Approved fonts and colors
- Corporate document templates
- Guidelines for advertising, signage, posters, brochures, fleet, and e-signatures

The Municipality's logo should be used on all public-facing materials, such as advertising, signage, and both digital and printed documents. Employees are required to follow the Visual Brand Standards. External organizations wishing to use the logo must obtain authorization, and it may only be used externally when the Municipality is a partner or sponsor, as determined by Communications.

While the Municipality has one corporate logo and brand, sub-brands for specific programs or facilities may be created with prior approval from the Communications Department to ensure alignment and protect the main brand's integrity.

Plain language

Communicating in plain language ensures information is more accessible and easily understood. This increases trust, shareability and accuracy of information. It also makes greater impact when asking for behaviour change.

<u>The Canadian Style Guide</u> provides a comprehensive guide for writing and editing, including requirements and best practices for writing in plain language.

The Communications team has oversight of corporate materials. They can review and edit department materials, as well as provide plain language coaching and / or training to department staff and elected officials as needed.

Accessibility

The Municipality of North Grenville is fully committed to ensuring that all internal and external communications adhere to the **Accessibility for Ontarians with Disabilities Act (AODA)** and are accessible to all members of the community. Our goal is to remove barriers and ensure that information is delivered in ways that can be easily understood, navigated, and engaged with by individuals of all abilities. Furthermore, the Municipality of North Grenville has accessible document guidelines and additional requirements are included within this policy to ensure the material is accessible or available in another

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format, when requested. The Clerks Office, with support from Communications, has developed and will train employees on those corporate accessible document requirements.

Communications will ensure the Municipality's website is also compliant with accessibility standards and the Municipality of North Grenville will continue to strive to make all information as accessible as possible and/or provide alternative formats when requested.

Photography and Video

The Municipality of North Grenville prioritizes visual content to enhance engagement, memory retention, and storytelling. The Corporate Communications team manages all visual content, including photos, graphics, and videos, for ads, social media, publications, and more. They also maintain a photo and video library and relevant equipment.

Guidelines for Visual Use:

- Staff must use authorized images from stock sites or with written permission from creators, ensuring no copyright infringement.
- Municipal staff must obtain signed Photo/Video Release Forms for any person featured in visuals used for publications and submit consent records to Corporate Communications.
- Photos or videos must be high-resolution, watermark-free, credited (unless contracted), and inclusive, reflecting diversity.
- Captions and transcripts are required for pre-recorded videos.

External and Public Photography:

- Photos/videos from external sources require a signed release for any identifiable individuals and the creator's permission.
- Notices should be posted at Municipal events indicating that photos or videos may be taken, with opt-out instructions for attendees.

Public and Media Recording:

 The public and media may record in public areas or with permission on private property, provided privacy and safety concerns are respected. Staff with concerns should notify their supervisors.

This approach strengthens the Municipality's visual identity while respecting privacy and copyright regulations.

Media Relations

Media relations are key to shaping public perception of North Grenville's local government, promoting transparency, and fostering community engagement. The Municipality is committed to providing timely and professional information, with media interactions coordinated through Communications to ensure consistency and protect the Municipality's reputation.

Communications leads media strategy, manages media inquiries, issues releases, and provides spokespeople with key messages and coaching. For high-profile inquiries, the Director of Client Services may offer additional support. Staff are required to direct all media inquiries to Communications and collect reporter details, ensuring only designated spokespeople respond.

Designated spokespeople include the Mayor (or alternates), CAO, Clerk, the Director of Client Services, or a Departmental Director as required, all of whom receive periodic media training. Council members can speak independently on personal views but should avoid discussing sensitive topics like investigations or confidential matters.

In election periods, Council members should avoid actions that might appear as campaigning during media engagements.

Proactive media engagement aligns with the Corporate Communication Plan, with releases shared first with Council, followed by employees, media, stakeholders, and the public. Media training is provided every two to three years for relevant officials and staff.

Website

The Municipality of North Grenville's website is managed by the Corporate Communications Department in collaboration with representatives from each department.

Communications oversees all corporate pages, such as the home page. All changes to the content or design of any page must be coordinated with Communications.

The Municipality will make every effort to provide as much information available as possible via the website. When external requests to have specific information posted on the website are received by staff, each request will be reviewed and evaluated and if appropriate it will be posted as part of the applicable department's webpages.

Each Department is responsible for ensuring the information on its departmental pages are up-to-date. Departments must regularly review website pages and contact Communications when any changes or additions are needed. They must also ensure all documents provided to Communications for the website are in an accessible format.

Links to Third Party Sites

Links to third-party sites are provided for visitor convenience and do not imply endorsement by the Municipality of North Grenville, which holds no responsibility for third-party content.

Link approvals are managed by the appropriate department and may be removed at their discretion or by the Corporate Communications Department. Approval factors include relevance, audience needs, business considerations, and alignment with Municipal values. Links that fail to meet Municipal standards or harm the Municipality's reputation are not permitted.

Social media

Social media is a valuable tool for the Municipality of North Grenville to share updates, engage residents, and build a positive reputation. It allows for interactions with community members, stakeholders, and visitors, and provides opportunities to listen and respond to feedback, whether positive or critical.

The Municipality values online conversations, welcoming both support and constructive criticism as opportunities to listen, clarify, or correct misinformation. The goal is always to foster a respectful online community.

Social Media Principles for Employees and Officials:

- 1. Use simple, clear language.
- 2. Listen first; understand before engaging.
- 3. Reflect Municipal values by being honest and friendly.
- 4. Encourage respect; respond to comments politely.
- 5. Follow privacy and confidentiality rules.
- 6. Foster two-way engagement by inviting feedback.

Roles and Responsibilities:

- Director of Client Services: Approves and manages all corporate social media accounts, handles sensitive or controversial content, maintains consistent messaging, and ensures account compliance with policies.
- **Department Directors**: Recommend social media moderators and ensure employees follow policies.
- **Social Media Moderators and Staff**: Use social media responsibly in line with Municipal policies and guidelines.

Access/moderators

Only the Corporate Communications Department has access to and manages the Municipality of North Grenville's official social media channels. With approval from the

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Director of Client Services and relevant Department Director, additional channels may be created if moderators are qualified to manage them effectively.

Social media is monitored and responded to during business hours, with content acknowledged or answered within one business day. Posts outside business hours may be scheduled or published in emergencies by designated staff. A Social Media Response Chart guides staff on appropriate responses.

Rules of Participation: The Municipality invites respectful engagement on its channels but reserves the right to remove or block posts violating standards, including offensive language, personal attacks, commercial endorsements, discriminatory content, confidential information, illegal conduct, derogatory attacks, or political campaigning.

Starting a New Channel: New or existing accounts require a Social Media Account Request, approved by the Director of Client Services, CAO, and Department Director. Channels must align with corporate goals, target specific audiences, and have a clear management plan. Accounts should display the Municipality's logo, contact info, website link, and terms of use, reviewed annually.

Decommissioning a channel

If a Municipal social media channel is underperforming or not bringing value, the Corporate Communications Department may recommend that it be decommissioned. It will be at the discretion of the Communications Department to initiate this process. The Director of Client Services will seek approval from the CAO and any appropriate Department Director. Corporate Communications will manage all steps to decommission the channel.

Staff personal use of social media

Employees are encouraged to follow the Municipality of North Grenville's official corporate social media channels and use their personal accounts to share positive stories about their coworkers, programs or services.

When employees are online, they are in public and are expected to act with integrity, honesty and respect. Even if they don't identify themselves as a Municipality of North Grenville employee in their personal websites, blogs or social media profiles, employees must act according to the Municipality's Employee Code of Conduct.

Employees must not share private or confidential information, or any other content that reflects poorly on them, their co-workers or the Municipality of North Grenville.

The Municipality does not expect nor encourage employees to deliver customer service, nor respond to questions or comments about Municipal programs, services, decisions or policies on behalf of the organization using their own personal social media channels. Questions received over social media about Municipal programs or services should be directed to the appropriate corporate channel via phone or email.

Opinions expressed on an employee's personal website, blog and/or social media account do not necessarily reflect the official position of the Municipality of North Grenville.

Paid Advertising

Advertising is a powerful tool for municipalities to promote their services, events, and initiatives. Advertising can help build awareness, increase engagement, and drive positive outcomes for the organization and the community.

The Corporate Communications Department oversees communication advertising as requested by departments. Staff needing to advertise content or services should contact Communications for assistance and coordination.

Funding for paid advertising efforts will come from two sources:

- 1. Department budgets with advertising envelopes as the primary source
- 2. In unique cases, funding may come from community partners or as part of grants received from other levels of government.

The communications team will advise on the optimal channel to direct advertising dollars based on past experience and success, especially in cases where there is more than one outlet serving a specific target market.

All advertising must include the Municipalities logo and contact information, whether a phone number or email address.

Legislated Advertisements

Legal advertisements are used to inform the public about Municipal actions and proposals, including but not limited to Planning & Zoning issues, requests for proposals, public hearings, elections, and heritage designations. The Municipality places these statutory notices according to the applicable legislation in local newspapers, on social media and/or on the Municipality's website as appropriate.

Issues Management

Issues risk the Municipalities reputation and relationships and may affect some operations.

The Communications will monitor main channels and flag potential issues. However, it is important that Departments inform the communications team immediately when an issue or

potential issue arises to start planning communication. The team will advise on an appropriate approach and potential response.

Emergency Communications

When an emergency situation is declared by the Municipality of North Grenville, emergency communications will proceed in accordance with roles and procedures set out in the Municipality's Emergency Plan.

Communications Guidelines for Elected Officials

As per the *Municipal Act*, the Mayor, as the Head of Council, is the official spokesperson for Council. The Mayor "represents the municipality at official functions" and "upholds and promotes the purposes of the municipality."

That said elected officials are influential voices in any community and play an important role in sharing information and engaging with constituents and listening and responding to their questions and concerns.

Individual members of Council, including the mayor, are responsible for their own personal communication.

However, there are guidelines that may be helpful to consider when communicating with constituents. The following guidelines include any form of communication – in person, over the phone, through email or over other digital channels, such as social media:

- When communicating including on social media elected officials should uphold the organization's standards, the values as identified in the <u>10-year</u> <u>Community Strategic Plan</u> and corporate management processes.
- Elected officials must respect privacy laws, and their responsibilities under the *Municipal Act*.
- Where possible, elected officials should help to share corporate information.
 Public questions and services requests should be addressed by directing the resident towards the appropriate Municipal channels.
- If an elected official chooses to engage on social media, it is important to monitor and respond in a timely way. Social media participants expect timely responses to requests and expect co-participants to monitor social media properties frequently and regularly.

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• It is helpful to think through social media use before engaging. Developing a personal social media plan is valuable and recommended.

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This Policy was authorized by F	Resolution Number	adopted by Council at its
meeting held on		

Revision History

Document Owner	Revised Date	Reason for Changes
Kyna Boyce		

Contact:

Any questions or concerns regarding this Policy shall be directed to:

Kyna Boyce, Director of Client Services

kboyce@northgrenville.on.ca

Standard Communication Tasks Development Timelines and Approvals

Task	Notice needed	Standard development time	Final Approvals
Planning and Preparing			
Communications plan	4 to 6 weeks	4-8 hours (depending	Director
development – new or updated	(longer if high	on complexity)	
program or service	impact)		
Event plan development	_	120 mins	

Media			
Media Release	2 to 3 days	45-90 mins	Mayor, CAO, Director
External newsletter	1 week	1 to 2 hours	CAO, Mayor
Media event coordination	7 to 10 days	90 mins	CAO, Mayor
Media pitch	i to to days	33	or to, mayor
Writing			
Key messaging/Q&A doc	2 to 5 days (more if	120 mins	Director, CAO
Troy moodaging/ Qa/ t doo	sensitive matter)	120 1111110	
Accessibility review (small	1 to 2 days	15 mins/page	Manager or Director
corrections)	1 to 2 days	To mino/page	Wanager of Bircotor
Internal Memo	1 to 2 days	60-90 mins	CAO
Speech (delivery = approx. 150	1 to 2 days	30 mins/150 words	0,10
words read per min)		00 mm3/ 100 words	
Editing		10-20 mins/250	Director, CAO, Mayor
Latting		words	Bircolor, OAO, Mayor
Letter to residents, businesses		Words	
etc.			
PowerPoint presentation deck		7-10 hours	
Municipal statement			
Promotional / Advertising			
Postcards	1 to 2 weeks	60 to 90 minutes	Director
Boosted Facebook post		20 mins	Manager or Director
Paid newspaper advertising	1 to 2 weeks (prior	20 1111110	Manager or Director
and metropaper autoritioning	to newspaper		Manager er Briedter
	deadline)		
Poster/ad design	3 to 5 days	90 mins	Manager or Director
Radio script development		30 mins	
Swag research and order	1 week	20 mins (per item if	Director
	- Wook	research is required)	
Website and social media		, , , , , , , , , , , , , , , , , , , ,	
Social media post (content and	1 to 3 days	30 to 60 mins	Manager or Director
visual graphic)			
Web banner design	2 to 4 days	30 mins	Manager or Director
New webpage	One week	One week	Manager or Director
Web content development	2 to 4 days	30-45 mins per page	Manager or Director
Graphic Design	_ : :::::	oo io iimio poi poigo	l l l l l l l l l l l l l l l l l l l
Publication layout & design	2 to 3 weeks	60 mins/page	Director, CAO
, ,	(depending on	1 3	,
	length of document)		
Photography / Video			
Imagery sourcing	1 to 2 days	90 mins	Manager or Director
Video – script and shooting	3 to 4 weeks	3 to 5 hours	Director, CAO, Mayor
Community Engagement			
Engagement plan			
Community survey			
•	•		•

Social media poll		



Policy Title: NGtransit Hand-to-Hand Transfer

Policy Number: CS 003 2024

Category: Department

Department: Corporate Services

Related Policies:

Approved By: Karen Dunlop, Chief Administrative Officer

Effective Date: March 21, 2024

Revision Date:

Policy Statement:

The Municipality aims to provide a safe and reliable transit service through NGTransit, including safe and secure service for users with specialized needs.

Purpose:

The NGtransit Hand-to-Hand Transfer Policy specifies a process for providing transit services to identified Community Living clients who cannot be left alone at their destination.

Application:

This policy applies to Designated Passengers.

Definitions:

- **1. Companion:** any person that is required to travel with an individual. The Companion does not pay a fare and must have the same origin and destination as the client.
- **2. Designated Passenger:** an NGtransit rider designated by Community Living as requiring hand-to-hand transfer.
- **3. NGtransit:** the transportation service offered by the Municipality of North Grenville and operated by Mobility Transportation Specialists.
- **4. Operator:** the third-party contracted to operate NGtransit on behalf of the Municipality, Mobility Transportation Specialists.
- **5. Receiver:** the person who receives the Designated Passenger.

Policy:

1. Hand-to-Hand Transfer

- 1.1. If a Receiver is not present at the destination at the time of drop-off, the Driver will return the passenger to their origin.
- 1.2. The Driver will wait five (5) minutes from the specified drop-off time.
- 1.3. If the destination is the Designated Passenger's home, they will be dropped off if a Receiver is not present.
- 1.4. If a Companion is riding with a Designated Passenger a Receiver is not required.

Responsibilities:

Community Living

- Community Living will provide a list to the Municipality of Designated Passengers that require hand-to-hand transfer.
- Community Living will ensure a Receiver is present at the destination.

NGtransit

• Municipal staff will add a note to Designated Passengers' profiles indicating they require hand-to-hand transfer.

- The Driver will wait five (5) minutes for a Receiver.
- If a Receiver is not present the Driver will return the passenger to their origin.

Compliance:

If there are issues with compliance, Community Living, the Municipality, and the Operator will discuss ways to revise the policy.

Policy Communication:

This policy will be shared with Community Living North Grenville.

Related Documents/Legislation:

None.

Authorization:

This Policy was authorized by the Director of Corporate Service and Chief Administrative Officer.

Revision History

Document Owner	Revised Date	Reason for Changes

Contact:

Any questions or concerns regarding this Policy shall be directed to the Director of Corporate Services.



Policy Title: Device Policy

Policy Number: CS-002-2024

Category: Corporate

Department: Corporate Services

Related Policies: Acceptable Internet and E-mail Use Policy, Electronic

Monitoring Policy

Approved By: Council

Effective Date: September 11, 2024

Revision Date:

Policy Statement:

At its discretion and under the terms and conditions set out in this policy, the Municipality of North Grenville (the "Municipality") may provide employees with devices as a business tool.

Purpose:

The purpose of this policy is to govern the acquisition, usage, and management of Municipal devices intended for Municipal business use by employees. It is also to protect Municipal resources, protect employee safety, manage communications costs, and help minimize Municipal liability.

This policy outlines what the Municipality considers acceptable use for all Municipality-related communications resulting from the use of a telecommunications device.

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Municipal email accounts, calendars, and contacts lists are property of the Municipality. As such, the Municipality retains the right to remotely access and install management software to these platforms and control them in the event of lost or stolen device or a suspected contravention of the Acceptable Internet and Electronic E-mail Use Policy.

Application:

This policy applies to all Municipal employees who are required and authorized by the Municipality to use a device issued to them by the Municipality as a business tool while performing their job duties.

Definitions:

- 1. **Device:** any devices used to perform one's work duties including, but not limited to, mobile phones, laptops, tablets and all accessories including, but not limited to, monitors, fobs, keyboard, headphones, etc.
- 2. **Employees:** anyone employed by the Municipality, including both employees (whether permanent or temporary) and elected officials.

Policy:

1. Authorization

1.1. The issuance of a device shall be in conjunction with an approved job description.

2. Provider and Plan

2.1. The Municipality's service provider agreement provides discounted pricing and a wide range of service plans to meet the Municipality's needs. The service provider agreement is reviewed on a regular basis. If the need arises to procure a new service provider, the process shall be completed in accordance with the Municipality's Procurement Policy.

3. Equipment and Purchases

- 3.1. New purchases for positions identified as requiring a device must be approved by the Department Director and a written request using the Device Assignment Form (Appendix A) must be provided to the IT Coordinator, who will coordinate the request.
- 3.2. Equipment upgrades may occur provided there is no additional cost to the Municipality and if the device no longer functions so as to allow the Employee to conduct their job duties. If a device is required to be replaced before the term of the contract with the service provider, written approval is required by the Department Director.
- 3.3. All costs for new mobile phones and tablets will be paid for by the requesting department.
- 3.4. In order to ensure consistency across the organization and to minimize IT and associated costs, only the following brands shall be acquired for telecommunications devices unless written approval is obtained from the Department Director. Specific models will also be specified by the IT Coordinator at the time of acquisition or otherwise stipulated by the Department Director:
 - Smartphone iPhone
 - Tablet iPad or Microsoft
- 3.5. All devices will include a cover/case suitable to the business functions as assigned by the IT Coordinator.
- 3.6. The employee is responsible to maintain all packaging and accessories for each item for return to the IT Coordinator once the device is no longer required or upon the frustration or termination of the employee's employment for any reason.

4. Use

- 4.1. Any device owned and issued by the Municipality shall have municipally-related business as its primary function.
- 4.2. Any device owned and issued by the Municipality is subject to the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). This means that the device may be reviewed and/or seized by the Municipality at any time. It is the responsibility of the employee to ensure that they utilize the devices issued to them in accordance with all Municipal policies, as well as applicable provincial and federal legislation.
- 4.3. Information will be provided by the IT Coordinator about the device settings regarding roaming, Wi-Fi, long distance, etc., when the device is provided to the employee.
- 4.4. The credentials (ids, passwords and passcode,) will be provided by the IT Coordinator. Employees cannot log-in with different credentials; however, the password and passcode should be changed regularly per this policy. Passwords and passcodes should be kept confidential and secure.
- 4.5. Employees shall not use their Municipal credentials for non-municipal devices.

- 4.6. Employees accept financial responsibility for any personal use and overage charges above and beyond those covered by the service provider agreement.
- 4.7. Employees who do not follow Municipal policies or applicable provincial or federal legislation may be subject to disciplinary action, up to and including immediate termination of employment.

5. Devices Issued by the Municipality

- 5.1. Upon receipt of a device, employees will be required to sign a Terms of Use Agreement (Appendix B).
- 5.2. The Municipality will cover the purchase cost and monthly fees of mobile phones according to the Municipality's negotiated plans.
- 5.3. Changes or modifications to the mobile phone monthly plans will be made only by the Director of Corporate Services.
- 5.4. The use of a Municipality-issued mobile phone for personal use is permitted provided it does not result in unreasonable additional charges to the monthly fees incurred under the Municipality's negotiated plan. Any additional charges will be invoiced back to the employee.
- 5.5. Subscribing to additional features or applications that increase the monthly cost of the negotiated mobile phone plan is not permitted. Any additional charges will be invoiced back to the employee.
- 5.6. Lost, damaged, or stolen devices must be immediately reported to the Municipality for deletion of Municipal information from the device and/or cancellation of service, as may be required. Should the Municipality determine that the device was lost, stolen, or damaged due to the employee's negligence, the employee may be responsible to reimburse the Municipality for the full cost of the device.
- 5.7. Upon frustration or termination of employment for any reason, employees must immediately return to the Municipality any municipally-issued device unless otherwise authorized by the Chief Administrative Officer.

6. Travel

- 6.1. Advanced notification to the IT Coordinator is required for mobile phone use while travelling outside of Canada.
- 6.2. Employees are responsible for any additional cellular costs due to roaming charges.
- 6.3. If an Employee is travelling outside of Canada and needs to be available for business purposes, a request for a plan to cover the specific dates and locations of travel can be made in writing to their supervisor who will coordinate the purchase of the international coverage with the IT Coordinator.
- 6.4. Employees should be aware that roaming charges may be incurred when near the US border.

7. Responsibility of User

- 7.1. If a device is lost, damaged, or stolen, the IT Coordinator is to be notified as soon as possible.
- 7.2. A password or device lockout must be used on all devices to protect any Municipal data that may be present on the device.
- 7.3. It is the responsibility of the user to make themselves aware of the usage plan for the device issued to them and to exercise diligence to ensure usage stays within the parameters of the plan. Users shall be required to reimburse the Municipality for any personal usage including text messaging, downloading, long distance charges, roaming charges etc., which exceed the limits of the monthly plan, as per Section 5.
- 7.4. Misuse of municipally-owned assets is subject to disciplinary actions up to and including termination.

8. Device Requirements

10.1. For security, devices must have, at all times, the latest updates for the operating system.

9. Mobile Phone Payment and Billing

- 9.1. Individual departments are responsible for all costs associated with devices issued to department employees, including hardware, accessories, service plans and overages.
- 9.2. Monthly billing statements shall be reviewed by the Director of Corporate Services and sent to the Department Directors to ensure service plans are appropriate and to highlight any overages as needed. Non-business use resulting in plan overages will be fully reimbursed by the individual employee.

10. Security and Confidential Information

10.1. Municipal employees are responsible for the backup of their own personal data and the Municipality will accept no responsibility for the loss of files due to noncompliance.

10.2. Any suspicion of unauthorized access to Municipal information through the employee's device should be reported immediately to their manager.

11. Leave of Absence

11.1. While an employee is on a leave of absence (not including vacation or compensatory leave), the Employee's direct manager will decide whether a device is a continued necessity. If not required, the device is to be returned to the Municipality promptly. Service will be reinstated once the Employee returns from leave.

12. Safety

- 12.1. Employees must not use devices while operating a motor vehicle without appropriate hands-free technology.
- 12.2. Employees must use devices in strict compliance with all applicable Municipal policies, including workplace harassment policies.
- 12.3. The Municipality requires that all employees comply with all Municipal policies and provincial and federal legislation regarding mobile telecommunication devices. Where operational needs require employees to be responsive to calls while in transit, employees shall pull over and stop the vehicle safely before placing, returning, or answering calls or messages. No attempt at talking, writing, texting, or other activities shall be undertaken while in transit (either in personal or Municipally-owned vehicles and equipment) that would distract the driver without appropriate hands-free technology.
- 12.4. Any violation of this policy that results in fines are the sole responsibility of the Employee.

13. Mobile Device Management ("MDM")

- 13.1. The Municipality uses MDM to ensure the security of municipally-issued cellphone devices.
- 13.2. The following policies are applied to iOS devices:
 - 13.2.1. Jailbroken devices will be blocked.
 - 13.2.2. Users will not be able to use their device if it is jailbroken or modified.
 - 13.2.3. The current minimum iOS version is 14 and will change over time.
 - 13.2.4. A passcode at least four (4) digits in length is required to unlock mobile devices.
 - 13.2.5. A passcode will be required after the screen has been locked for fifteen (15) minutes.
 - 13.2.6. The screen will lock after fifteen (15) minutes of inactivity.
 - 13.2.7. The passcode expiration is three hundred and sixty-five (365) days.
 - 13.2.8. Users cannot set a new passcode identical to their current passcode or any of their previous nine (9) passcodes.
- 13.3. The following policies are applied to Android devices:
 - 13.3.1. A password is required.

- 13.3.2. Passcode will be required after the screen has been locked for fifteen (15) minutes.
- 13.4. The following apps are prohibited: TikTok.
- 13.5. Actions in response to non-compliance:
 - 13.5.1. Immediately mark device noncompliant.
 - 13.5.2. The user and IT Coordinator will receive an email notification immediately notifying them about the compliance issues.
 - 13.5.3. The device will be locked after fourteen (14) days of noncompliance.
- 13.6. Devices will be deleted from the system if they have not checked in for sixty (60) days.

14. Other

14.1. The nature of the technology to support services is rapidly evolving. Devices may have additional features such as cameras, text messaging, Internet access, etc. that are also to be used primarily for business purposes and at no additional cost. The intent of this policy is to apply the principles outlined to any such add-ons or accessory features.

Responsibilities:

Employer:

 The Municipality will comply with all safety, security and privacy policies and protocols as they relate to the use of the Municipality's property, including electronic devices.

Employee:

Employees of the Municipality will comply with all safety, security, and privacy
policies and protocols as they relate to the use of the Municipality's property,
including electronic devices. Employees will refer to and comply with the
Municipality's IT policies.

Compliance:

Employees must comply with the guidelines contained in this Device Policy and acknowledge receipt and understanding of said policy. Employees who violate this policy may be subject to disciplinary action, up to and including immediate termination of employment.

Policy Communication:

This policy will be circulated to all employees upon hiring and annually thereafter.

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Related Documents/Legislation:

None.

Authorization:

This policy was authorized by Council by resolution C-2024-267 at the meeting held September 11, 2024.

Revision History

Document Owner	Revised Date	Reason for Changes

Contact:

Any questions or concerns regarding this policy shall be directed to the Director of Corporate Services.

Appendix A: Device Assignment Form

Position:	
Employee Name:	
Start Date:	-
End Date:	

Business Conditions to Consider	Department Issued Cell	Individual Issued Cell
Position that regularly works in isolation from other employees and where personal safety may be threatened	X	
Position required to be on-call	Х	
Position that responds to emergency situations or business where immediate access at all times is imperative to the proper discharge of duties		×
Position where immediate access to e-mail or cell phone at all times is imperative to the proper discharge of duties		Х
Position required to monitor the Municipality's Social Media sites		Х

Device/Accessory	Device Information	Date Assigned	Date Returned
Laptop			
Tablet			
Cell Phone			
Duo Fob			
Google Titan			
Keyboard			
Mouse			

Headphones		
Dock		
Printer		
RocketStick		
At home monitor		
At home keyboard		
At home mouse		
At home dock		
At home printer		
Other		
Employee	 Date	
Department Director	 Date	
Director of Corporate Services	 	

Appendix B: Terms of Use Agreement

I acknowledge that I have received a copy of and read the Device Policy and agree to the following:

- 1. I have received information about the parameters of the service provider agreement and understand that any charges outside of the agreement as a result of personal use will be reimbursed to the Municipality.
- 2. A passcode/password has been set up on all devices limiting access to the device and its contents.
- 3. I acknowledge that the device and my use thereof is subject to Municipal policies, provincial and federal legislation, and that the device may be reviewed and/or seized at any time to ensure compliance.

Name:	Date	
Title:		



Policy Title: Acceptable Internet and E-mail Use Policy

Policy Number: CS-001-2024

Category: Corporate

Department: Corporate Services

Related Policies: Device Policy, Electronic Monitoring

Policy Approved By: Council

Effective Date: September 11, 2024

Revision Date:

Policy Statement:

Staff of the Municipality of North Grenville will be required to use internet and e-mail appropriately to perform their duties.

Purpose:

The purpose of this policy is to outline the acceptable use of information systems and computing equipment at the Municipality of North Grenville (the "Municipality"). These rules are in place to protect both the employee and the Municipality. Inappropriate use exposes the Municipality to risks, including malware attacks, compromise of network systems and services, loss of confidential information and legal issues.

Application:

This policy applies to all Municipal devices and employees. All employees with access to Municipal computing devices or information systems shall comply with this policy.

Definitions:

- Confidential Information: information owned by the Municipality or entrusted to the Municipality that is not intended for sharing with the public. It includes Protected Information. Security protections must be applied to this information to safeguard its confidentiality, integrity, and availability.
- 2. Protected Information: information that is highly sensitive and that must be safeguarded in accordance with legislative or regulatory requirements. Protected Information is often subject to privacy breach notification laws and the loss of this information could have severe consequences for the Municipality. Examples include protected health information, payment card information and most forms of personally identifiable information.

Policy:

1. General and Internet Use

- 1.1. Employees shall not, under any circumstances, in their use of the Municipality's computing devices or information systems:
 - 1.1.1. Engage in any activity that is illegal or violates the rights of any person.
 - 1.1.2. Download or install software of any type without the authorization of the IT Coordinator or their designate.
 - 1.1.3. Copy or distribute any copyrighted material without authorization.
 - 1.1.4. Access the personal information of others without authorization, except as part of the employee's assigned duties.
 - 1.1.5. Make any claims on behalf of the Municipality unless authorized to do so.
 - 1.1.6. Associate the Municipality's name with any activity that would harm the reputation of the organization.
 - 1.1.7. Visit websites exhibiting sexually explicit material, gambling sites, or sites related to illegal activities.
 - 1.1.8. Visit websites that encourage discrimination or the violation of the rights of any group or individual, except in the course of authorized research.

- 1.1.9. Visit websites that share music or other files on a peer-to-peer basis, or otherwise share content in violation of copyright laws.
- 1.1.10. Engage in any activity that interferes with the ability of another organization or individual to conduct computing activities (e.g., denial of service attacks).
 - 1.1.11. Provide information about the Municipality or its employees, clients, customers, or associates to any outside party, unless authorized to do so.

2. Personal Internet Use

2.1 Activities of a personal nature, such as non-business online shopping, access to personal e-mail, job searching, and access to personal pages of social networking sites are permitted provided that it is done on the user's own time, does not interfere with or conflict with Municipal use, and is at no cost to the Municipality.

3. Online File Sharing, Backup, and Synchronization Services

- 3.1. Online file sharing, backup and synchronization services, such as Dropbox, Google Drive, OneDrive, etc. are convenient ways to store and share files online, but increase the risk that Confidential Information will be inappropriately shared. The following controls must be followed:
 - 3.1.1. Confidential Information must not be copied to or stored on any online file sharing or backup system without specific authorization from the IT Coordinator.
 - 3.1.2. Use of online file sharing, backup and synchronization services for information that is not Protected Information is restricted to services approved by the IT Coordinator and Records and Licensing Coordinator.

4. Transmission of Confidential Information

4.1 Employees must not transmit any Confidential Information in any e-mail or via any instant messaging or chat service, except as part of their duties.

5. Authorized Storage Locations for Confidential Information

5.1. All Confidential Information shall be processed and stored within the applications authorized by the Municipality. No employee may copy any Confidential Information to any other location unless directed to do so by an authorized Municipal representative.

6. E-mail Usage

- 6.1 Email is an important communication tool, but also has the potential to cause damage to the Municipality. Inappropriate use of e-mail can result in the loss of sensitive or confidential data or intellectual property, damage to public image, damage to critical internal systems, and unintentional employee exposure to inappropriate content or material.
- 6.2 Municipal employees must not engage in any of the following:

- 6.2.1 Sending unsolicited e-mail messages, including sending "junk mail" or other advertising material to individuals who did not specifically request such material (e-mail spam).
- 6.2.2 Engaging in workplace harassment contrary to the Municipality's applicable policies, in any form, whether through language, frequency, or size of messages.
- 6.2.3 Creating or forwarding "chain letters" or "Ponzi" or other "pyramid" schemes of any type.
- 6.2.4 Posting the same or similar non-business-related messages to large numbers of Internet posting sites.
- 6.2.5 Engaging in unauthorized use or forging of email header information.
- 6.3 In order to ensure proper branding and professionalism, all employees must include the standard e-signature on all e-mails sent outside the Municipality.

7. Social Media

- 7.1. All Municipal employees shall refer to By-Law No. 17-17, Social Media Policy, for information regarding the use of social media, both professionally and personally.
- 7.2. Some social media applications may be restricted by the Device Policy.

8. Remote Access and Personal Wireless Networks

- 8.1. No employee is permitted to install any wireless networking device that connects to the Municipality's systems without authorization from the IT Coordinator or their designate.
- 8.2. No employee or contractor may install any software or application that allows access to the organization's systems from a remote location without appropriate authorization from the IT Coordinator.

9. Reporting Security Incidents

- 9.1. All employees must immediately report the following as security incidents to the IT Coordinator:
 - 9.1.1. Any unauthorized disclosure of Confidential Information, whether intentional or unintentional.
 - 9.1.2. Any attempt to view or access Confidential Information by a person not authorized to view or access that information.
 - 9.1.3. Any unauthorized attempt to gain physical access to, or install unauthorized software applications on, any server or workstation.
 - 9.1.4. Any telephone, email, or other communication that includes an unauthorized attempt to receive or access Confidential Information.
 - 9.1.5. Any unusual computer behavior (e.g., unusual error messages, unusual pop-up windows, website redirection, etc.). When unusual computer activity is observed, the computer should not be turned off to preserve valuable evidence.

10. Protecting the Organization from Cyber Threats

Sooner or later, the Municipality may be the target of an attempt to trick employees into disclosing Confidential Information or installing malicious software on Municipal systems; these are referred to as phishing or social engineering attacks. Be aware that social engineers often conduct extensive research in preparation for their attacks and may present you with names, events, or other information that you would not expect to be known to anyone outside your organization. Be aware of the following considerations:

- a) Exercise caution with email attachments and links in email messages. If the message is unexpected or if you have any doubt about whether it is genuine, <u>do not reply to the email</u>. Contact the sender using contact information you have previously recorded.
- b) Be suspicious if anyone asks you for a password, account information, or other Confidential Information. Phishing email messages can be made to look exactly like legitimate messages you have received in the past.
- c) Never send Confidential Information, enter passwords, or provide account information over an insecure connection. A secure connection will always start with https:// in the browser address bar.
- d) Do not click on banner ads or the ads along the top, sides, or bottoms of web pages. These ads are designed to be tempting, but some may link to malicious websites.
- e) Understand that you may be targeted by cyber-criminals and that they want to steal Confidential Information from organizations. Be constantly vigilant.

11. Violations

11.1. Any violations of this policy may result in disciplinary action, which may include, but not be limited to, immediate termination of employment and/or such other legal actions as may be warranted in the circumstances.

Responsibilities:

Director of Corporate Services

 Shall be responsible for ensuring implementation of all items listed in the Policy section. Responsibility for the creation and implementation of specific procedures may be assigned to internal staff or contractors as appropriate.

Users

- Shall be responsible to:
 - Ensure that they use the Municipality's information systems and computing equipment in accordance with the policy.
 - o Access IT resources in a responsible and informed manner.
 - Respect federal and provincial legislation and regulations and Municipal policies and procedures.
 - Take reasonable measures to control the use of their password, user identification and computer accounts.

 Report any incidents that may raise security concerns, including instances of viruses, spam, hacking, or any release of Confidential Information to the IT Coordinator and their Director as appropriate.

Compliance:

All Municipal staff must review and sign that they acknowledge the policy upon hiring and annually thereafter.

Policy Communication:

The policy will be shared with municipal staff upon hiring and annually thereafter.

Related Documents/Legislation:

Authorization:

This policy was authorized by Council by resolution C-2024-267 at the meeting held on September 11, 2024.

Revision History

Document Owner	Revised Date	Reason for Changes

Contact:

Any questions or concerns regarding this policy shall be directed to the Director of Corporate Services.



Policy Title: Electronic Monitoring

Policy Number: A09-001

Category: Corporate

Department: Office of the CAO

Related Policies: Device Policy, Acceptable Internet and E-mail Use

Policy Approved By: Council

Effective Date: October 11th, 2022

Revision Date: September 11th, 2024

Policy Statement:

The Municipality of North Grenville values trust, discretion, and transparency and believes employees deserve to know when and how their work is being monitored.

This policy was prepared on September 28th, 2022, and is in force as of October 11, 2022.

Purpose:

Electronic monitoring may be used by the Municipality of North Grenville to collect information about employee activities in the workplace. This policy is to inform all employees where the Municipality of North Grenville may make use of electronic monitoring systems to ensure the health and safety of municipal property and staff and to outline where electronic monitoring may be used to monitor staff movements and work.

The policy is made in compliance with the relevant provisions of the *Employment Standards Act, 2000* (the "ESA").

Application:

- i. This policy applies to all employees, as defined by the ESA, whether they are working remotely, in the workplace, flexibly, or mobile.
- ii. It applies in any location in which you are engaged in work-related activities or in the work-related use of electronic devices.

Definitions:

- 1. **Workplace:** The *Occupational Health and Safety Act* (the "OHSA") defines a workplace as any land, premises, location, or thing at, upon, in or near a worker works.
- **2. Electronic Monitoring:** shall refer to electronic systems that may be used to monitor the movement and work of employees including, but not limited to, building security codes and fobs, IT passwords and accounts, GPS technology, and video surveillance.

Policy:

The Municipality of North Grenville utilizes a range of electronic monitoring systems in order to, among other things, ensure the safety and security of staff and property. These include:

1. Electronic Monitoring Systems

- 1.1. Building Security Systems The Municipality of North Grenville may monitor employee access to the Municipality's properties with the use of electronic fobs and security codes.
- 1.2. Video Surveillance The Municipality of North Grenville may utilize video surveillance at some locations to assist with security and safety concerns.
- 1.3. Internet and Email Resources All use of the Municipality of North Grenville's Internet and email systems are identifiable by user, device and device location and time of access. Electronic monitoring of Internet and email systems is required for accounting and security purposes.
- 1.4. GPS Technology Municipality vehicles are electronically monitored with GPS technology. This information is used to track and locate Municipality property as required.
- 1.5. Municipality of North Grenville Devices Please refer to the Device Policy.

In addition to the purposes set out above, the information obtained by the Municipality through electronic monitoring may be used for purposes including, but not limited to:

- Tracking employee working time to ensure accurate compensation and/or adherence to attendance policies;
- Improving work efficiency by tracking time spent on specific task types, tracking employee use of specific tools or software, or tracking employee location and travel time;
- Protecting employee health and safety by tracking employee location and/or keeping a record of employee access to the workplace; and
- Ensuring employee adherence to workplace policies, especially those related to use of IT systems; for example, the Municipality may review an employee's Internet browsing history or instant messaging history following a complaint of inappropriate behaviour.

As noted in the ESA, for greater certainty, while the policy outlines the intended use of information obtained through electronic monitoring, nothing herein affects or limits the Municipality's ability to use information obtained through the electronic monitoring of its employees.

The above-noted electronic monitoring of employee activities by the Municipality may be performed at any time, without notice to the employee, in order to determine compliance with this policy and any other municipal policy. Without limiting the generality of the foregoing, information collected by the Municipality through electronic monitoring may be used for disciplinary purposes, up to and including termination of employment.

Responsibilities:

Employer Obligations

 The Municipality of North Grenville will comply with all safety, security and privacy policies and protocols as they relate to the use of the Municipality's property, including electronic resources. Employees will refer to and comply with the Municipality's IT policies.

Employee Obligations

 Employees of the Municipality of North Grenville will comply with all safety and security policies and protocols as they relate to the use of the Municipalities property, including electronic devices. Employees will refer to and comply with the Municipality's and any applicable Counties' IT policies.

Compliance with Policy and Consequences:

Employees must comply with the guidelines contained within this Electronic Monitoring Policy and acknowledge receipt and understanding of said policy. Employees who

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violate this policy may be subject to disciplinary action, up to and including termination of employment.

Privacy and Confidentiality:

Any employee personal information collected through electronic monitoring will be collected, used and disclosed for the purposes described in this policy, and will be subject to security, retention and access as described in *Protection of Personal Employee Information*, *Policy # A-2*, and any applicable privacy legislation, including the *Municipal Freedom of Information and Protection of Privacy Act*.

Review:

The Municipality reserves the right to revise any part of this policy in accordance with its operational requirements and any legislative or technological changes.

Authorization:

This Policy was intially authorized by the CAO October 2022. Amendments to this Policy were authorized by Resolution Number C-2024-267 adopted by Council at its meeting held on September 11, 2024.

Revision History:

Document Owner	Revised Date	Reason for Changes
Corporate Services	Sept 11, 2024	Consistency with
		other policies

Contact:

Any questions or concerns regarding this policy shall be directed to:

Director of Client Services

Or

Human Resources Coordinator

Employee Acknowledgement:

I, the undersigned, (print name)	_ have read and
understand the Municipality of North Grenville's Electronic Monitoring acknowledge that I have received a copy of this policy.	Policy. I
Signature:	
Date:	

THE CORPORATION OF THE MUNICIPALITY OF NORTH GRENVILLE

BY-LAW NO. 56-17

A By-Law to Adopt a Purchasing & Procurement Policy

WHEREAS the Council of the Municipality of North Grenville deems it necessary and desirable to establish a Purchasing and Procurement Policy applicable to the Municipality of North Grenville Council and staff:

NOW THEREFORE the Council of the Corporation of the Municipality of North Grenville enacts as follows:

- 1. The Purchasing & Procurement Policy as outlined in Schedule "A" attached hereto, is adopted by Council.
- 2. This by-law shall be known as the "Purchasing & Procurement Policy By-Law".
- 3. That By-Law 34-06 be repealed.
- 4. The Clerk of the Municipality of North Grenville is hereby authorized to make any minor modifications or corrections of an administrative, numeric, grammatic, semantic or descriptive nature or kind to the by-law and schedule(s) as may be deemed necessary after the passage of this by-law, where such modifications or corrections do not alter the intent of the by-law.
- 5. This by-law shall come into force and take effect on the date of its passing.

PASSED AND ENACTED THIS 23RD DAY OF MAY, 2017.

ĎAVID GORDON

Mayor

CAHL POMINVILLE

Clerk



FINANCE POLICY

Approval Date: Revision Date: May 23, 2017

Title: Purchasing & Procurement Policy

Applies To: All Departments

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1. PURPOSES, GOALS & OBJECTIVES

The purposes, goals and objectives of this policy and each of the methods of Purchasing authorized herein are:

- a) To provide a corporate-wide policy for the procedures and controls in the acquisition of goods and services;
- b) To ensure fairness among bidders;
- c) To ensure all goods and services are purchased on a competitive basis at lowest cost consistent with the quality required and availability;
- d) To provide a level of service that meets the timeframe requirements for each department;
- e) To ensure openness, accountability and transparency while protecting the financial best interest of the Municipality of North Grenville;
- To promote, and incorporate wherever possible in purchasing activities of the Municipality, the requirements of the Accessibility for Ontarians with Disabilities Act, 2005;
- g) To monitor all purchases within current control resources and to maximize savings to the taxpayers; and
- h) It will be the policy of the Municipality to standardize the procurement of goods and services wherever possible, to meet the following objectives:
 - To allow for reduced number of goods and services required;
 - To maximize volume buying opportunities;
 - To provide economies of scale;
 - To reduce handling, training and storage costs;
 - To minimizing maintenance costs:
 - To reduce overall cost: and
 - To maximize value.

2. SCOPE

The policy will be applicable to all departments of the Municipality of North Grenville and where their operational and reporting structure permits, boards, committees and services that are responsible to the Municipality.

3. PROCUREMENT PRINCIPLES

The following principles are intended to protect the integrity of the procurement process, to prevent unauthorized spending and to minimize risks to the procurement activities of the Municipality.

3.1. CONFLICT OF INTEREST

Any employee who has a conflict of interest, meaning a situation where the employee's personal interests may affect the employee's judgement in acting in the best interest of the Municipality, shall disclose the conflict of interest to the Chief Administrative Officer (CAO) and shall withdraw from the procurement process. Members of Council, committees and local boards shall comply with the *Municipal Conflict of Interest Act*.

3.2. ELECTED OFFICIAL ROLE

Elected officials shall be involved in the procurement process only as voting members of Council. Elected officials shall not make purchasing commitments or acquire goods and services on behalf of the Municipality.

3.3. NO EMPLOYER - EMPLOYEE RELATIONSHIP

The Department Director shall reject any purchase requisition or proposal for services where the services could result in the establishment of an employer-employee relationship.

3.4. CONSULTANTS' CONFLICTS OF INTEREST - DISCLOSURE

All consultants (engineers, architects, legal and other advisors) retained by the Municipality shall be required to disclose any real or potential conflict of interest prior to accepting a contract or as soon as the conflict is evident to the consultant. The Municipality may then withhold the assignment from the consultant until the matter is resolved or may terminate the contract without penalty, at the Municipality's sole discretion.

3.5. NO SPLITTING

Splitting of orders (dividing of large orders into two or more smaller requisitions) to stay within expenditures thresholds is not permitted.

3.6. UNSOLICITED PROPOSALS

Unsolicited proposals will not be accepted by the Municipality.

3.7. **GIFTS**

No employee shall accept any gifts or favours from any vendor, contractor or others who may do business with the Municipality that could tend to influence the employee in the performance of his/her duties. "Gifts" do not include promotional materials with a value of less than \$20.

3.8. **NO DISCRIMINATIO**N

In order to comply with all federal and provincial legislation and trade agreements, the Municipality shall ensure that suppliers are treated fairly when competing for procurement opportunities, regardless of geographic location. As stated in these agreements, there shall be no preference given to local suppliers or local content.

3.9. **COMPLIANCE**

A Department Director shall not award a contract where it has been determined that the provisions of these policies have not been complied with or when the Department Director has been advised not to do so by the Director of Finance or CAO.

3.10. DISCIPLINARY ACTION

Any employee who knowingly and intentionally acquires any goods or services or enters into any agreement on behalf of the Municipality in contravention of these policies, as amended from time to time, shall be subject to disciplinary action in accordance with the Human Resources Policies of the Municipality.

3.11. ACCOUNTABILITY

The goal is to provide clear delegation of authority and a means of ensuring implementation of plans authorized in the annual budget. Accountability refers to the obligation to answer for results in terms of prudent spending of public funds.

3.12. TRANSPARENCY

To create an open and transparent procurement process. Openness and transparency refer to clarity and disclosure about the process for arriving at procurement decisions. Policies that promote openness and transparency are to be governed by legal considerations with respect to confidentiality and protection of privacy.

3.13. **EFFICIENCY**

To maximize efficiency in carrying out procurement activities. Efficiency measures the quality, cost and amount of goods and services procured as compared to the time, money and effort used to procure them.

3.14. **EFFECTIVENESS**

Effectiveness refers to the extent to which the procurement process is achieving its desired results in terms of meeting the needs of the Municipality.

3.15. FAIRNESS & CONSISTENCY

To promote fairness and consistency in the treatment of prospective suppliers and to avoid discriminatory practices.

3.16. **OBJECTIVITY**

To approach the procurement of goods and services in an objective and unbiased way, that is not influenced by personal or private interests.

3.17. **VALUE**

To endeavour to obtain best value in all purchasing decisions in terms of price, quality, risk, service and contribution to the operations of the Municipality. Value means the advantage or gain that the Municipality derives from the item or service.

3.18. **LEGAL COMPLIANCE**

To ensure compliance with all Federal and Provincial laws and regulations in all purchasing and procurement activities.

4. COMPLAINTS

Any complaints from a supplier or potential supplier concerning any aspect of the procurement process shall be submitted in writing to the appropriate Department Director, with a copy to the CAO and the Director of Finance. The Director of Finance, in consultation with the Department Director, shall investigate and resolve the matter and may refer the matter to Council, at his/her discretion.

5. **DEFINITIONS**

Wherever a word is used in this policy with its first letter capitalized, the term is being used as it is defined in this section. Where any word appears in ordinary case, its regularly applied meaning in the English language is intended.

- a) "Appropriated" means the provision of funds in the annual budget. Where Council has not yet adopted a budget for the current year, an expenditure shall be deemed to be appropriate if the expenditure is for normal operations and maintenance, and does not exceed funds at the previous years' service levels.
- b) "Agreement" shall mean a legal document that binds the Municipality and all other parties, subject to the provisions of the contract.
- c) "Award", "Awarded" and "Awarding" means authorization to proceed with the purchase of goods, services or construction from one or more selected suppliers or contractors.
- d) "Best Value" means the optimal balance of performance and cost as determined by the decision-maker and in accordance with any pre-determined evaluation plan.
- e) "Bid" means an offer or submission from a bidder in response to a call for bid and in accordance with the terms and conditions of the Municipality's bid documents.
- f) "Bidder" means one who submits a response to a call for a bid.

- g) "Bid Deposit" means the form of security required by the terms and conditions of Bid Solicitations to guarantee that the successful supplier enters into a Contract with the Municipality.
- h) "Bid Solicitation" means a formal request for Bids including a Request for Informal Quotation, Request for Quotation, Request for Tender, or Request for Proposal.
- i) "Budget" means the budget or portion of the budget approved by Council.
- j) "Chief Administrative Officer" or "CAO" means the Chief Administrative Officer of the Municipality of North Grenville.
- k) "Compliant Bid" means a Bid that meets the terms and conditions of the Bid Solicitation and this policy.
- l) "Conflict of Interest" means a situation where a personal, business or other interest of an elected or appointed official, officer or employee of the Municipality is, or can be reasonably perceived to be, in conflict with the interests of the Municipality, and includes, but is not limited to:
 - i. the giving or receiving of a direct or indirect personal gain or benefit, or a direct or indirect advantage or privilege, by any person or business that offers goods and/or services to the Municipality;
 - ii. a direct or indirect interest in any business that provides goods and/ or services to the Municipality;
 - iii. a conflict of interest as defined in the Employee Code of Conduct Policy.
- m) "Construction" means the process of utilizing labour to build, alter, repair, improve or demolish any structure, building or public improvement, and generally does not apply to routine maintenance, repair or operations of existing real property.
- n) "Contract" shall mean a legally binding agreement, enforceable by the courts, between two or more parties that creates an obligation to provide defined goods and/or perform defined services in exchange for some consideration.
- o) "Council" means the Council for the Corporation of the Municipality of North Grenville.
- p) "Department Director" means an employee who holds operational responsibility for a municipal function or service. Where responsibility for a function or service cannot be ascribed to a Department Director, this definition shall be deemed to mean the CAO.
- q) "Designate" means a person authorized by the Department Director to act on their behalf, for the purpose of this policy. Only a person holding a position no lower than one level below in the Municipality's organizational chart may be authorized to act as a Designate.

- r) "Disability" or "Disabilities" shall have the same meaning as set out in the *Accessibility for Ontarians with Disabilities Act, 2005*, or any successor legislation thereto.
- s) "Emergency" shall mean a situation where the purchase of goods and services requires immediate action to prevent or correct dangerous or potentially dangerous safety conditions, or ensure the safety of the public as a result of a sudden unexpected event.
- t) "Expression of Interest" shall mean a situation where vendors are solicited by the Municipality to advise the Municipality of their ability or desire to undertake municipal requirements.
- "Goods" means, in relation to procurement, moveable property (including the costs of installing, operating, maintaining or manufacturing such moveable property), including raw materials, products, equipment and other physical objects of every kind and description whether in solid, liquid, gaseous or electronic form, unless they are procured as part of a general construction contract.
- v) "Lowest Compliant Bid" means the Compliant Bid that would provide the Municipality with the desired goods and/or services at the lowest cost.
- w) "Normal Operating Expenditure" means an expenditure of an operational, recurring nature and does not include one-time special or capital expenditures.
- x) "**Professional Services**" means those services requiring the skills of professionals for a designed service requirement including:
 - i. architects, engineers, designers, surveyors, geoscientists, project managers, financial consultants, auditors, accountants, doctors, dentists and lawyers;
 - ii. firms or individuals having specialized competence in environmental, planning or similar disciplines;
 - iii. software consultants and any other persons providing similar services.
- y) "Proponent" means one who submits a response to a Request for Proposal.
- z) "**Proposal**" means the submission received or the response to a Request for Proposal, acceptance of which may be subject to further negotiation.
- aa) "Purchase" means to acquire goods and/or services by purchase, rental, lease or trade.
- bb) "Quote" means a submission to the Municipality in response to a request for the cost of providing goods, services or construction to the Municipality.
- cc) "Request for Expression of Interest" or "RFEOI" means a public request made by the Municipality seeking responses from potential suppliers for the purpose of compiling a list of suppliers who may be interested in providing goods and/or services to the Municipality from time to time. Receipt of an expression of interest by the Municipality does not create any obligation

between the potential supplier and the Municipality, but may be a precondition to qualifying for subsequent Bid Solicitations issued by the Municipality.

- dd) "Request for Pre-Qualification" or "RFPQ" means a public request by the Municipality seeking submissions outlining the experience, financial strength, education, background and significant personnel of potential suppliers who may, from time to time, qualify to supply goods and/or services to the Municipality.
- ee) "Request for Proposal" or "RFP" means a request for proposals from proponents for goods, services or construction and is generally based on providing a solution to objectives stated within applicable terms of reference. The request document must clearly state the evaluation criteria; price may not be the primary evaluation factor and subsequent award recommendation.
- ff) "Request for Quotation" or "RFQ" means a public request for quotation for the provision of goods, services or construction to the Municipality based on defined requirements and where a clear solution exists.
- gg) "Request for Tender" or "RFT" means a public request for tenders for the provision of goods, services or construction to the Municipality based on defined requirements and where a clear solution exists.
- hh) "Services" means intangible products that do not have a physical presence and includes professional services. No transfer of possession or ownership takes place when services are sold and they: 1) cannot be stored or transported; 2) are instantly perishable; and 3) come into existence at the time they are bought and consumed.
- ii) "Single Source" means the non-competitive procurement process to acquire goods and/or services from a specific supplier even though there may be more than one supplier capable of delivery of the same goods and/or services.
- jj) "**Sole Source**" means there is only one source of the goods and/or services that meets the requirements of the Municipality.
- kk) "Special Circumstance" means:
 - i. An event that is exceptional or could not be foreseen and is likely to pose a threat to the health, safety or welfare of the public;
 - ii. An event that, unless immediately addressed is likely to cause significant loss or damage to property;
 - iii. An event that has disrupted any essential service that needs to be reestablished without delay; or
 - iv. An emergency.
- II) "**Tender**" means an offer submitted to the Municipality in response to a formal request for the cost of providing goods, services or construction to the Municipality.

mm) "**Tenderers**" means a person, agent, company or other entity that formally responds to a call for tenders by submitting a price to do the work or provide the product.

6. INTERPRETATION

- 6.1. Wherever this policy refers to a person or thing with reference to gender or the gender neutral, the intention is to read the policy with the gender applicable to the circumstances.
- 6.2. Schedule "A" Purchasing Exemptions is incorporated into this policy.
- 6.3. Schedule "B" Chart of Bid Irregularities is incorporated into this policy.
- 6.4. Schedule "C" Purchasing and Execution Authority is incorporated into this policy.

7. RESPONSIBILITY & AUTHORITY

- 7.1. Every person who purchases goods and services shall exercise that authority in a responsible manner consistent with public purchasing practices and procedures and in accordance with the applicable laws of the Province of Ontario, the Government of Canada and the regulations made pursuant to this policy. All purchases must be approved by the Department Director or their designate.
- 7.2. The methods of purchasing outlined in this policy shall not apply to the purchase of those goods and services outlined in Schedule "A".
- 7.3. This provision provides authority for the purchase of goods and services outlined in Schedule "A" as long as the funding is available in the Budget.
- 7.4. The exercise of authority to award a contract is subject to the identification and availability of sufficient funds in appropriate accounts within Council's approved Budget.
- 7.5. Where goods and services are routinely purchased or leased on a multi-year basis, the exercise of authority to award a contract is subject to:
 - a) The identification and availability of sufficient funds in appropriate accounts for the current year within Council approved Budgets;
 - b) Confirmation by the Director of Finance that the required funding can be reasonably expected to be made available in future years.
- 7.6. Expenditures are authorized by Council through adoption of the annual budget. Prior to budget adoption, departments are authorized to expend funds at the previous years' service levels.
- 7.7. The Department Director has the authority to award contracts in the circumstances specified in these policies provided that delegated authority is

- exercised within the limits prescribed.
- 7.8. The Department Director is responsible for ensuring that all purchasing commitments represent good value for the Municipality and comply with all policies of the Municipality.
- 7.9. The Director of Finance shall monitor compliance with these policies and shall inform the Chief Administrative Officer when non-compliance has occurred.

8. ACCESSIBILITY

- 8.1. Pursuant to the *Accessibility* for *Ontarians with Disabilities Act, 2005*, as amended, in deciding to purchase goods or services, the Municipality will have regard for persons with disability. The Municipality is committed to accessibility principles and is taking steps to improve accessibility in accordance with the Act.
- 8.2. Suppliers and contractors providing service to the Municipality may, as required by the Accessibility for Ontarians with Disabilities Act or subsequent legislation, be required to sign a "Third Party Declaration" related to their training in accessibility requirements.

9. ADVERTISING OF PURCHASING OPPORTUNITIES

- 9.1. Purchases requiring a RFP or RFT shall, as a minimum, be advertised:
 - a) On the Municipality's website from the date that the Bid Solicitation is issued up to and including the date on which the Bid Solicitation closes; and/or
 - b) One time, at least seven (7) calendar days before the Bid Solicitation closes, in a local newspaper that has circulation within the Municipality.
- 9.2. Any person responsible for a purchase may advertise purchases for lesser amounts if he or she determines that it is in the Municipality's best interest.

10. CANCELLATION OF REQUEST FOR QUOTATION, PROPOSAL OR TENDER

A Department Director, with the concurrence of the CAO, may cancel a Request for Quotation, Proposal or Tender at any time up to contract award, and shall ensure that the confidentiality of any bid submitted is maintained in accordance with the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*, as amended.

11. REQUEST FOR PRE-QUALIFICATION OF ACCEPTABLE SUPPLIERS

11.1. The Municipality may conduct a Request for Pre-Qualification (RFPQ) to develop a list of suppliers that may be eligible to submit a Bid on subsequent Bid Solicitations or to develop a roster of suppliers for professional services.

- 11.2. Pre-Qualification may be considered in the following circumstances:
 - a) The work will require substantial project management by the Municipality and could result in substantial cost to the Municipality if the supplier is not appropriately experienced;
 - b) The goods and/or services to be purchased must meet national safety standards:
 - c) The work involves complex, multi-disciplinary activities, specialized expertise, equipment, materials or financial requirements;
 - d) Miscellaneous repairs and services as required by the Municipality such as plumbers, electricians, and drywall contractors;
 - e) There could be substantial impact on the Municipality's operations if the work is not satisfactorily performed the first time; or
 - f) Any other circumstances deemed appropriate by the CAO or Department Director.
- 11.3. An RFPQ shall be provided to the potential suppliers setting out the criteria for prequalification which may include, but are not limited to:
 - a) Experience on similar work (firm and staff assigned);
 - b) References provided from other customers for similar work;
 - c) Verification of applicable licences and certificates;
 - d) Health and safety policies and staff training; and
 - e) Financial capability.
- 11.4. Supplier submissions will be evaluated and ranked and a short list of prequalified suppliers will be invited to participate in the second step of the twostep purchasing process being a Request for Proposal or a Request for Tender.
- 11.5. An RFPQ is not a legal offer but only an invitation for suppliers to make offers to the Municipality.

12. DIRECT PURCHASES

(Non-competitive) Purchases of \$0 to \$1000 (excluding HST)

- 12.1. To allow for procurement of lower value goods and services in an efficient and timely manner without seeking competitive pricing.
- 12.2. The Department Director and/or designate shall have authority to make purchases where the required goods or service can be specified, and are of a low value as stated above and may be acquired by direct purchase without formally seeking comparative bids, although informal comparative pricing is encouraged.
- 12.3. All disbursements shall be evidenced by invoices approved by the Department Director or designate.

13. LOWER VALUE PURCHASES

Verbal Quotations (informal pricing) – purchases of \$1,001 - \$2,500 (excluding HST)

- 13.1. The Department Director and/or designate shall have authority to make purchases to meet the requirements of the Municipality for the acquisition of goods, services or constructing having a value of \$1001 \$2,500.
- 13.2. The user department shall obtain 3 quotations for the required item through vendor advertising, telephone, fax, catalogue, internet, or other means, where possible and practicable. The Department shall keep a record of such quotations.
- 13.3. Only purchases that can be demonstrated to have been made at Fair Market Value shall be made.
- 13.4. All disbursements shall be evidenced by invoices approved by the Department Director or designate.

14. MID-RANGE VALUE WRITTEN QUOTATIONS

Purchases between \$2,501 and \$10,000 (excluding HST)

- 14.1. Purchases estimated between \$2,501 and \$10,000 shall be handled by the Department Director, or designate, obtaining a minimum of 3 written quotes which shall be evaluated on price and the criteria outlined in the quote request.
- 14.2. Following the review of quotes, the Department shall complete the form "All budgeted Items over \$2,501" (Schedule "D") and submit the form (including a recommendation) to the Director of Finance and CAO for approval. The Department Director is hereby given designated signing authority to award and enter into the contract, provided that all terms of these policies have been complied with. No report to Council is necessary, provided that the proposed expenditure is included in the approved budget. The original documentation will be filed by department.
- 14.3. Quotes need not be obtained if the purchase qualifies for Single Source or Sole Source purchases.
- 14.4. All disbursements shall be evidenced by invoices approved by the Department Director or designate.

15. HIGH VALUE TENDERS

Purchases between \$10,001 and \$50,000 (excluding HST)

- 15.1. The Department Director shall prepare the prescribed form which shall include the following information:
 - a) The specifications for the goods and services required;
 - b) The name and address of the Municipality and person to whom the quotes should be directed:
 - c) The date and time of closing for the receiving of sealed tenders; and

- d) Required delivery date.
- 15.2. Invitations to submit tenders shall be directed to a minimum of three suppliers (where possible). The Department Director or designate shall keep a list of suppliers who have been invited to quote with the objective of getting the best value for the Municipality.
- 15.3. Tenders received by the Municipality must be sealed, in writing and include specifications of products/services, supplier's company name, name of individual, date, amount and delivery date.
- 15.4. The winning bid shall be selected based on the best value to the Municipality. The Bidder acknowledges that the Municipality shall have the right to reject any, or all, tenders for any reason, or to accept any tender which the Municipality in its sole unfettered discretion deems most advantageous to itself. The lowest tender will not necessarily be accepted.
- 15.5. Any Bid irregularities shall be dealt with in accordance with Schedule "B".
- 15.6. If only one bid is received, the Municipality may exercise its right to cancel the call for tenders or may accept the bid, at its discretion.
- 15.7. Bids are opened in public by representatives from the department and treasury. Prices are disclosed unless protected under legislation. Members of the public attending the opening will record their name on a sign in sheet.
- 15.8. Following the opening of tenders and review of submissions, the Department shall complete the form "All budgeted Items over \$2,501" (Schedule "D") and submit the form (including its recommendation) to the Director of Finance and CAO for approval.
- 15.9. No report to Council is necessary provided that the expenditure is within budget, unless otherwise determined by the CAO.
- 15.10. Tenders shall remain confidential until after the date and time of closing.
- 15.11.All disbursements shall be evidenced by invoices approved by the Department Director or designate.
- 15.12.Appendix 1 includes a sample tender to be used as guidance when preparing a tender document. Department Directors must ensure that all relevant terms and conditions are set out in each RFP document.

16. HIGH VALUE REQUEST FOR TENDER

Purchases \$50,001 and over (excluding HST)

- 16.1. A Request for Tender shall be used for purchases exceeding \$50,001 where all the following criteria apply:
 - a) Two or more sources are considered capable of supplying the requirement;
 - b) The requirement is adequately defined to permit the evaluation of tenders

- against clearly stated criteria;
- c) The market conditions are such that tenders can be submitted on a common pricing basis;
- d) Sufficient funds are available and identified in appropriate accounts within Council approved budgets, except in an emergency situation;
- e) Any Bid irregularities shall be dealt with in accordance with Schedule "B"; and
- f) The provisions of this policy are complied with.
- 16.2. The Request for Tender becomes due a minimum of two (2) weeks subsequent of the advertisement date.
- 16.3. The Department shall prepare and publish the advertisement as outlined in this policy.
- 16.4. Tenders received by the Municipality must be sealed, in writing and include specifications of products/services, supplier's company name, name of individual, date, amount and delivery date.
- 16.5. If only one tender is received, the Municipality has the option of not opening the bid and closing the call for tender.
- 16.6. Tenders received are opened in the presence of the Department Director or designate, Director of Finance or designate as well as anyone from the general public. Members of the public attending the opening will record their name on a sign in sheet.
- 16.7. The winning bid shall be selected based on the best value to the Municipality. The Bidder acknowledges that the Municipality shall have the right to reject any, or all, tenders for any reason, or to accept any tender which the Municipality in its sole unfettered discretion deems most advantageous to itself. The lowest tender will not necessarily be accepted.
- 16.8. Following the opening of tenders and review of submissions, the Department shall complete the form "All budgeted Items over \$2,501" (Schedule "D") and submit the form (including its recommendation) to the Director of Finance and CAO for approval.
- 16.9. Tenders are reviewed by the applicable staff/consultant and a written report prepared and presented to Council recommending the award of the contract to the supplier meeting all mandatory requirements and providing best value as stipulated in the Request for Tender.
- 16.10. The contract will then be awarded by Council.
- 16.11. The Department Director is responsible for obtaining current insurance certificates, WSIB certificates, and performance bonds, as called for in the bid documents.
- 16.12. The original agreement shall be sent to the Clerk for filing with the minutes and bylaws of the Municipality.

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- 16.13. The original performance bond and a copy of the agreement shall be sent to Treasury.
- 16.14.All disbursements shall be evidenced by invoices approved by the Department Director or designate.
- 16.15.Appendix 2 includes a sample tender to be used as guidance when preparing a tender document. Department Directors must ensure that all relevant terms and conditions are set out in each RFP document.

17. REQUEST FOR PROPOSAL

Purchases \$10,001 & over (may include the engagement of professional & consulting services and may be of any dollar value)

In certain instances, when the requirements for goods and/or services cannot be definitively specified, a Request for Proposal is used. An RFP is an invitation to enter into negotiations. The process involves solicitation of proposals from interested and qualified vendors or consultants, by invitation or advertisement. If and when the successful party is chosen, they have been granted the opportunity to negotiate with the Municipality for the work, but they have not yet been awarded the contract. An RFP is used in conjunction with strong evaluation criteria that includes but is not limited to price. An RFP must include wording such as "this is not a tender call", to avoid possible legal issues.

- 17.1. A request for proposals shall be issued where the goods, services or construction cannot be specifically defined and it is anticipated that bidders may propose a variety of alternatives to fulfill the Municipality`s requirements.
- 17.2. All RFPs shall clearly set out evaluation criteria and weightings on a predetermined point system upon which an award of the RFP may be made.
- 17.3. The RFP shall clearly indicate those needs which have been determined and which will have to be fulfilled by the successful proponent. For example, the proposal shall clearly state mandatory criteria that are project related and weighted criteria such as qualifications and the approach. The department Director or designate shall be responsible for establishing such criteria.
- 17.4. The RFP shall not be construed as a contract to purchase goods and services and the Municipality is not bound to accept the lowest price submitted. Price may not be the primary evaluation factor and subsequent award recommendation.
- 17.5. RFPs are not formally opened in public.
- 17.6. The Municipality reserves the right to reject any part of or all proposals.
- 17.7. The advertisement and approval processes will be subject to the limits and guidelines established in Sections 15 and 16, depending on the value of the RFP, along with the completion of the form "Proposal Ranking Sheet" (Schedule

"E").

17.8. Appendix 2 includes a sample RFP to be used as guidance when preparing a RFP document. Department Directors must ensure that all relevant terms and conditions are set out in each RFP document.

18. SPECIAL CIRCUMSTANCE PURCHASES

- 18.1. Purchases that are required to respond to a Special Circumstance, as defined in this Policy, shall be authorized in accordance with Schedule "C".
- 18.2. All such purchases must be reported to the Director of Finance and the CAO the following business day and all purchases must have written evidence of approval from the CAO.
- 18.3. Contracts required to effect Special Circumstance purchases shall be signed in accordance with the Document Execution Authorities set out in Schedule "C".
- 18.4. The CAO may enter into a contract for the provision of services under a qualifying special circumstance. Any contractual agreements must then be approved by Council at its next Council meeting.
- 18.5. Where an emergency exists requiring the immediate procurement of goods, services and construction, the CAO may authorize the purchase required by the most expedient and economical means.
- 18.6. During working hours the CAO shall be contacted to approve the applicable purchase.
- 18.7. After working hours, the Department Director or designate may arrange to make the applicable purchase and provide the relevant documentation and rationale in a timely manner for review by the CAO and the Director of Finance.
- 18.8. When such action is taken as outlined above, the CAO shall report such action to Council forthwith, if the amount is outside the budget allotment.

19. SINGLE SOURCE PURCHASES

19.1. SINGLE SOURCE PROCUREMENT

Purchase of goods or services and direct appointment of a consulting professional by negotiation with a single vendor or consultant may be permitted, if it is deemed in the best interest of the Municipality, and in the judgment of the Department Director any of the following conditions apply:

- a) The goods and services are in short supply due to market conditions.
- b) In the case of professional and consulting services, specialized expertise is required which is not available from more than one professional/consultant, or the issue is a continuation or recurrence of a previous issue.
- c) The sources of supply are restricted to the extent that there is not effective

price competition, or consideration of substitutes is precluded due to any of the following:

- i. Components or replacement parts for which there is no substitute;
- ii. Compatibility with an existing product, facility or service is required;
- iii. Specific standards are adopted by Council.
- d) There is documented evidence that the extension or reinstatement of an existing contract would prove most cost effective or beneficial.
- e) The requisitioning department will require the written approval of the CAO and Director of Finance before proceeding.
- f) Work is required at a location where a contractor or professional has already been secured through a tender process, with established unit prices by another party and it is considered to be beneficial and cost effective to extend the unit prices for the work to be completed for the Municipality.
- g) The project is a multi-year contract.
- h) Only one bid/proposal is received through the procurement process and it is impractical to recall the requirements of the call for quotations/proposals. After the process has closed, it may be necessary for discussion to occur to clarify and/or make revisions to the initially defined requirements of the call for quotations/ proposals.

19.2. **SOLE SOURCE PROCUREMENT**

Sole source procurement may be permitted if a specialized item/ service is required which is only available from one vendor. The requisitioning department will require the written approval of the CAO and Director of Finance before proceeding. All purchases shall be authorized in accordance with the Purchasing Authorities set out in Schedule "C" and all Contracts shall be signed in accordance with the Document Execution Authorities set out in Schedule "C".

19.3. **NEGOTIATION METHOD**

Notwithstanding that Negotiation may be a component of another procurement process, Negotiation may be used for the procurement of goods, services or construction when any of the following conditions exist:

- a) The required goods and/or services are in short supply;
- b) Competition is precluded due to the existence of any patent right, copyright, technical secret or control of raw material;
- c) A Sole Source is being recommended;
- d) Two (2) or more identical Bids are received;
- e) The Lowest Compliant Bid received meeting all specifications exceeds the Budget amount;
- f) The extension of an existing Contract would be more effective;
- g) Only one (1) Bid is received in response to a Bid Solicitation;
- h) The Bid Solicitation process has been cancelled without Award;
- i) A roster for professional services has been developed;
- j) There is Council authorization to do so.

All purchases shall be authorized in accordance with the Purchasing Authorities set out in Schedule "C" and all Contracts shall be signed in accordance with the Document Execution Authorities set out in Schedule "C".

20. ROSTER FOR PROFESSIONAL OR STANDING OFFER

- 20.1. A RFPQ or RFEOI may be conducted for the purpose of developing a roster of qualified suppliers of Professional or Specialized Services for groups of projects requiring similar and particular expertise. While the use of a roster is strictly optional, the associated RFPQ or RFEOI shall be conducted in accordance with this policy.
- 20.2. The Department Director shall define what relevant information or required expertise is needed.
- 20.3. The Department Director will prepare the RFPQ or RFEOI, inviting interested suppliers to submit Bids outlining, among other things, their qualifications, availability, hourly rate, recent project experience, key personnel, and roles, and sufficient references satisfactory to the Department Director for work of a similar nature.
- 20.4. An evaluation team consisting of members of the requesting department shall analyze and evaluate the responses received using the criteria outlined in the RFPQ or RFEOI to select a number of qualified suppliers of Professional or Specialized Services which shall be placed on a roster.
- 20.5. On subsequent projects, suppliers of Professional or Specialized Services may be selected from the roster to submit detailed proposals in response to a Bid Solicitation, in accordance with this policy. The requesting department shall invite suppliers on the roster to provide services, using best efforts to equally distribute opportunities amongst the suppliers on the roster.
- 20.6. Alternatively, a supplier may be selected from the roster to submit a Bid for Professional or Specialized Services, in accordance with the requirements for Single Source or Negotiated purchases.
- 20.7. Rosters shall be updated at least once every three (3) years.

21. PETTY CASH

- 21.1. Cash purchases (petty cash) may be used by departments in accordance with established procedures and where the value is less than \$50.00.
- 21.2. They are not to be split to achieve larger purchases.

22. CO-OPERATIVE PURCHASING

The Municipality may enter into arrangements with any government body, ministry, agency, board, corporation or authority on a co-operative or joint basis for purchases of goods and/or services where there are economic advantages in doing so and such purchases comply with this policy.

23. TENDER AND CONTRACT ADMINISTRATION

23.1. **Define Needs**

In order to minimize the risk of over-spending or other contingent liabilities, Department Directors shall clearly define expenditure requirements, project scope, and all terms and conditions, rights and obligations prior to requesting any procurement quotation and shall be satisfied that all terms are in the best interests of the Municipality before entering into an expenditure commitment.

23.2. Financial Securities and Insurance

- 1. The Municipality may require that a Bid be accompanied by a Bid Deposit or other similar security to guarantee that the successful supplier enters into a Contract with the Municipality.
- 2. In addition to the security referred to above, the successful supplier may also be required to provide:
 - a) A Performance Bond to guarantee the performance of the Contract;
 - b) A Labour and Materials Bond to guarantee the payment for labour and materials to be supplied in connection with a Contract; and/or
 - c) Such further security as the Department Director deems appropriate in the circumstances.
- d) Prior to the commencement of work, the supplier shall provide to the Municipality, proof of insurance in accordance with the Bid Solicitation, satisfactory to the Department Director.
- e) Failure to comply with all terms and conditions of a Bid Solicitation, including failure to provide proof of insurance as required, shall be just cause for cancellation of the Award.
- f) Prior to the Municipality issuing payment to a supplier and before any work commences, the supplier shall provide a Certificate of Clearance from the Workplace Safety and Insurance Board confirming all premiums or levies have been paid to the Board to date.

23.3. Bid Irregularities

The process for administering irregularities contained in Bids pertaining to all Bid Solicitations shall be as set out in Schedule "B".

23.4. Form of Contract

- 1. A formal written agreement satisfactory to the CAO or Director of Finance shall be used when the resulting Contract is complex.
- 2. It shall be the responsibility of the Department Director, in consultation with the CAO or Director of Finance, to determine if it is in the best interest of the Municipality to establish a formal written agreement with the supplier.

3. All formal written agreements must be approved by Council.

23.5. Supplier Performance

- 1. The Department Director, or designate, shall monitor and document the performance of suppliers providing goods and/or services to that department. The Department Director, Director of Finance and CAO shall be notified in writing when the performance of a supplier has been unsatisfactory.
- 2. The Municipality may, in its sole discretion, disqualify a supplier from bidding on any Bid Solicitation or reject a Bid if a supplier:
 - a) Has, at any time, threatened, commenced or engaged in legal claims or litigation against the Municipality;
 - b) Is involved in a claim or litigation initiated by the Municipality;
 - c) Previously provided goods and/or services to the Municipality in an unsatisfactory manner;
 - d) Has failed to satisfy an outstanding debt to the Municipality;
 - e) Has a history of illegitimate, frivolous, unreasonable or invalid claims;
 - f) Provides incomplete, unrepresentative references or receives unsatisfactory external and/or internal references in a reference check undertaken by the Municipality; or
 - g) Has engaged in conduct that leads the Municipality to determine that it would not be in the Municipality's best interests to accept the Bid.

23.6. Submission of Tenders, and Proposals

Sealed tenders or proposals, clearly marked as to contents, shall be accepted. Tenders or proposals by facsimile or in electronic form will not be accepted.

23.7. Environmentally Sound Acquisitions

Departments will, when possible, endeavor to include specifications in Bid Solicitations that provide for energy efficient products, reusable products and products that contain the maximum level of post-consumer waste and/or recyclable content, without significantly affecting the intended use of the product or service. It is recognized that cost analysis is required in order to ensure that the products are competitively priced.

23.8. Contract Execution

Successful bidder(s)/proponent(s) who are required to execute a contract agreement with the Municipality shall provide the following items for performance of a contract:

- a) Contract security;
- b) Proof of insurance;
- c) Certificate of Workplace Safety and Insurance Board (WSIB) compliance;
- d) Policy and Procedures related to Health & Safety;
- e) Signed Third Party Declaration of and supporting documentation that the supplier received AODA training;
- f) Project schedule;
- g) Accrediting credentials; and

h) Any other relevant documentation as may be warranted and requested at the discretion of Council, the CAO or the Department Director.

The Department Director shall select the appropriate means to guarantee execution and performance of the contract. Means may include one or more of, but are not limited to, financial bonds or other forms of security deposits, provisions for liquidated damages, progress payments, and holdbacks.

23.9. Exercise of Contract Renewal Options

- 1. Where a contract contains an option for renewal, the Council may authorize the Department Director to exercise such option provided that:
 - a) The supplier's performance in supplying the goods, services or construction is considered to have met the requirements of the contract;
 - b) Council and the Department Director agree that the exercise of the option is in the best interest of the Municipality; and
 - c) Funds are available in appropriate accounts within Council approved budget including authorized revisions to meet the proposed expenditure.

The request to Council to exercise the contract renewal options shall include a written explanation as to why the renewal is in the best interest of the Municipality, including comments on the market situation and trends, and the report shall be approved by resolution of Council.

23.10. Contract Amendments and Revisions

- 1. No amendment or revision to a contract shall be made unless the amendment is in the best interest of the Municipality.
- 2. No amendment that changes the price of a contract shall be agreed to without a corresponding change in requirement or scope of work.
- 3. Amendments to contracts are subject to the identification and availability of sufficient funds in appropriate accounts within Council's approved Budget including authorized revisions, approved by resolution of Council.

24. LEASE CONTRACTS

In general, rental or leasing arrangements will be considered when the cost of purchase of the goods or service cannot be reasonably justified and the goods or services are legitimately required to meet an operational need.

- 24.1. Lease/rental contracts will be negotiated by the Department Director, in consultation with the CAO and Director of Finance.
- 24.2. The lease/rental contract will require the written approval of the CAO and Director of Finance.
- 24.3. All financing leases must comply with the Municipal Act 2001.

- 24.4. A report to Council will generally be required, unless the term is one year or less and the value is less than \$50,000. The report shall include a description of the product or service, the value of the product or service, term of lease, monthly and annual lease payments, residual amount, interest costs and a comparison of lease/purchase options and shall include a recommendation by the Department Director, Director of Finance and CAO.
- 24.5. Any analysis of lease/rental or buy options, whether prepared at the time of proposed procurement or during any review of operational needs or long term planning exercise, must be submitted to the Director of Finance and CAO for review and recommendation prior to going forward to Council or any committee of Council.
- 24.6. A copy of all rental and lease documents must be forwarded to the Director of Finance after finalization and the original documents must be sent to the Clerk.

25. TERM OF COUNCIL

Where a contract may extend beyond the term of the Council, the contract may contain provisions to minimize the financial liability of the Municipality should the subsequent Council not approve sufficient funds to complete the contract and the contract must be terminated by the Municipality.

26. ACCESS TO INFORMATION

- 26.1. The disclosure of information received relevant to the issue of bid solicitations or the award of contracts shall be made by the appropriate officers in accordance with the provisions of *the Municipal Freedom of Information and Protection of Privacy Act*, as amended.
- 26.2. All suppliers who contract with the Municipality shall adhere to or exceed the standards set in the *Municipal Freedom of Information and Protection of Privacy Act* or other relevant Ontario or federal privacy legislation or common law as may be passed or amended from time to time, as if they were agents of the Municipality as relate to the confidential and secure treatment, including collection, use, disclosure or retention of personal information, other confidential information of the Municipality, and all records thereof which they come into contact with in the course of performing services or providing goods to the Municipality.

27. PROVIDING ASSISTANCE

The CAO has the authority, provided there is no adverse impact upon the operations of the Municipality, to lend, lease, rent or otherwise provide any vehicle, equipment or other goods owned by the Municipality to any federal, provincial, or municipal body, ministry, agency, board, corporation or other public authority when such action is reasonably justified due to unforeseen conditions and shall report such action to Council forthwith.

28. CONFLICT OF INTEREST

- 28.1. Personal purchases shall not be made for any elected or appointed officials, members of a board or commission, or for Municipality officers, employees or their families.
- 28.2. Every elected official, appointed officer, employee of the Municipality or member of an employee's family is expressly prohibited from accepting, directly or indirectly, from any person, company, firm or corporation to which any Contract is, or might be awarded, any rebate, gift or money, except:
 - a) Gifts of a very small intrinsic value; or
 - b) Moderate hospitality during normal course of business that would not significantly exceed what the Municipality, through its Budget would likely provide in return and would not be perceived by others as influencing the making of a business decision.
- 28.3. All elected officials, officers or employees of the Municipality shall declare any Conflicts of Interest to the Director of Finance and shall have no involvement in a purchasing process where a real or perceived Conflict of Interest has been found or deemed to exist, including but not limited to:
 - a) Requesting the goods and/or services, setting the parameters of the Purchase, evaluating Bids or recommending, deciding or making Awards;
 - b) Direct contact with those making those purchasing decisions.
- 28.4. Suppliers shall not be allowed to submit a Bid for any Bid Solicitation in which the supplier has participated in the preparation of the Bid Solicitation, and any such Bid submitted shall be disqualified.

SCHEDULE A – Purchasing Exemptions

The purchasing methods described in this policy do not apply to the following goods and services:

- 1. Petty Cash items
- 2. Training & Education
 - a) registration/tuition fees for conferences, conventions, courses & seminars
 - b) magazines, books and periodical unless the purchase of such items are subject to value-added services
 - c) memberships
- 3. Refundable employee/councillor expenses
 - a) advances
 - b) meal allowances
 - c) travel and entertainment
 - d) miscellaneous non travel
- 4. Employer's general expenses
 - a) payroll deductions remittances
 - b) medical
 - c) licenses, (vehicles, etc.)
 - d) debenture payments
 - e) grants
 - f) tax remittances
 - g) damage claims
 - h) payments for employment
- Professional Services
 - a) Committee fees
 - b) medical and laboratory services
 - c) fees for professional legal or expert services
 - d) funeral and burial expenses
 - e) appraiser fees
 - f) witness fees
 - g) honorariums
 - h) advertising
- 6. Ongoing maintenance and software licencing agreements for equipment such as computer hardware/software, telecommunications equipment, elevators, and HVAC equipment.
- 7. Banking Services & Charges
- 8. Utilities (monthly charges)
 - a) water and sewer
 - b) electricity
 - c) gas
 - d) communication infrastructure services (Bell, Cogeco, etc.)
 - e) utility relocations
 - f) construction work completed by railways on Municipal property and billed to the Municipality.

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SCHEDULE B - Chart of Bid Irregularities

Irregularity	Response		
Late Bids	Automatic rejection		
Unsealed Envelope	Automatic rejection		
No bid deposit, uncertified cheque, or financial security not an original	Automatic rejection		
Amount of Financial Security is insufficient	Automatic rejection (if expressed as a percentage of the total bid sum and the insufficiency is trivial or insignificant, rejection is not required)		
Name, or signature of supplier, or bonding company is missing or incomplete	Automatic rejection		
Failure to provide a letter of agreement to bond (if applicable)	Automatic rejection		
Bids completed in erasable medium	Automatic rejection		
Signature of representative authorized to bind the supplier missing or incomplete on the document	Automatic rejection or if electronic signature, 2 days to obtain original signature		
Form of Proposal or Quotation missing or incomplete	Two (2) working days to correct to the satisfaction of department, otherwise automatic rejection		
Signature of witness, if required, missing or incomplete	Two (2) working days to correct otherwise automatic rejection		
Date of Bid missing or incomplete	Two (2) working days to correct, otherwise automatic rejection (or automatic rejection if stated in the Bid Solicitation)		
Bids received on documents other than those provided or specified by the Municipality	Automatic rejection.		

Irregularity	Response
Bids containing minor obvious clerical errors or mathematical errors	Two (2) working days to initial the correction as made by the Municipality. Unless otherwise stated in the Bid, the unit price shall prevail and the total Bid price shall be adjusted accordingly. The Municipality reserves the right to waive initialing and accept Bid as corrected.
Incomplete, illegible or obscure Bids or Bids which contain information not called for, erasures, overwriting or strike outs (not initialed)	Two (2) working days to correct to the satisfaction of the Municipality, otherwise automatic rejection.
Bids, in which all necessary Addenda have not been acknowledged	Two (2) working days to confirm Bid to the satisfaction of the Municipality, or if stated in the Bid Solicitation automatic rejection.
Failure to attend mandatory site visit (if required)	Automatic rejection.

Working days start from the hour the Bidder is notified by Municipality staff of the irregularity.

SCHEDULE "C" - Purchasing & Execution Authority

Method of Purchasing	Dollar Value	Purchasing Authority	Document Execution Authority	Type of Agreement with Supplier
Direct Purchase • Non-competitive purchases of \$0 to \$1,000	0- \$1000	Dept. Rep any employee authorized by the CAO or Dept. Director	Dept. Director or Designate	Cash, credit card or purchasing card
		Department Director or Designate	Department Director or Designate	Legally executed agreement
Mid-Range Value Written Quotation • obtaining a minimum of 3 written quotations for goods and services	\$2,501 to \$10,000	Department Director or Designate	Department Director	Legally executed agreement
High Value Tender or RFPformal bid solicitation to obtain quotations from at least 3 suppliers	\$10,001 to \$50,000	Council through budget approval	Department Director, CAO or Council	Legally executed agreement
High Value Tender or RFP	\$50,001 and over	Council through budget approval	Council	Legally executed agreement
Special Circumstances	N/A	Council	Department Director, CAO or Council	Legally executed agreement



SCHEDULE D - All Budgeted Items Over \$2,501

Tender/Quote Number:	Issue Date:		Closing Date:		Opening Date:				
* Tenders/Quotes must be placed on comparable basis with respect to freight, taxes, etc., attach separate sheet to show analysis, if applicable.									
Tender/Quote Requested By:									
Tender/Quote Requirements:									
Company Name/Address	Date & Time	Tender Amo	ount Staf	f Initials	Tender	ed Amount	Staff I	nitials	Rank
1.									
2.									
3.									
4.									
Remarks (include details of any submission	n disqualified and reasons):								
Recommendation									
Recommend Tender/Quote from: Within Budgeted Amount? Yes No									
Send Tender/Quote for further analysis: Department:									
Other (describe): G.L. #:									
Recommended by (signature):						e:			
Further Analysis									
Recommendation:									
Signature: Date:									
Approval*									
Signature of C.A.O.: Date:									
Signature of Treasurer:					Dat	e:			

^{*}Purchases over \$50,001 require Council approval



SCHEDULE E - Proposal Ranking Sheet

1. Background
[Include a brief description, context, scope, and objectives of the services]
2. The Selection Process
[Describe briefly the selection process, beginning with the advertising (if required), th
establishment of the shortlist, expressions of interest, and withdrawals of firms before proposa
submissions]
3001113310113]
3. Technical Evaluation
[Describe briefly the meetings and actions taken by the evaluation committee: formation of
technical evaluation team, outside assistance, evaluation guidelines, justification of criteria and
associated weightings]

4. Results

[Present results of the technical evaluation: scores and the award recommendation] Highlight strengths and weaknesses of each proposal (most important part of the report):

<u>Strengths</u>: I.e. Experience in very similar projects, quality of the methodology, proving a clear understanding of the scope etc.

<u>Weaknesses</u>: I.e. Lack of experience including lack of practical experience (experience in studies rather than in implementation), lack of staff experience compared to the firm's experience, lack of responsiveness etc.

Proposal Number:		
Proponent Name:		
Total Score:		
Comments:		
Strengths:		
Weaknesses:		
Scoring: *		
	Criteria 1:	Score:
	Criteria 2:	Score:
	Criteria 3:	Score:
Drop cool Number		
Proposal Number:		
Proponent Name:		
Total Score:		
Comments:		
Characteristics		
Strengths:		
NA		
Weaknesses:		
		T
Scoring: *		
	Criteria 1:	Score:
	Criteria 2:	Score:
	Criteria 3:	Score:

Proposal Number:		
Proponent Name:		
Total Score:		
Comments:		
Strengths:		
Weaknesses:		
Scoring: *	Criteria 1:	Score:
	Criteria 2:	Score:
	Criteria 3:	Score:

*Sample Scoring Chart – noting that this example is for a simple evaluation and more complex projects would require a more in depth weighted scoring chart

0	1	2	3	4	5
No	Unsatisfactory	Marginal	Satisfactory	Very Good	Excellent
Submission					
Does not	Does not meet	Meets most	Meets all of	Exceeds all of	Exceeds all of
respond to	most of the	of the	the minimum	the	the
the	requirements	requirements	requirements	requirements	requirements
requirement		but does not		and clearly	and has
		clearly		demonstrates	clearly
		demonstrate		abilities	demonstrated
		abilities			superior
					abilities.



Appendix 1 – Sample Tender Document

Vendor:	Request for Tender/Quotation No:	Page
Address:	NGxx-xx	x of x
Address.	Return Quote to:	
Fax:	Municipality of North Grenville	
	Tender Opening Location:	
Telephone:	285 County Rd. #44, PO Box 130	
Attn:	Kemptville, ON KOG 1J0	

Buyers Name: <name> for the Municipality of North Grenville</name>	Buyers Phone # 613-258-9569 ext. xxx		FOB N/A
Payment Terms	Date Issued		
30 days	XX		
Freight Terms	Tender/Quote VIA		Confirm to/Telephone
N/A	Sealed Quote		613-258-9569
	Closing Date/Time		Quote Effective Date
	xx at xx:00xm	60 Days	

Item	Qty	Unit	Description	Delivery Date	Unit Price	Total	
1							
Bidder to com	Bidder to complete fill-in areas below this line						
Warranty	Warranty						
All or Part to be subcontracted Payment Terms □ Yes □ No						HST \$	
I have read and agree to comply with the terms and conditions of					Grand Total		
this Tender							

Instructions for Tenders/Quotations

- I. A Municipality of North Grenville return envelope is provided which should be used to submit a response to the Request for Tender if, due to bulk, the tender and supporting documents cannot be contained in the envelope, the entire submission can be packaged in plain paper and the tender return envelope affixed to the top of the package.
- II. Carefully read all terms and conditions printed below, plus any supplementary terms and conditions which may be attached
- III. A completed Quotation/Tender must be received at the designated location prior to closing date and time to be considered valid.
- IV. Late Tender submissions will be returned unopened.
- V. The successful bidder will be notified by the Municipality by means of a purchase order or other agreement applicable to the requirements being tendered.
- VI. If you do not wish to bid on this tender, please complete and return the "Notice of No Bid" in the tender return envelope provided.

General Terms and Conditions

1. Validity of Quotation/Tender

To be considered valid, this Quotation/Tender must be completed, legible and signed (in ink) and be submitted on the forms provided. If lengthy description is necessary, attach separate sheet(s) which will be considered part of the Quotation/Tender. Any attachments must be listed on the main Quotation/Tender document. Any erasure, overwriting or strikeovers must be initialled by the person signing for the bid.

2. Acceptance, Revocation and Rejection of Quotation or Tender

The Bidder agrees that the bid is a firm bid to supply requirements specified in this document at the quoted process, and on the terms and conditions herein contained, which offer may be accepted by the Municipality or its designated officials in whole or in part, as specified. Late Quotations/Tenders will be rejected and returned unopened. Should a Bidder wish to alter after the bid, amendments will be accepted until the designated time of bid closure.

3. Alternatives

Brands are to be as specified or an equivalent approved by the Municipality. When submitting bids on alternatives, supporting literature should accompany your submission wherever possible.

4. The Lowest or any Quotation/Tender not necessarily accepted

- a. The Bidder acknowledges that the Municipality shall have the right to reject any, or all, Quotation/Tenders for any reason, or to accept any Quotation/Tender which the Municipality in its sole unfettered discretion deems most advantageous to itself. The lowest, or any, Quotation/Tender will not necessarily be accepted and the Municipality shall have the unfettered right to:
 - i. Accept a non-compliant Quotation/Tender
 - ii. Accept a Quotation/Tender which is not the lowest Quotation/Tender; and
 - iii. Reject a Quotation/Tender that is the lowest Quotation/Tender even if it is the only Quotation/Tender received.
- b. The Municipality reserves the right to consider, during the evaluation of Quotation/Tenders;
 - i. information provided in the Quotation/Tender document itself;
 - ii. information provided in response to enquiries of credit and industry references set out in the Quotation/Tender:

- iii. information received in response to enquiries made by the Municipality of third parties apart from those disclosed in the Quotation/Tender in relation to the reputation, reliability, experience and capabilities of the Bidder;
- iv. the manner in which the Bidder provides services to others;
- v. the experience and qualifications of the Bidder's senior management, and project management;
- vi. the compliance of the Bidder with the Municipality's requirements and specifications; and
- vii. innovative approaches proposed by the Bidder in the Quotation/Tender.
- c. The Bidder acknowledges that the Municipality may rely upon the criteria which the Municipality deems relevant, even though such criteria may not have been disclosed to the Bidder. By submitting a Quotation/Tender, the Bidder acknowledges the Municipality's rights under this Section and absolutely waives any right, or cause of action against the Municipality and its consultants, by reason of the Municipality's failure to accept the Quotation/Tender submitted by the Bidder, whether such right or cause of action arises in contract, negligence, or otherwise.

5. Price

Prices quoted by the Bidder shall include packing, packaging, delivery, unloading and installation charges, where applicable, unless otherwise specified in the Quotation and shall remain unchanged during the period stipulated in the Quotation.

6. Packaging

All goods shall be packaged in standard commercial packages and/or cartons unless otherwise specified and shall be accompanied by a packing slip. All shipping containers shall carry the names of the item, size or weight, quantity, the name of the vendor, purchase offer number, tagging and shipping instructions specified.

7. Harmonized Sales Tax

Bidders must include the Harmonized Sales Tax (HST) in their bid

8. Unit Price

All unit prices must be clearly indicated and must be extended and totalled. In the event of any conflict between unit prices and the total sum, the unit prices will be used in evaluating the bid.

9. Cash Discounts

Cash discounts offered for expeditious payment of invoices, if applicable, shall be quoted separately and the time will be measured from the date of which the goods and services are delivered, whichever is the later date.

10. Electrical Equipment

All electrically operated equipment quoted or tendered must be C.S.A and/or Ontario Hydro approved and bear label.

11. Legal Responsible

The Bidder shall indemnify and save harmless the Corporation of the Municipality of North Grenville against all claims, actions, suits and proceeding for the infringement of any patent based upon the use of any inventions protected by such patent or for royalties or other payments which may be payable in conjunction with carrying out the work and in respect of the use of disposal by the Municipality or articles and supplies, furnished pursuant to a contract

All contractors, subcontractors and suppliers to the Municipality shall comply with all legislation and regulations which may be applicable to this Quotation/Tender

12. Delivery Conditions

Unless otherwise stated in the "Request for Quotation/Tender", all goods ordered in quantities specified from time to time shall be delivered to the specified destination in the Province of Ontario, in good order and free from any extra expense to the Municipality. Unless otherwise specified, all deliveries shall be made on a normal working day. The tenderer shall ensure strict adherence to any specified delivery schedule.

13. Quality Control

Authorized representatives of the Municipality of North Grenville shall during normal working hours, have access to the Bidders plant and premises where any part of the work is being carried out.

The Bidder shall provide assistance, test pieces and samples to carry out any requested inspections and/or appropriate tests of goods or materials.

Representative samples of the goods delivered shall be inspected by the consignee. In the event that the goods supplied do not conform to specifications, they shall be rejected and returned to the bidder, at the bidder's expense.

If latent defects are discovered after the goods have been accepted, such goods will then be rejected and the Bidder shall replace the defective goods at the Bidder's expense. Rejected goods will be returned to the Bidder, transportation charges 'collect'. The Bidder shall replace rejected goods within a reasonable period not usually exceeding fifteen (15) working days.

14. Supplementary Terms and Conditions

Any articles hereinafter have been numbered as supplementary to the respective articles of the general policies.

□ These supplementary policies shall, where used, govern over the general policies.

Supplementary policies attached.

Note: Receipt of this completed form will assist us in calling for future bids. Please complete and submit this form prior to the closing date and time as shown on the Request for Quotation/Tender form.

Notice of No Bid

<u>Ouotation/Tender No:</u> NGxx-xx

A	A Quotation/Tender is not being submitted for the following reason(s):							
	We do not manufacture/supply the required goods or services		We are unable to competitively quote/ tender at this time					
	We do not manufacture/supply to stated specifications		Cannot meet delivery requirements					
	Specifications are not sufficiently defined		We do not have facilities to handle this requirement					
	Insufficient information to prepare		Cannot quote/tender a firm price at this time					
	quotation/tender Quantity too small		Insufficient time to prepare quotation/tender					
	Quantity too large		Licensing restrictions (please explain below)					
	Quantity beyond our production capacity							
	Cannot meet packaging requirements		Agreements with distributors and/or dealers do not permit us to sell					
	Cannot handle due to present plant loading		directly					
	Cannot obtain raw materials in time to meet delivery requirements		Other reasons or additional comments (please explain below)					

I/We wish to quote/tender on similar good/services in future Yes No	Authorized Company Official – Signature and Title		Date:
	Firm Name		
	Address		
	City		
	Province	Postal Code	

Appendix B – Sample RFP Document



REQUEST FOR PROPOSAL

<Project Name>

Issued on:

<Date>

Requested by:

The Municipality of North Grenville 285 County Road 44 P.O. Box 130 Kemptville, Ontario KOG 1J0

Attention: <Name>

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INTRODUCTION

The Municipality of North Grenville (the Municipality) is an urban/rural municipality located adjacent to the southern border of the City of Ottawa. As one of the fastest growing municipalities in Eastern Ontario, North Grenville is committed to providing a broad range of amenities and services to its residents and visitors alike.

The urban serviced area (formerly the Town of Kemptville) currently serves a population of approximately 5,000. It is strategically located 30 minutes from downtown Ottawa, the Nation's Capital, along Highway 416, with easy access to Highways 417 and 401. The Municipality has experienced strong growth in recent years and has projected a population build out of 15,150 by the year 2034 within the urban serviced area.

The Municipality is responsible for the provision of a wide range of services including fire protection, by-law enforcement, emergency management, parks, recreation, cemeteries, local roads and bridges, snow removal, drainage, land-use planning, economic development, libraries, sewer and water services to the urban serviced area, and general municipal governance and administration. The operating and capital budgets for the Municipality for <year> are <\$X> million and <\$X> respectively.

<This paragraph of the Request for Proposal (RFP) should provide a high level description of what the request for proposal is for and the purpose of the requirement>.

Consultants wishing to submit an <RFP for (name of project) > are to provide <enter number of copies > of their proposal in a sealed package clearly identified as to the contents and addressed to:

The Municipality of North Grenville 285 County Road 44 Box 130 Kemptville, Ontario KOG 1J0

Attention: <name>

Director of <enter department name>

A full description of the project and scope of work is set out herein.

1.0 INSTRUCTIONS TO PROPONENTS

1.1 Invitation

The Municipality of North Grenville is seeking proposals from qualified consulting firms to provide professional services to <describe the services needed>.

The Municipality requires that the Project be completed prior to <enter date>.

Consultants are to provide <#> copies of their proposal in a sealed package, clearly identified as to the contents and addressed to:

The Municipality of North Grenville 285 County Road 44 Box 130 Kemptville, Ontario KOG 1J0

Attention: <Name>

Director of <enter department name>

Proposals must be received at this location **NO LATER THAN** <enter time> LOCAL TIME on <enter date>.

Proposals received after the above due date and time will not be considered and will be returned unopened to the Consultant. Fax or electronic submissions will **not** be accepted.

1.2 Charge for Documents

All documents, including background information, will be provided at no cost. Refer to section 3.8 for a list of background documents to be available to the successful consultant.

1.3 Costs Incurred by Proponents

All expenses incurred in the preparation and submission of proposals shall be borne by the Consultant. No payment will be made for any proposals received, or for any other effort required of or made by the Consultant prior to the commencement of work defined by the proposal approved by the Municipality.

1.4 Acceptance of Terms

All those who submit a proposal represent that they have read, completely understand, and accept the terms and conditions of this Request for Proposal (RFP) in full.

1.5 Insurance

<If insurance is required, outline the details of required amounts and policies.>

1.6 Clarification

All inquiries regarding this RFP are to be directed to the individual identified below. Inquiries must be received in writing or email no later than <enter date>. All inquiries received and the

responses provided will be sent by the Municipality to all Consultants by way of written addendum(s), no later than <enter date>, without naming the source of the inquiry.

The Municipality of North Grenville 285 County Road 44 Box 130 Kemptville, Ontario KOG 1J0

Attention: <enter name> <enter position/title> <enter email address>

2.0 Terms of Payment

The successful Consultant shall be reimbursed on a monthly basis for actual work completed and time spent on the project. Monthly invoices are to include supporting documentation for all disbursements. Disbursements will be paid at cost.

Invoices submitted by the Consultant shall include the project title, a description of the work completed and a billing summary. This summary shall include the tasks set forth in the financial submission and shall indicate the budgeted cost, percentage invoiced to date and a total of these amounts for each task.

2.1 Proposal Validity

Proposals shall remain valid and open for acceptance by the Municipality for a period of sixty days (60) calendar days following the deadline for receipt of proposals.

2.2 Follow-On Contracts

The Municipality reserves the right to award subsequent phases of the project to the successful proponent, and fees for any follow-on contracts shall be based on the same unit or per diem rates proposed under this RFP, unless negotiated and approved otherwise.

The Municipality also reserves the right to request competitive proposals for subsequent phases of the project if deemed to be in the best interests of the Municipality of North Grenville.

3.0 TERMS OF REFERENCE

3.1 Background

<This section should contain background information such as a description of services we currently provide and what is needed, or a brief description of request and how it ties to the Municipality.>

3.2 Plan Objectives

<This section should outline the areas to be addressed in the RFP. It should provide the purpose and description of the project or work to be performed. In order for companies to submit accurate proposals, they need the details of exactly what work needs to be performed and the purpose of the work. The purpose of the work is important because sometimes bidders may be

able to provide different but more effective solutions. You could say, for example, "Areas to be addressed in this Plan will include policies and procedures related to, but not limited to the following: >

- 1.
- 2.
- 3.

3.3 Scope of Work

<While the plan objectives provides bidders with general information about the project, this part of the Request for Proposal should include details of what exactly is required for the project. In addition to the description of the project, this section should detail any additional work required to achieve the desired result (i.e. research, coding, etc.).>

3.4 Assumptions

<If any assumptions need to be acknowledged, they should be listed here. For example, "It is important that the Plan acknowledges certain assumptions which the Municipality holds to be true:"</p>

- 1. Financial risk to the Municipality be minimized;
- 2. The Municipality shall become more effective and efficient in the provision of services to the community;
- 3. The Municipality will continue to be one of the fastest growing communities in Eastern Ontario.>

3.5 Public Consultation

<The consultant is expected to prepare a strategy on how to communicate with the public, as well as senior staff and Council. This section describes how they need to go about it. For example, do you want a public meeting, or a targeted social media campaign etc.>

3.6 Project Reporting

<This section outlines who the Consultant shall report to, and who their day-to-day Municipal contact will be. It also needs to state that "Council shall be the approval authority for the Plan".</p>

This paragraph describes how many copies of the finished project will be required, and shall state "In addition, one (1) digital copy of all documentation, in MS Word or PDF shall be provided. All printed material must be reproducible".>

3.7 Deliverables

<Describe any deliverable that must be provided. For example, training for Municipal Staff, or provincial regulations that must be met or exceeded.>

3.8 Background Documents Provided

<The following documents will be made available following the awarding of the contract:</p>

1. In number form, outline all documents to be provided.>

3.9 Summary of Key Dates for Proposal

Distribution of RFP	<enter date=""></enter>
Submission of proposal	<enter date=""></enter>
Consultant Clarification Question Submission	<enter date=""></enter>
NG Clarification Answer Distribution	<enter date=""></enter>
Consultant interview (if necessary)	<enter date=""></enter>
Anticipated award of assignment (at the latest)	<enter date=""></enter>

4.0 EVALUATION CRITERIA

The successful firm will possess the requisite technical skills to deal with the complex matters to be addressed in the scope of work and will be required to work directly with Municipal staff, the project manager, the public, agencies and stakeholders in a professional manner.

To achieve this, the Municipality is interested in a firm, which in addition to sound technical qualifications, exhibits such skills as timeliness, diplomacy, tact, strong communication ability (both written and verbal) and an understanding of the municipal culture.

The Consultant Project Team member(s) must demonstrate:

- list the skills they must demonstrate>
- list the skills they must demonstrate>
- list the skills they must demonstrate>

4.1 Basis of Selection

The Municipality intends to recommend the appointment of the Consultant on the basis of best overall value, based upon a review of the technical and fee proposal, and the consultant interview. The Consultant appointment is subject to approval by the Municipality in accordance with the provisions of the Procurement By-Law.

4.2 Selection Criteria

A total of 100 points will be allocated to each proposal, as follows:

Category	Available Points
Technical:	
Qualifications and Experience of Company	10
Qualifications and Relevant Experience of Project	20
Team	
Understanding of Objectives	10
Quality of Approach and Methodology	20
Proposed Work Plan and Schedule	20
Sub-total	80
Financial:	
Fees and disbursements (including sub-consultants)	20
Total	100

Financial points will only be awarded to submissions that have achieved a minimum score of 60 out of 80 points on the technical evaluation criteria. Proposals that do not meet this minimum score will be deemed non-compliant and will be given no further consideration.

Technical proposals scoring 60 points or higher will be evaluated financially, on the following basis:

The lowest cost submitted will be awarded 20 points, and the other cost proposals will be awarded points based upon the ratio of the cost submitted to the highest cost submitted, e.g.:

Points = 20 x
$$(1 - \left[\frac{Proposal \cos t - Lowest}{Highest - Lowest} \right]$$

Up to three (3) of the highest rated proposals may be invited by the Municipality to attend an interview to present and discuss their proposal. Interview details and evaluation criteria will be provided at the time of notification of request to attend an interview.

4.3 Qualifications and Experience of Company

Provide a brief company profile and recent relevant experience. Provide three (3) similar projects completed by your firm in <subject matter at hand>, including as a minimum, one (1) project completed in the last five (5) years. Provide client references for each project.

4.4 Qualifications and Recent Relevant Experience of Project Team

Provide the qualifications, recent relevant experience and responsibility of each member of the project team (Project Manager, key team members, sub-consultants and other staff), clearly stating the employment history of the Project Manager and key team members, years with current firm and work location. Resumes should be included in an appendix.

4.5 Understanding of Objectives

Describe your understanding of the assignment, including overall scope and objectives, noting any particular issues that may require specific attention.

4.6 Quality Approach and Methodology

Describe the approach and methodology to be followed in completing all aspects of the assignment in order to achieve the stated project objectives.

4.7 Proposed Work Plan and Schedule

Provide a work plan and schedule in the form of a Gantt chart to illustrate the breakdown of the major tasks and the level of effort of the individual team members in sufficient detail to allow a complete understanding as to how and by whom the work is to be carried out.

The Consultant shall allow a minimum of <#> week(s) for the review of draft Plan and <#> week(s) for the review and acceptance of final Plan. The Consultant will be required to make a presentation to Council on the final study and recommendations.

The Consultant shall outline the measures that it has in place to ensure the project delivery and cost control to meet the needs of the Municipality.

4.8 Fees

The Consultant is to provide a total upset limit price, including all fees, sub-consultants and disbursements, but exclusive of HST, to complete this assignment in accordance with the services detailed herein in the Consultant's proposal.

The breakdown of fees shall be presented in a table format identifying the level of effort that each team member has allocated to each of the tasks in the proposed work plan, as well as disbursements for each task, if applicable.

Costs for materials for display and distribution for all public open houses and public meetings are to be included as a disbursement. Costs of newspaper advertisements and rooms for public meetings will be the responsibility of the Municipality.

All reasonable and proper expenses incurred by the Consultant shall be reimbursed without any allowance thereon for overhead and/or profit. The following costs shall not be reimbursed:

- Communication expenses including facsimile, local phone and cellular charges;
- Standard PC or computer aided design and drafting equipment (excludes specialized equipment or software as identified in Consultant's proposal); and
- Travel and living expenses unless identified in the proposal or approved in advance.

The Consultant shall provide the per diem cost for any additional public meetings as a separate line item, should they be required.

4.9 Consultant Interviews

Up to three (3) of the highest rated proposals may be required to make a brief presentation (15 minutes) to the Senior Management Team on this project to discuss their methodology and approach to this assignment.

5.0 SPECIAL TERMS AND CONDITIONS

Submission of a proposal constitutes acknowledgement the proponent has read and agrees to be bound by all the terms and conditions of the Request for Proposal.

The Municipality will not make any payments for the preparation of the response to the Request for Proposal. All costs incurred by a proponent will be borne by the proponent.

This is not an offer. The Municipality does not bind itself to accept the lowest price proposal or any proposal submitted.

The Municipality has the right to cancel the Request for Proposal at any time and to reissue it for any reason whatsoever, without incurring any liability and no proponent will have any claim against the Municipality as a result of the cancellation or re-issuing of the Request for Proposal.

The Consultant acknowledges that the Municipality shall have the right to reject any, or all, Proposals for any reason, or to accept any Proposal which the Municipality in its *sole unfettered discretion* deems most advantageous to itself. The lowest, or any, Proposal will not necessarily be accepted and the Municipality shall have the *unfettered* right to:

(i) Accept a non-compliant Proposal;

- (ii) Accept a Proposal which is not the lowest Proposal; and
- (iii) Reject a Proposal that is the lowest Proposal even if it is the only Proposal received.

The Municipality reserves the right to consider, during the evaluation of Proposals:

- (i) information provided in the Proposal document itself;
- (ii) information provided in response to enquiries of industry references set out in the Proposal;
- (iii) information received in response to enquiries made by the Municipality of third parties apart from those disclosed in the Proposal in relation to the reputation, reliability, experience and capabilities of the Consultant;
- (iv) the manner in which the Consultant provides services to others;
- (v) the experience and qualification of the Consultant's senior management, and project management;
- (vi) the compliance of the Consultant with the Municipality's requirements and specifications; and
- (vii) innovative approaches proposed by the Consultant in the Proposal.

The Consultant acknowledges that the Municipality may rely upon the criteria which the Municipality deems relevant, even though such criteria may not have been disclosed to the Consultant. By submitting a Proposal, the Consultant acknowledges the Municipality's rights under this Section and absolutely waives any right, or cause of action against the Municipality, by reason of the Municipality's failure to accept the Proposal submitted by the Consultant, whether such right or cause of action arises in contract, negligence, or otherwise.

If a contract is to be awarded as a result of the Request for Proposal, it will be awarded to the proponent whose proposal, in the Municipality's opinion, provided the best potential value to the Municipality and is capable in all respects to fully perform the contract requirements and the integrity to assure performance of the contract obligations based on the objective assessment outlined above.

If the Municipality decides to award a contract based on a submission received in response to this Request for Proposal, the successful proponent will be notified of the intent to award in writing, and the subsequent execution of a written agreement shall constitute the making of a contract. Proponents will not acquire any legal or equitable rights or privileges whatsoever until the contract is signed by both parties.

In the event of any inconsistency between the RFP and the contract, the contract shall govern.

The Municipality reserves the exclusive right to determine the qualitative aspects of all proposals relative to the evaluation criteria. Unsuccessful proponents will be provided with a verbal debriefing on the evaluation of their submission after the selection process has been completed, if so requested.

Proponents may not amend or withdraw their proposals after the closing date and time.

Proposals will be evaluated as soon as practicable after the closing time.

The proposals and accompanying documentation submitted by the proponent are the property of the Municipality and will not be returned.

Proponents are advised that all communications with the Municipality related to this RFP during the bidding process must be directly and only with the individual nominated in section 1.6.

Policy for Waiving or Reducing Fees Related to Use of Municipal Owned Recreation Facilities and Spaces

(with the exception of Kemptville Campus owned properties)

Policy #:

Date Approved:

Department Responsibility: Parks, Recreation and Culture

Status:

Policy Statement:

The policy of Waiving or Reducing Fees Related to the Use of Municipal Owned Recreation Facilities and Spaces (with the exception of Kemptville Campus owned properties) will assist in determining whether fees related to facility rentals may be waived or reduced for an organization requesting this in connection with rental of Municipal facilities or spaces.

Purpose:

- To reduce financial barriers for non-profit and not-for-profit organizations in the planning of programs and events that provide support to the community.
- To provide a consistent approach in assessing requests for waiving of Municipal feed related to booking facilities and spaces.
- To ensure the approved waiving of fees will not have a significant impact on the Municipality's budget and overall fiscal objectives.

Scope:

Certain community groups and non-profit or not-for-profit organizations may request a waiving or reduction of fees related to rental of facilities or spaces if they meet some of the following conditions.

- Must be a non-profit or not-for-profit organization.
- Must provide evidence that regular rental fees may constitute a real barrier to the running of their event or program.
- Activity is open to the public, or membership in the requesting organization is open to the public.
- If activity is a fundraising event, 100% of the proceeds raised are dedicated to local projects that provide a broad community benefit.
- Activity must comply with all applicable legislation, Municipality of North Grenville policies and by-laws.
- Activity must not be for the purpose of generating revenue for profit making businesses and organizations.

Exclusions:

All organizations granted a waiving of fees for a facility rental will still be required to enter into the municipality's standard rental contract, provide the appropriate insurance coverage, (at their own expense), and pay for any additional services provided beyond the basic rental fee such as extra cleaning costs or damages to the facility.

Policy:

This Policy provides local non-profit or not-for-profit free or reduced fee, use of Municipal owned facilities and spaces that provide broadly based and valuable services to the community or a fundraising event where 100% of the proceeds support a local project.

Requests for the waiver/reduction of fees shall be initially submitted to the Parks, Recreation and Culture Department for consideration. Upon review, the Director of Parks, Recreation and Culture will prepare a report with a recommendation to Council to approve the fee waiver/reduction or to decline the request.

Council has the final authority to approve or deny the request. Council will be guided by the following criteria:

- The request has significant social/community benefits to residents of North Grenville.
- The dollar value of the fees related to the rental may outweigh the social/community benefits.
- The dollar value is within the \$2,000 maximum per request limit.
- The events or services provided by the applicant align with the Community Strategic Plan.
- \$10,000.00 maximum annual budget allotment.

Policy Review:

This policy will be reviewed and updated as required.

Definitions:

Fee Waiver means the facility rental fees as established in the fees and charges by-law policy are reduced to zero or partially reduced.



POLICY

Date: May 4, 2018

Policy Title: Ice Allocation Policy - Amended

Please note: This policy is only in effect for the Winter Ice Season, September 1 - March 31.

The purpose of this policy is to assist the Municipality of North Grenville (hereafter referred to as the Municipality) in the allocation of ice time in a fair and judicious manner.

There are many key principles in the determination of ice time allocation such as age, gender, residency, universality, economic impact, revenue generation, number of hours requested, time of year, customer history, special events and extraordinary cases.

Definitions:

Prime Time: The duration of hours where the ice is in the greatest demand meaning:

Weekdays 4:00pm until 12:00am (midnight)
Weekends 7:00am until 12:00am (midnight)
Statutory Holidays 7:00am until 12:00am (midnight)

Non-Prime Time: Shall mean weekdays 7:00am until 4:00pm

Special Non-Prime Time: Shall mean weekends, 6:00am until 7:00am

Prime Time Evening Special: Shall mean Monday-Sunday 10:30pm - 12:00am Contracts must start at 10:30pm

N.G. Organized Group - Youth: Shall mean any not for profit group that has an elected executive, budget, constitution and open registration. The group shall be based in the Municipality of North Grenville, with a minimum of 70% of the registrants being North Grenville residents, or be recognized as an integral part of community activities, with a minimum of 80% of the registrants under the age of 20.

N.G. Organized Group - Adult: Shall mean any not for profit group that has an elected executive, budget, constitution and open registration. The group shall be based in the Municipality of North Grenville, with a minimum of 70% of the registrants being North Grenville residents, or be recognized as an integral part of community activities, with more than 20% of the registrants being 20 years of age and older.

School: Shall mean any elementary or secondary school located in the Municipality of North Grenville in the Public or Separate School Boards. Post secondary institutions shall be considered N.G. Organized Group – Adult.

Season: Winter Ice - September 1 to March 31; Summer Ice - April 1 to August 31

Ice Hour: One (1) hour of ice is fifty (50) minutes in length plus ten (10) minutes of maintenance. An hour and one-half (1 ½) is generally equal to eighty (80) minutes of ice time plus ten (10) minutes of maintenance. However, the Municipality has the discretion to add additional floods during ice rentals in order to maintain the integrity and condition of the ice and to ensure participant safety.

Priorities

The ice allocation procedure is based on the needs of each group, with consideration given to facility use. (i.e. dressing room requirements and facility maintenance) Ice time shall also be allocated to maximize the utilization of the facility. Historical precedent will be a principle of the allocation system to give due consideration to the allocation of ice according to previous years. Significant changes to previous year's ice shall be based on changes to registration levels, registration composition or to emerging needs.

This policy applies to Winter Ice (September 1 to March 31). Summer Ice considerations are also based on the above priorities, but the winter hierarchy will not apply.

Prime Time Hierarchy

The scheduling of ice time will be based on the following hierarchy:

Major Events and Municipal Programs (e.g. Public Skating, Tournaments & Special Events)
Kemptville 73's
North Grenville Organized Group – Youth
North Grenville Organized Group - Adult
North Grenville Organized Group – New
Private Rentals – Residents
Non-Residents

Any "Organized Group – Youth" shall be scheduled to commence no later than 9:05pm except at the request of said group.

Universality: The Municipality supports the availability of ice time to all of the community, therefore, public skating, sundry rentals, under-represented groups and special events shall form part of the ice allocation. All users will be subject to all available hours to ensure ice time distribution is equitable.

Process

Two (2) times per year, (May for the winter season and January for the summer season) the Municipality shall receive ice requests from existing and new groups. All requests must include:

- Start/Finish dates, times, special events
- For all registrants from last season, a list of names and their, addresses, the municipalities in which they reside, the specific program in which they are enrolled and the ages of those participants under 20 years.
- The number of registrants that reside outside North Grenville.

All requests received after the specified deadline will be considered only after all requests received before the deadlines have been satisfied.

This information shall be used to prioritize and organize the ice schedule for each season. The Municipality may adjust the initial allocation after registration for Resident Youth Groups in order to respond to annual growth or reduction. Organizations interested in obtaining additional ice time for new initiatives must request supplementary ice prior to program development. The Municipality may meet with users to discuss the ice time allocations and other facility use guidelines. Any concerns with ice allocation must be submitted in writing to the Director of Parks, Recreation and Culture.

Rates

Ice rental rates increased April 2018.

Tournaments and Special Events

The Municipality supports tournaments and special events and each organized group shall be allocated a minimum of one (1) Saturday or Sunday per season for special events. The Municipality shall have the discretion to pre-empt regular use of the facilities to assist with such an event. These requests, in all efforts, shall be booked in advance of regular bookings. To accommodate tournaments and special events, seasons may start early and/or be extended.

Dead Ice

Dead Ice is any ice Monday to Friday between 7:00am - 4:00pm. Dead Ice is often shared ice and there must be a minimum of 2 skaters. Cost is \$20.00 per person plus HST. Dead Ice time can only be booked 1 week in advance. The municipality reserves the right to cancel a dead ice booking for a full rate rental, ice maintenance or weather. No refunds.

Allocation Guidelines

Ice time at the Municipality shall be allocated during the winter season in accordance with the following guidelines:

- 1. A minimum of 3.0 prime time hours per week shall be set aside for public skating and 1.5 prime time hours per week shall be set aside for family skating.
- 2. A minimum of 6 prime time hours per week shall be set aside for the Kemptville 73's.
- 3. Organized Groups Youth shall receive a maximum of 60% (91.5 hrs.) of the available prime time hours. (Prime Time = approx. 153 hours). Any one youth organization can request up to 75% of the maximum 60% (75% = approx. 69 hours) at the North Grenville prime time youth rate. However, if the full 91.5 hours are not utilized, any one particular North Grenville youth group can exceed the 75% limit until the 91.5 hour limit is reached and still be charged at the youth rate. Once the 91.5 hour limit is exceeded the youth group who has exceeded the 75% will be charged at the non-resident rate.





Effective Date: 2022-02-15

Policy Title: Theatre Allocation Policy – Urbandale Arts Centre

Parks, Recreation and Culture Department

Purpose:

The purpose of this policy is to establish guidelines for the allocation and management of the Urbandale Arts Centre (theatre), owned and operated by the Municipality of North Grenville (hereafter referred to as the Municipality).

Objective:

To promote and encourage participation and cooperation among all groups using this facility to the overall benefit of the community.

Goals:

- Provide a fair and transparent process for service delivery to all clients.
- Ensure fair community access to Municipal recreation and culture facilities reflecting a variety of interest areas, skill levels and program formats.
- Consider the benefits of participation in cultural, social and recreational activities with respect to wellness and skill development of residents as well as local economic benefit.
- Prioritize engagement in cultural, social and recreational activities.
- Maximize use while considering quality, safety and the need for maintenance.
- Balancing revenue targets identified in associated budgets with community accessibility.

Definitions:

North Grenville Organized Group: Shall mean any not-for-profit group that has an executive, budget, constitution, and open registration. The group shall be based in the Municipality of North Grenville with a North Grenville address.

School: Shall mean any elementary or secondary school located in the Municipality of North Grenville in the Public or Separate School Boards.

Regional Organization: Shall mean a not for profit or government agency who services a broader geographic region that includes the Municipality of North Grenville.

North Grenville Resident/Business: An individual who pays property taxes to the Municipality of North Grenville or whose landlord pays property taxes to the Municipality of North Grenville.

Non-Resident/Business: An individual who does not pay property taxes to the Municipality of North Grenville or whose landlord does not pay property taxes to the Municipality of North Grenville.

Seasons:

- Winter/Spring Season: January 1 to June 30
- Summer/Fall Season: July 1 to December 31

Peak Season: Dates in which theatre use is in highest demand.

- Winter/Spring Peak Season: March 15 June 30 (108 of days)
- Summer/Fall Peak Season: October 15 December 23 (70 of days)

Allocation Process:

- Theatre space will be allocated a minimum of one year in advance.
- Application forms will be made available as per the schedule below.
- All requests received after the deadline will be considered on a first come first serve basis after the draft allocation schedule is established.
- In the process of reviewing all requests, groups may be contacted by Municipal Staff to discuss alternatives and flexibility in order to work towards the goals of this allocation policy.
- Bookings are not confirmed until a contract has been signed by the rental client and returned to the Municipality. Proof of insurance must be provided 2 weeks prior to first booked date. The allocation process timelines can be found below.

Allocation Process Timelines:

Winter/Spring Season runs from: January 1 to June 30

- Applications Available: September 1
- Deadline for Submissions for following season: October 15
- Draft Contract provided to client by: November 30

Client to return signed contract to Municipality by: December 15

Summer/Fall Season runs from: July 1 to December 31

Applications Available: March 1

• Deadline for Submissions for following season: April 15

Draft Contract provided to client by: May 31

Client to return signed contract to Municipality by: June 30

Example:

Season	Winter/Spring Jan. 1 – June 30/23	Summer/Fall July 1 – Dec. 31/23
Applications Available	Sept. 1/21	March 1/22
Deadline for Submissions	Oct. 15/21	April 15/22
Draft Contract Provided to Client	Nov. 30/21	May 31/22
Client Returns Signed Contract to	Dec. 15/21	June 30/22
Municipality		

Allocation Priority:

The scheduling of the theatre will be based on the following hierarchy:

- 1. Major Community Event and Municipal Activities
- 2. North Grenville Organized Group
- 3. School Boards and Regional Organizations
- 4. North Grenville Resident/Businesses
- 5. Non-Residents/Businesses

Priority will be given to annual events that have cultural significance in North Grenville so that these events may reoccur at the same time in order to maintain continuity from year to year (to be assessed on individual basis).

Allocation Guidelines:

- North Grenville Organized Groups may book a maximum of 60% of the available days in any peak season. Any one of these groups can request up to 75% of the maximum 60%. If, after allocation of all requests, additional days are available, any one particular group can exceed the 75% limit.
- The Parks, Recreation & Culture Department may review a group or organizations' status during the allocation process.
- Supporting documents to determine a rental client's priority may be requested during the allocation process.

- Groups are permitted to occupy the stage with sets for a maximum of 4 weeks prior to their first performance date. Statutory holidays and school holidays are not included in this 4-week period.
- Groups will be permitted to book up to 50% of number of paid rehearsal and performance hours at no charge for construction, move-in, technical set up, tear down, and clean up.
- From time to time, minor variance from this policy may be deemed necessary. Such variances are at the discretion of the Director of Parks, Recreation and Culture.



North Grenville Developer's Guide

For Council Approval



Prepared for: Municipality of North Grenville

Prepared by: Jp2g Consultants Inc.

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Appendix A – Studies, Scope and When Required

Appendix B – North Grenville Site Plan Review Process

Appendix C – Choosing the Right Tree

1.0 Introduction

1.1 Purpose of Developer's Guide

The purpose of this Developer's Guide is to provide direction to those wishing to initiate a development involving a plan of subdivision/condominium application or a site plan control application.

In addition to the review of the Developer's Guide, reference should also be made to all other applicable documents which may contain aspects of design, such as the Municipal Official Plan and Zoning By-law, and Engineering Standards.

It is also understood that those submitting other Planning Act applications such as Official Plan Amendments, Zoning By-law Amendments, Minor Variances, or Consent applications, may benefit from a review and understanding of the direction provided by this Guide.

1.2 Creation of Developer's Guide

The Municipality of North Grenville retained the services of Jp2g Consultants Inc. to assist in the preparation of a Developer's Guide. In addition to drawing from the Municipality's Official Plan and Zoning By-law, the content of this document also involved research into best practices. During the preparation of this Guide efforts were made to

This Guide is intended to:

- 1. Provide a series of development guidelines that apply to residential, commercial, industrial, and institutional development proposals initiated through site plan control and/or subdivision/condominium processes.
- 2. Ensure consistent development expectations within North Grenville through clearly expressed development standards, submission requirements for professional reports and drawings and related expectations.
- 3. Ensure that community design objectives are clearly understood and addressed in all subdivision/condominium and site plan proposals.
- 4. Outline when certain studies are required.

consult with staff, Council and various stakeholders. Specifically, there were two consultation workshops conducted: one involving staff and Council and the other involving members of the local development industry.

The Guide also involved consultation with various agencies involved in the review of development proposals, including the United Counties of Leeds and Grenville, Conservation Authorities, the Leeds Grenville Lanark District Health Unit, and Parks Canada.

1.3 Relationship with Other Documents

This document is intended to function as an independent document. However, it is understood that this Guide only covers certain elements of the design and development. In addition to this Developers Guide, the proponent and his team should familiarize themselves with the

Municipality's Engineering Standards which provides detailed direction on matters related to servicing and infrastructure. This Guide is intended to complement the Engineering Standards which should be reviewed in conjunction with this Guide. Consultation on applicable standards are intended to take place during the preconsultation phase of the development.

The Municipality's Zoning By-law and Official Plan are the key regulatory and policy documents governing development within the Municipality. Much of the direction set out in this Guide originated from these two documents. This Guide is intended to complement these documents and provide direction on how to implement various zoning requirements and Official Plan policies.

Every effort will be made to ensure that this Guide is updated in conjunction with updates to the Official Plan or Zoning By-law. When conflicts arise between the direction of this Guide and the policy or regulations of the Official Plan or Zoning By-law, the Official Plan or Zoning By-law provisions shall prevail.

The Municipality's Strategic Plan is also an important document for developers to be familiar with. The North Grenville Strategic Plan depicts the community's vision and creates a roadmap for how to get there. As a growing community, it is important for those wishing to develop in North Grenville to understand the **strategic** priorities of the community so that they can present opportunities to better the community that are consistent with the community's vision.

1.4 Structure of the Guide

This document has been broken out into eight (8) chapters:

- 1. Introduction.
- 2. General Submission Requirements.
- 3. Neighbourhood Integration.
- 4. Landscaping Standards.
- 5. Parkland Development Standards.
- 6. Sustainable Design Standards.
- 7. Street Right-of-Way Standards.
- 8. Agreements and Administrative Control.

It is understood that not all the sections may be relevant to every development proposal. Efforts have been made to separate the sections into relevant guidance for subdivision/condominium applications and site plan control application.

1.5 How and When to Use Guide

The steps in the "Planning Process" for subdivisions/condominium and site plan control applications can generally be categorized as follows:

- 1. Familiarization
- 2. Preconsultation
- 3. Application Submission
- 4. Application Review
- 5. Decision & Implementation

How the Guide can be utilized during the planning process is detailed below.

1.5.1 Familiarization

The proponent and his team shall familiarize themselves with the relevant planning and design requirements of the Municipality. The proponent may wish to meet with the Municipality's Engineering and Planning staff to discuss areas of preliminary concern and other issues prior to the preconsultation meeting and the commencement of project design.

Design work is to adhere to the Municipalities Master Plans and the requirements set out in the engineering standards. All engineering design and submission procedures and requirements are outlined in the Engineering Standards. It is incumbent upon the proponent and his team to familiarize themselves with these documents prior to proceeding to the design phase of the project.

1.5.2 Preconsultation

Preconsultation is a required element of the planning approval process for all those wishing to initiate a plan of subdivision/condominium or site plan application.

Preconsultation is typically, the first formal contact between the developer and the Municipality. It is understood that there may be several discussions between Municipal Staff and the developer leading up to the preconsultation exchange between the developer and the Municipality.

Preconsultation is designed to achieve two specific outcomes:

- a) Allow the developer to share their ideas and vision for their development proposal.
- b) Allow for members of the Development Review Team (DRT) to provide direction and guidance to the developer, outlining matters related to Official Plan conformity, compliance with zoning regulations, compliance with other relevant documents (including this Guide), and confirmation of the planning approval process.

Preconsultation takes place prior to the submission of an application. It is the stage in the process where developers share their ideas and vision and where members of the North Grenville Development Review Team provide direction and guidance to those wishing to develop.

This Guide is intended to provide direction on key elements of the design that are important to the Municipality. To ensure developers gain maximum benefit from the preconsultation phase, they should make every effort to acknowledge and understand the requirements of this Guide as part of the preconsultation submission. It is not expected that the developer will have fully formed proposal detailing compliance with the Guide, rather it is expected that the developer have a basic understanding of the design issues that are important to the Municipality and how the development proposal may address the design issues.

During the preconsultation phase, comments and direction will be provided by the Municipality's Development Review Team. Identification of required studies and supporting information, design elements that are critical for inclusion, understanding of local context, and awareness of pending initiatives, are all expected to be shared at this informal stage of the development process.

Preparation for a preconsultation meeting with the Development Review Team (DRT) by the developer and their representatives will ensure the maximum benefit of this informal, free process is obtained. It is expected that a developer will submit an outline of the project and a preliminary design concept/plan for review and consideration prior to the meeting. Section 2.1 of this Guide provides more details on preconsultation requirements.

It is understood that there may be confidential elements of the proposal that the developer wishes to keep private at the preconsultation stage. Section 2.1.2 of this Guide addresses confidential preconsultation.

It is the practice of Municipal Staff to provide a written follow-up to the developer summarizing the outcome of the preconsultation discussions, including process details, study requirements, and matters which require consideration.

1.5.3 Application Submission

Following the direction and comments received during the preconsultation stage, it is anticipated that submitted subdivision/condominium or site plan applications will address all the relevant elements of this Guide. There may be situations where unique circumstances exist and inclusion of various elements of the Guide may not be appropriate. Where these situations exist, it is

In order for an application submission to be <u>deemed complete</u>, there is a basic requirement to complete the application, submit the required supporting studies, plans, and information as identified during the preconsultation stage, and pay the required fees.

anticipated that the application submission will contain a justification for not including elements of the Guide.

Application submissions that are not complete will be returned to the developer with the specific requirements for a complete application clearly identified. Incomplete applications shall not be processed and shall not proceed through the development review process.

Developers are encouraged to present their complete application to the North Grenville Development Review Team (DRT) so that members of the DRT are fully briefed on the details of the development proposal.

1.5.4 Application Review

Once an application has been deemed complete the Municipality shall circulate the application to the various internal departments and external agencies for their review and comment. The comments received will be focused on the mandate or responsibility of the commentor and generally involve comments that accept submitted material, seek clarification of the submitted material, offer an alternative approach, or outright refusal of the submitted material.

Review comments provided will focus on conformity with the local and County Official Plans, the North Grenville Zoning By-law, public body policies and procedures, provincial policy, as well as the direction in this Guide.

Once all requirements of the commenting bodies have been addressed to their satisfaction, the development proposal will be presented to the approval authority for consideration.

1.5.5 Decision & Implementation

Once the approval authority has made a decision on the merits of the application, it is the developer's responsibility to address any conditions associated with the approval. It is anticipated that for both subdivision/condominium and site plan applications, the approval will involve conditions that must be addressed prior to development proceeding.

The implementation of the decision by the approval authority usually involves satisfying conditions that are reflected in a Subdivision/ Condominium or Site Plan Agreement. Such agreements are typically between the developer and the Municipality however, other external bodies may be party to or have an interest in the agreement.

It is normally the case that an executed agreement will also involve the posting of securities and be registered on the title of the subject lands, all at the developer's expense. Agreements and Administrative Controls are discussed in detail in Section 8 of this Guide.

1.6 Geographic Application of the Guide

The Municipality of North Grenville has a diverse geography consisting of a fully serviced urban area (Kemptville), historic hamlet settlement areas developed on private services (Oxford Mills, Bishops Mills, South Gower, Burritts Rapids, etc) and vast rural lands developed on private services.

Although it is anticipated that the majority of the growth and development of the Municipality will be focused in Kemptville, and to a lesser extent the historic hamlets, this Guide will apply equally to any subdivision/condominium or any site plan application, regardless of the location within the Municipality.

1.7 Developer Guide Exemptions

This Guide is intended to be applied to all development proposals involving residential, commercial, industrial, and institutional subdivision/condominium and site plan applications.

Notwithstanding the above, the Developer's Guide is not intended to be applied against aggregate resource extraction applications, agricultural applications, forestry applications, or other resource-based activities.

That said, there may be benefit for exempt applications to consider elements of the Guide to assist in their design.

Other activities under Federal government jurisdiction, such as telecommunication applications under the Innovation, and Science and Economic Development Canada's (ISED) Spectrum Management and

It is typical for the approval of plans of subdivision to require conditions to be addressed and the plan finalized within three (3) years of the date of Draft Approval.

NG site plan approvals typically have a two year timelines in which conditions must be satisfied.

Telecommunications Policy, are exempt from the Developer's Guide.

1.8 Overall Design Objectives

There are a number of fundamental design objectives that provide direction to the Developer's Guide.

All future development, whether greenfield or infill, urban or rural, shall be consistent with the following Design Objectives:

- Maximize integration and connections with existing neighbourhoods resulting in a contiguous community, where new development is not isolated from existing development and connects with existing neighbourhoods.
- Incorporate connection with, continuation of, and advancement of the Municipality's active transportation infrastructure.
- 3. Develop high quality landscaped areas based on the planting of sustainable, native species appropriate for the situation.
- 4. Provide the necessary parkland and open space.
- 5. Designed to meet AODA standards for accessibility.
- 6. Incorporate sustainable design elements, use of sustainable building materials and construction methods.

It is the goal of the Official Plan "to promote a high standard of architectural, landscape and community design that is sensitive to the character of the surrounding uses and streetscapes, conducive to pedestrian accessibility, safety, circulation and use, and that provides for the protection of significant natural features."

2.0 General Submission Requirements

2.1 Preconsultation Requirements

2.1.1 Developer Preconsultation Submission

In order for preconsultation to be effective it is necessary for the developer to:

- 1. Prepare a written statement outlining the nature and details of the development proposal
- 2. Prepare a preliminary concept plan for the development of the property. Efforts should be made to avoid hand prepared concept plans. The Concept Plan should be drawn to scale and clearly labeled. The use of existing survey information, if available, for the boundary of the subject property and base for the concept plan is encouraged.
- 3. Arrange to have the developer's team attend the preconsultation meeting (planners, engineers, architects, etc.) to ensure that all parties are hearing the same message at the same time.

2.1.2 Confidential Preconsultation

It is understood that development concepts are rarely fully advanced at the preconsultation stage and that there may be the need to exchange sensitive details or materials during the preconsultation process. It is not unusual for land deals to be happening during the approval process and as a result, highly sensitive. As a result, it is common for the developer to want to keep sensitive information from being "public" at the preconsultation stage. Where sensitive information is presented to DRT it is critical for the developer to inform the DRT that the information is sensitive and confidential. DRT members are to respect confidential information presented during the preconsultation process and treat the meeting as "in camera" and not public.

It is the practice of Municipal Staff to provide a written follow-up to the developer summarizing the outcome of the preconsultation discussions, including process details, study requirements, and matters which require consideration.

2.2 Studies/Supporting Information Requirements/Triggers

Understanding the type and scope of the studies required to support any given subdivision/condominium or site plan application is a critical outcome of the DRT preconsultation process. Depending on the nature, location, and details of the development proposal, a wide range of studies may be required to be submitted in support of the development application. Appendix A sets out the range and type of studies that may be required, when the need for the study is triggered, who can do the study, when they are required in the process, who reviews the work, and how the recommendations are implemented. Although every effort will be made to identify required studies during the DRT preconsultation process, it is important to understand that additional information or new studies may be requested at any time throughout the approval process.

It is important to understand that there may be situations where the Municipality shall seek a third-party peer review of studies submitted by the proponent. The Municipality may require a deposit from the proponent to cover the costs associated with retaining third party peer review services.

2.3 Subdivision/Lot Creation Requirements

2.3.1 Subdivision/Condominium Drawing Requirements

The plan of subdivision/condominium submission requirements are set out in Section 51(17) of the Planning Act and shall apply to this Guide. The North Grenville Official Plan also provides the authority for additional information requirements.

An applicant of a plan of subdivision/condominium shall provide a plan of the proposed subdivision/condominium drawn to scale and showing:

- a) the boundaries of the land proposed to be subdivided, certified by an Ontario Land Surveyor (OLS);
- the locations, widths, orientation, and names of the proposed highways within the proposed subdivision, including site triangles, and of existing highways on which the proposed subdivision abuts or connects with, including the identification of the road authority;
- active transportation elements including walkways, bike paths, sidewalks, and their connection to the Municipal Active Transportation Network and Commuter Cycling Plan;
- d) the location of existing railways or railway corridors on which the proposed development abuts or is within the influence area of the railway authority;
- e) on a small key plan (on a scale of not less than one centimetre to 100 metres), all of the land adjacent to the proposed subdivision that is owned by the applicant or in which the applicant has an interest, every subdivision adjacent to the proposed subdivision, and the relationship of the boundaries of the land to be subdivided to the boundaries of the township lot or other original grant of which the landforms the whole or part;
- f) the purpose for which the proposed lots are to be used, including identification of parkland, open space, and stormwater management blocks;
- g) the existing uses of all adjoining lands;
- h) the approximate dimensions and layout of the proposed lots;
- i) if any affordable housing units are being proposed, the shape and dimensions of each proposed affordable housing unit, and the approximate location of each proposed affordable housing unit in relation to other proposed residential units;
- j) natural and artificial features such as buildings (to be retained and/or removed) or other structures or installations, railways, highways, watercourses, drainage ditches, natural heritage features, wetlands, wooded areas, and significant trees or vegetation to be protected within or adjacent to the land proposed to be subdivided;
- k) the availability and nature of domestic water supplies;
- I) the nature and porosity of the soil;
- m) existing contours or elevations as may be required to determine the grade of the highways and the drainage of the land proposed to be subdivided;

- n) identification of the phases of the development proposal;
- o) the municipal services available or to be available to the land; and,
- p) the nature and extent of any restrictions affecting the land proposed to be subdivided, including restrictive covenants or easement.

Special attention should be paid to Appendix 1 of the United Counties Subdivision/ Condominium application which sets out some of the general requirements for applications for subdivisions/condominiums, including direction on planning application fees, early preconsultation, assessment/review of applications, approval for private sewage systems, and other permits that may be required.

2.3.2 Unique Subdivision Requirements

For applications for plans of subdivision it is critical that required supporting documents are included in the application submission package. The confirmation of the studies required to be included in order for the subdivision application to be deemed complete, shall take place during the preconsultation before the Development Review Team (DRT).

For a residential plan of subdivision containing two hectares or more of developable lands, within the Urban Service Area, Section 2.4.3 of the Official Plan requires 21% of new development to be medium density development and 11% shall be high density development.

For developments proposing medium or high-density residential development, special consideration will be required to the demand for parking, the provision of on-site parking, the provision of visitor parking, and the need for on-street parking. In no case should a development proposal result in on-street parking demands that spill into neighbouring areas. Consideration of seasonal issues such as snow storage shall also be considered.

It is a policy of North Grenville that a minimum of one street tree per new residential unit be planted. It is understood that most medium and high-density residential

developments do not offer the same opportunity for street tree plantings that lower densities afford, due to conflicts between driveways, servicing laterals, and snow storage areas, especially with townhouse type development. It is anticipated that for such areas, landscaped plans will provide for as many street trees as practical, with the remaining required trees to be grouped and located in appropriate locations throughout the development.

A condition of subdivision approval typically involves the requirement to enter into a subdivision agreement between the applicant and the Municipality. Such agreements are registered on the title of the property and binding on successive owners.

2.3.3 Unique Condominium Requirements

One of the unique elements of condominium development is the option for the use of private roads through the common element condominium process. It is critical to ensure that the private road has the same form and function as a public street and that building setbacks should be from the private road right-of-way to the proposed building. There may be situations where the building setback can be significantly reduced from the private road, provided there is room

for parking and snow storage. Private roads are discussed in more detail in Section 7.6 of this Guide.

A condition of condominium approval typically involves the requirement to enter into a condominium agreement between the applicant and the Municipality. Such agreements are registered on the title of the property and binding on successive owners.

2.3.4 Landscape Plan Drawing Requirements

All subdivision and condominium applications shall also be accompanied by a Landscape Plan, drawn to scale, and showing:

- i. Existing landscaped features to be retained, areas to be grassed, and areas to be used for the storage of snow.
- ii. Location, type, and height of any fencing and retaining walls, and materials used for constructing sidewalks.
- iii. Location, quantity, species, caliper or height of all existing and proposed trees, plants, and shrubs. A table of such landscaping materials, cross sections, and planting schedules must be shown on the plan.
- iv. Any other detail pertaining to the aesthetic development of the site such as berms, planters, and street furniture (benches, bike racks, garbage receptacles, etc.).
- v. Where required, an open space/park plan shall be prepared to the satisfaction of the Municipality.
- vi. The requirements of the Municipal Engineering Standards for Landscape Plans should be addressed.

2.3.5 Application Fees and Deposits

Reference to the Municipality's User Fees By-Law is recommended to ensure applications are accompanied by the appropriate fees. It may be necessary to contact the approval authority for plans of subdivision and plans of condominium to confirm their required fees. In all cases, the fee is required to be submitted with the application in order for the application to be deemed complete. No application will be processed or reviewed until such time as fees are deposited with the approval authority.

With most applications, there may be a requirement for a separate deposit to cover the cost of the peer review of studies, including engineering plans and reports. Typically for plans of subdivision and/or condominiums, the security deposit is \$5,000. The deposit is to be drawn upon when needed to cover the cost of the peer review. Any deposit remaining unspent at the conclusion of the project is returned to the applicant. Should the deposit be drawn to \$0.00, the applicant will be required to replenish the deposit to a level determined by the Municipality. It is required that the deposit be replenished within 10 business days of the notice from the Municipality for the need to top up the deposit.

Deposits shall be in the form of cash, deposited with the Municipality.

2.4 Site Plan Requirements

2.4.1 Site Plan Drawing Requirements

The site plan submission requirements that are detailed in Section 41(4) of the Planning Act shall apply to this Guide. The North Grenville Official Plan also provides the authority for additional information to be requested.

A site plan application shall be accompanied by a Site Plan of the proposed development, drawn to scale, and showing:

- a) Location of the subject property in relation to adjacent properties, streets, railway rights-of-way, easements, as well as the dimensions and area of the subject property.
- b) A legend explaining all design features and a breakdown of all uses in metric units.
- c) Identification of abutting lands in same ownership as the subject property.
- d) Location of all buildings and structures to be erected and showing the size, elevation, and type of existing buildings and structures including floor area, number of storeys, width, length, height, and number of dwelling units for each building
- e) Location of all facilities and works to be provided including:
 - i. Facilities designed to have regard for accessibility for persons with disabilities.
 - ii. Widenings of highways that abut onto the land.
 - iii. To provide access to and from the land, such as access ramps and curbing, and traffic direction signs, including the width of existing and proposed access to public streets.
 - iv. Off-street vehicular loading and parking facilities, either covered or uncovered, access driveways, including driveways for emergency vehicles, and the surfacing of such areas and driveways. Internal road pattern including aisles, ramps, loading bays, and parking spaces with dimensions. A table of parking calculations and parking for handicapped persons must be shown on the plan.
 - v. Walkways and walkway ramps, including the surfacing thereof, and all other means of pedestrian access.
 - vi. Distance from front lot line to centreline of public streets.
 - vii. Location and details of underground and above ground utilities extended to the subject property, including hydro, water, sewer, gas, cable, and telephone lines. The location of fire hydrants, light standards, hydro poles, or other installations shall be identified.
 - viii. Facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon.
 - ix. Walls, fences, hedges, trees, shrubs or other groundcover or facilities for the landscaping of the lands or the protection of adjoining lands.
 - x. Location and details of existing and proposed signs.
 - xi. Vaults, central storage and collection areas, and other facilities and enclosures for the storage of garbage and other waste material.

- xii. Easements conveyed to the Municipality for the construction, maintenance or improvement of watercourses, ditches, land drainage works, sanitary sewage facilities and other public utilities of the Municipality or local board thereof on the land.
- xiii. Grading or alteration in elevation or contour of the land and provision for the disposal of storm, surface, and wastewater from the land and from any buildings or structures thereon.
- xiv. Perpendicular distance from lot lines to the nearest walls of existing and proposed buildings, and building spacing, where applicable.
- xv. Location of designed fire routes(s), easements, and rights-of-way.
- f) The requirements of the Municipal Engineering Standards for Landscape Plans should be addressed.

2.4.2 Landscape Plan Drawing Requirements

All site plan applications shall also be accompanied by a Landscape Plan, drawn to scale, and showing:

- i. Existing landscaped features to be retained, areas to be grassed, and areas to be used for the storage of snow.
 - ii. Location, type, and height of any fencing and retaining walls, and materials used for constructing sidewalks.
 - iii. Location, quantity, species, caliper or height of all existing and proposed trees, plants, and shrubs. A table of such landscaping materials, cross sections, and planting schedules must be shown on the plan.
 - iv. Any other detail pertaining to the aesthetic development of the site such as berms, planters, and street furniture (benches, bike racks, garbage receptacles, etc.).
 - v. Where required, an open space/park plan shall be prepared to the satisfaction of the Municipality.
 - vi. The requirements of the Municipal Engineering Standards for Landscape Plans should be addressed.

2.4.3 Grading and Drainage Plan Drawing Requirements

All site plan applications shall also be accompanied by a Grading and Drainage plans which show:

- Existing elevations on subject and adjacent lands, and along centreline or adjacent public streets and railway rights-of-way. All elevations are to be geodetic.
- Location, elevations and contours of any creeks, ravines, or watercourses on the subject and adjacent lands. Arrows indicating the proposed direction of flow of all surface water.
- iii. Finished elevations at the building lines and at all critical points such as catch basins and adjacent lands.
- iv. Location and details of swales, all surface water outlets, catch basins, ripraps, rock and retaining walls, and size and gauge of metal culverts.

- v. Dimensions of box culverts, depth and quality of asphalt, curbing, servicing, and connections.
- vi. The requirements of the Municipal Engineering Standards for Grading and Drainage Plans should be addressed.

2.4.4 OLS Drawing Requirements

All site plan applications shall be accompanied by a Survey prepared by an Ontario Land Surveyor (OLS), stating the legal description, and showing the property boundary. The Municipality may request that the survey also identify existing buildings and structures, existing trees, floodplain limit, and appropriate dimensions. The requirements of the Municipal Engineering Standards for OLS Drawings should be addressed.

2.4.5 Unique Site Plan Requirements

Site Plan applications are typically required for commercial, industrial, and institutional development proposals. Site plan control is also required for medium and high-density residential development, and, for low-density residential development in circumstances where there are natural heritage or hazard features.

The North Grenville Site Plan Control By-law 58-12, Section 4 provides for exemptions for certain classes of development from site plan control including:

- a) All buildings and structures accessory thereto, on lands where no development is proposed within 30 m of a waterbody.
- b) A "public use", as defined in the Municipality's Zoning By-Law, where Council has by resolution specifically exempted such use.
- c) Agriculture, forestry, or conservation buildings or structures, including buildings and structures accessory thereto.
- d) A temporary building or structure used during construction of a permanent building or structure.

The approval of a site plan can include conditions that must be satisfied. Typically, there is a site plan agreement entered into between the developer and the Municipality that details the terms and conditions related to the development of the property and how the conditions are satisfied, along with financial requirements, including the posting of a security deposit associated with specific site works. More detail on site plan agreements is provided in Section 8 of this Guide.

It is important to appreciate that only the applicant has the right to appeal site plan control decisions. The general public typically does not have appeal options for site plan applications.

Appendix B contains flow chart of the Development Review Process for site plan applications.

2.4.6 Application Fees and Deposits

Reference to the Municipality's User Fees By-Law is recommended to ensure applications are accompanied by the appropriate fees. In all cases, the fees are required to be submitted with an application in order for the application to be deemed complete. No application will be processed or reviewed until such time as fees are deposited with the approval authority.

With most applications, there may be a requirement for a separate deposit to cover the cost of the peer review of studies, including engineering plans and reports. Typically for site plans, the security deposit is \$3,000. The deposit is to be drawn upon when needed to cover the cost of the peer review. Any deposit remaining unspent at the conclusion of the project is returned to the applicant. Should the deposit be drawn to \$0.00, the applicant will be required to replenish the deposit to a level determined by the Municipality. It is required that the deposit be replenished within 10 business days of the notice from the Municipality for the need to top up the deposit.

Deposits shall be in the form of cash, deposited with the Municipality.

2.5 Approval Authorities

2.5.1 Subdivisions/Condominiums

The approval authority for plans of subdivision and condominiums is the United Counties of Leeds and Grenville. For such applications, the Municipality is a "commenting agency" and is responsible for reviewing the development proposal and providing comments to the United Counties, along with recommended conditions to be included in the United Counties decision.

Counties decisions on "draft plan approval" for subdivision and condominium applications are typically for a three-year period. All conditions associated with the draft plan approval must be satisfied within the three-year period. There is an option for the applicant to request one-year extensions to the draft approved application. If the conditions of draft approval are not satisfied within the three year or extended timeline, the Counties decision becomes null and void and the application will be deemed "lapsed". In order to reactivate a lapsed decision, the applicant must reapply with a new application and start the process from the beginning.

As part of the approval of a draft plan of subdivision or condominium, the United Counties has the authority to impose such conditions on the approval of a plan of subdivision. Such conditions must be reasonable, in the opinion of the approval authority, having regard for the nature of the development proposed for the subdivision, including the requirements:

- 1. That land be dedicated, or other requirements met for park or other public recreational purposes.
- 2. That such highways, including pedestrian pathways, bicycle pathways and public transit rights of way, be dedicated as considered necessary.
- 3. That such land be dedicated for commuter parking lots, transit stations and related infrastructure for the use of the general public using highways, as considered necessary.
- When the proposed subdivision abuts on an existing highway, that sufficient land be dedicated to provide for the widening of the highway to such width as considered necessary.

- 5. That the owner of the land proposed to be subdivided enter into one or more agreements with the Municipality, dealing with such matters as may consider necessary, including the provision of municipal or other services.
- In the case of an application for a condominium containing affordable housing units, a shared facilities, an agreement will be entered into to the satisfaction of the United Counties.

2.5.2 Site Plans

The approval authority for site plan applications is the Municipality of North Grenville. The Municipality is responsible for circulating the complete applications to the various agencies and public bodies to solicit their comments and for making a decision on the merits of the application.

With Site Plan applications there are no requirements to circulate the proposal to surrounding property owners. The Municipality may provide a courtesy notice to surrounding property owners, but there is no requirement for a public meeting and the public have no appeal rights on site plan applications.

The Municipality will circulate and gather comments from the various agencies and public bodies and provide a decision on the site plan application, typically with conditions, including the requirement to enter into a site plan agreement with the Municipality.

Once approved decisions on site plan applications typically do not have a lapsing date.

As part of the approval of a site plan application, the Municipality has the authority to require, as a condition, that the owner of the land provide, to the satisfaction of and at no expense to the Municipality, any or all of the following:

- 1. Widenings of highways that abut on the land.
- 2. Facilities to provide access to and from the land such as access ramps, curbings and traffic direction signs.
- Off-street vehicular loading and parking facilities, either covered or uncovered, access
 driveways, including driveways for emergency vehicles, and the surfacing of such areas
 and driveways.
- 4. Walkways and walkway ramps, including the surfacing thereof, and all other means of pedestrian access.
- 5. Facilities designed to have regard for accessibility for persons with disabilities.
- 6. Facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon.
- 7. Walls, fences, hedges, trees, shrubs, or other groundcover or facilities for the landscaping of the lands or the protection of adjoining lands.
- 8. Vaults, central storage, and collection areas and other facilities and enclosures for the storage of garbage and other waste material.
- 9. Easements conveyed to the Municipality for the construction, maintenance, or improvement of watercourses, ditches, land drainage works, sanitary sewage facilities, and other public utilities of the Municipality or local board thereof on the land.

- 10. Grading or alteration in elevation or contour of the land, and provision for the disposal of storm, surface and wastewater from the land and from any buildings or structures thereon.
- 11. Maintain to the satisfaction of the Municipality and at the sole risk and expense of the owner any or all of the facilities or works including the removal of snow from access ramps and driveways, parking areas, loading areas, and walkways.
- 12. Enter into one or more agreements with the Municipality dealing with and ensuring the provision of any or all of the facilities or works and the maintenance thereof, and that development proceeds in accordance with the plans and drawings approved.

The Municipality is not authorized to regulate interior design, layout of interior areas, excluding interior walkways, stairs, elevators and escalators, or the manner of construction and standards for construction for development through the site plan control process.

2.5.3 External Approval Requirements

Through the draft plan of subdivision/condominium process or the site plan control process, there may be the need for approvals from external agencies/public bodies, other than the Municipality or the United Counties of Leeds and Grenville. The following is a summary of some of the more common external approvals that may be required through the subdivision/condominium or site plan approval processes:

<u>Province of Ontario</u>: the province is responsible for the approval of Records of Site Condition (RSC) for contaminated sites, Archeological Assessments where there are findings of significance, and Environmental Certificates of Approval (ECA) for sewage works and stormwater management. The Ministry of Transportation is also responsible for the review and issuance of land use permits for all development within 300 m of a MTO right-of-way.

Leeds Grenville, Lanark District Health Unit (LGLDHU): The LGLDHU is currently responsible for the issuance of building permits for septic systems with capacity of less than 10,000 l/day. If the development proposal is on private services, a permit from the LGLDHU will be required.

<u>Conservation Authorities</u>: There are two Conservation Authorities with jurisdiction in North Grenville (Rideau Valley CA and South Nations CA). Where development is within an area regulated by the Conservation Authority, a permit may be required to do any work within the floodplain, watercourse, wetland, or unstable slope.

<u>United Counties Road Authority</u>: Where development fronts on a County Road under the jurisdiction of the United Counties Road Authority, there may be a need for an entrance permit to be issued or upgraded.

<u>Parks Canada (Federal)</u>: The Rideau Canal is federally regulated under the jurisdiction of Parks Canada. All near shore and in-water works within the area regulated by Parks Canada may require a permit.

The above list is not exhaustive and there may be additional external approvals required for a specific development proposal.

3.0 Neighbourhood Integration

Proper, thoughtful integration of new development into existing neighbourhoods is required in order to ensure the character and compatibility with the surrounding neighbourhood are maintained. Proper integration requires special attention to a number of design issues related to the road network, pedestrian and open space connectivity, building design details, cultural heritage considerations, and accessibility.

3.1 General Neighbourhood Integration Standards

The physical environment of a neighbourhood is composed of its lots, buildings, streetscapes, topography, street patterns and natural environment, that collectively determine much of the character of a neighbourhood. A well organized and documented understanding of a neighbourhood's character is an effective tool in assessing the appropriateness of a proposed change and the implications the change may have on the character of the neighbourhood (see Neighbourhood Characterization Studies in Table 1 of Section 2.2). The intent is to ensure projects are sensitive to, compatible with, and a good fit within, the existing surrounding neighbourhood based on, but not limited to, a review of both existing and proposed built form, massing, and architectural treatments, and accommodates natural heritage and hazard features. It is recommended that regard should be given to the Municipal Strategic Plan as it relates to community and neighbourhood development goals and objectives.

3.1.1 Residential Intensification

Residential intensification projects (including plans of subdivisions/condominiums) are subject to site plan control and must demonstrate:

- a) Sensitivity to existing private amenity spaces as they relate to the location of proposed building entrances, garbage receptacles, parking areas, and other features that may impact the use and privacy of such spaces.
- b) The use of fencing, landscaping, and planting buffers to mitigate impacts of the proposed development on existing properties.
- c) Consideration of the following Urban Design Principles:
 - innovative and creative standards of design for the form and design should complement and/or enhance any significant natural features that form part of the site or are located adjacent to the site;
 - ii. new development should provide for a diversity of styles, continuity, and harmony in architectural style with adjacent uses;
 - iii. new infill development should have a similar relationship to the street as surrounding development, and may be required to provide for pedestrian travel;
 - the design and positioning of new buildings should have regard for the impact of the proposed development on year-round sunlight conditions on adjacent properties and streets;
 - v. buildings should be positioned to define usable and secure open space areas on the site and to afford a reasonable measure of privacy to individual dwelling units;
 - vi. parking and driveways should be located and designed to facilitate maneuverability on site and between adjacent sites, and to reduce traffic flow disruption to and from the property.

3.1.2 Neighbourhood Character Statement

A detailed statement of the character of the existing neighbourhood that demonstrates how the proposed development respects the character of the existing neighbourhood is required for infill and intensification projects. Such work would inventory the urban design characteristics of the neighbourhood and shall include a review of structures and the natural environment within the surrounding neighbourhood.

The conceptual design of the proposed development needs to be based on specific built form principles which guide what it is that the project wants to achieve. The Neighbourhood Character Statement shall incorporate the following items:

The extent of the neighbourhood area to be reviewed is typically established at the pre-consultation stage. It shall include a minimum area consisting of a 120 metres radius from the subject site.

- a) Character and Image:
 - i. description of the existing street character;
 - ii. description of the project in the context of the neighbourhood;
 - iii. visual components; and,
 - iv. retention and role of natural environment.
- b) Site Design:
 - i. the location of buildings, as well as their orientation to the street edge and sidewalks;
 - ii. the location of building entrances;
 - iii. how the design relates to its site and greater surrounding area, including established building lines, rear yard and front yard setbacks, and building separation;
 - iv. views into and out of the site how does the building function as a view terminus provide pedestrian perspectives (at-grade views) and important views; and,
 - v. vehicular and pedestrian circulation
- c) Servicing:
 - accessibility and connectivity of the site to the adjacent neighbourhood, community facilities and destinations, including consideration of the circulation for automobile, pedestrians, cyclists, and persons with disabilities;
 - ii. access to transit:
 - iii. shared service locations, parking, ramps, drop-offs, service areas for garbage, loading, utilities, etc.;
 - iv. capacity of water and sewage system; and
 - v. protection of source water aguifers.

3.1.3 Neighbourhood Compatibility

As part of an application for residential intensification, the applicant may be required to provide a detailed statement of the compatibility of the project, to demonstrate that the proposed project is sensitive to, compatible with, and a good fit within the existing surrounding neighbourhood. The conceptual design of the project shall incorporate the following items:

a) Built Form Elements:

- i. how the building(s) addresses the street;
- ii. street wall and treatment of grade level;
- iii. rooftop and cornice lines;
- iv. location of entrances and other openings;
- v. relationship of the building(s) to the street at intersections;
- vi. design for comfort and safety (i.e., privacy, lighting, sun, and wind protection, etc.); and
- vii. dark skies friendly design and lighting.
- b) Massing and Articulation:
 - i. at-grade openings;
 - ii. setbacks;
 - iii. transition to adjacent uses / buildings, and among buildings within the site;
 - iv. transition of scale;
 - v. street proportion / street sections (building to street ratio);
 - vi. shadowing caused by mid-rise and tall buildings should be minimized and impacts on adjacent private amenity areas (natural light and privacy for example) should be minimized; and
 - vii. energy efficient and passive solar design.
- c) Architectural Treatment:
 - i. style;
 - ii. details;
 - iii. materials;
 - iv. colour; and
 - v. exterior lighting.

3.2 Transportation Network

The transportation network includes roads, railways, multi-use pathways, sidewalks, and parking. A key element of neighbourhood integration involves the proper design of the various elements of the transportation network and its integration with the existing neighbourhood design. The following is intended to guide proposed transportation networks.

- The connection of a new road into an existing road network should be consistent with the existing block pattern and lengths. Efforts should be made to avoid mid-block road connections and promote right-angle connections. Public safety and site lines where new roads connect with the existing network are key elements.
- 2. The internal road network layout should be grid-like with short blocks, approximately 150m to 250m in length, to create an easily walkable network. In general, a grid-like road network is the preferred layout because it is known to reduces travel times and emissions, facilitates water supply servicing and emergency service access, supports transit and active transportation, and is easily navigable for users.
- 3. Connection to adjacent and existing development should be considered.
- 4. The internal road networks should include pedestrian and cycling facilities with connections to municipal facilities (existing and planned), where applicable.
- Road allowance widths for new development should be consistent with the road allowance widths of existing neighbourhoods. The Municipality may require larger road allowances widths where existing neighbourhood widths are substandard.

- 6. Consideration should be given to maintaining minimum intersection spacing guidelines, along with other intersection design requirements such as minimum sight distance and approach angles for developments with accesses onto municipal or county roads.
- 7. Hydro and utility lines are encouraged to be placed underground to avoid visual intrusion of the streetscape.
- The standards for new road design are detailed in the Official Plan and the Engineering Standards for the Municipality. Reference should also be made to the Municipality's Traffic Calming Policies. Traffic calming should be incorporated as part of the Traffic Impact Study.

3.2.1 Streetscape

A significant component of the transportation standards is the detailed design of the streetscape. Existing building facades frame the streetscape and should be consistent with new development. Streetscapes include roadway, sidewalks, lighting, signage, landscaping, and parking. The streetscape and design of the transportation network is a major element in ensuring consistency and compatibility with existing neighbourhoods.

3.2.2 Unopened Road Allowances

Where a development proposal involves the opening of unopened road allowances, approval from the Municipality will be required. The Municipality will normally require an agreement for the construction of the road. Where more than one landowner will benefit from the opening of a road allowance, the Municipality will endeavour to recover a reasonable share of the road building costs from any benefitting owners who did not contribute to the original cost of construction. Such costs may be recovered by means of a special development charge which will be a condition of a severance or plan of subdivision. Nothing in the afore referenced should be construed as encouraging the opening of unopened road allowances.

The use of unopened road allowances as lanes to gain access to year-round residential development shall be discouraged. Roads may be permitted to cross unopened road allowances with the permission of the Municipality.

3.2.3 Road Widening

The Municipality shall use the subdivision/condominium or the site plan control planning approval processes to obtain road widening where necessary, especially where the proposed use will generate significant volumes of traffic or where the entrance onto the public road would otherwise be deemed insufficient by the Municipality. This policy applies to all roads under the Municipality's and Counties' jurisdiction.

The Municipality or the Counties may require land to be conveyed to the appropriate road authority at no cost for the purpose of widening the existing road right-of-way as a condition of subdivision/condominium or site plan control approval.

More details on road widening considerations is found in Section 7.3 of this Report.

3.2.4 Lands to be Clean

Where the Municipality is deeded land for public highways or road widening, the Municipality may require, as a condition of transfer, verification to the satisfaction of the Municipality that the lands in question are suitable or have been made suitable for the proposed use in accordance with provincial legislation and regulations, including, filing by the property owner of a Record of

Site Condition (RSC) and submission by the owner to the Municipality of proof that the MECP has acknowledged receipt of the RSC.

3.2.5 Pedestrian Design

Where appropriate, redevelopment projects will be encouraged to include pedestrian design features such as the widening of sidewalks, the provision of landscaped areas accessible to pedestrians, the development of grade-separated street crossings to link major developments, and street benches. Consideration will also be given to the upgrading of public streets to accommodate pedestrian traffic through measures such as the provision of weather protection, the use of accessibility design standards, and the development of at-grade, mid-block street crossings.

3.3 Active Transportation and Open Space Connectivity

One of the most important community development objectives in North Grenville is to establish four season pedestrian and bicycle friendly environments that serve the needs of all categories of users based on age

During preconsultation, developers will be informed of the intended active transportation and cycling connections within various areas of the Municipality as per the ultimate cycling network.

or skill, provide direct access to the natural environment, promote a viable alternative to automobile use, and connect residential areas to recreation, commercial, and institutional uses.

The subdivision/condominium and site plan proposals may be required to reserve additional space, in addition to environmental setbacks, for the construction of cycling and recreational paths, where appropriate.

Subdivision/condominiums and site plan applications shall be planned with an emphasis on active transportation, street connectivity and active transportation infrastructure, and will incorporate or facilitate the enhancement of the preferred cycling network as identified in the Municipality's Commuter Cycling Plan and Transportation Master Plan. They

Opportunities for interconnections between bike routes and open space areas shall be identified as part of new development, or redevelopment of sites in order to improve the viability of cycling and active transportation as an alternative to car use.

should be designed to encourage people to walk or cycle for health reasons and to reduce their dependence on the automobile. This may include the provision of sidewalks, pathways, and bicycle routes that are linked to established trails and/or public areas, such as the Ferguson Forestry Centre, Waterfront Trail, Riverside Park, schools, and community facilities.

In approving plans of subdivision, the Municipality shall consider requiring a walkway and bicycle path system to be developed so that an integrated open space network may be created.

3.3.1 Active Transportation Design Considerations

The following active transportation design elements will be considered by all development and redevelopment proposals:

- 1. Where possible, walkways and/or bicycle paths should be located along watercourses, hedge rows, and other natural boundaries, or along collector roads.
- Development Subdivisions/Condominiums and site plans shall be expected to incorporate appropriate cycling facilities and opportunities for connectivity to the network. Submissions shall consider cycling facilities as part of the development process, including conceptual/layout plans and detailed design drawings.
- 3. The implementation of cycling facilities within new development areas that connect to existing and proposed routes identified in the cycling plan should be considered a priority. Developers shall demonstrate where and how these connections are to be made. Where existing cycling and pedestrian infrastructure exists at the limits of a development area, every effort should be made to ensure a connection between the existing facilities and the new development facilities. The introduction of small gaps within the network should be avoided whenever possible.
- 4. To encourage pedestrian travel, streetscapes should be safe, convenient, and attractive for pedestrians and include shelters, provide appropriate lighting, street furniture, bicycle racks, and landscaping.
- 5. The location, size, and nature of the development will determine whether sidewalks are needed on both sides or one side of the street, and whether bike lanes are necessary. New development, or redevelopment, will be expected to provide bicycle lanes on all roads with a 26 metre, or greater, road allowance and bicycle racks within all commercial developments. In general, sidewalks may be required on both sides of all arterial and collector roadways and on one side of all local streets. Sidewalks may not be required on cul-de-sac with 22 units or less unless the cul-de-sac connects to a walkway, park, school or is deemed necessary by the Municipality. Sidewalks may be required on both sides of the roadways for roads leading to high pedestrian traffic generators such as schools and commercial uses. Where possible, sidewalks should be constructed on the north and west sides of the streets. Reference to the Municipal Engineering Standards is recommended to confirm thresholds for the provision of sidewalks. When designing a sidewalk network consideration should be given to the intended road classification.
- 6. Active transportation infrastructure shall be constructed outside the 1:20 year flood plain unless approved by the RVCA. Where appropriate, the Municipality may require new developments to reserve additional space in addition to environmental setbacks for the construction of cycling and recreational paths.
- 7. When integrating cycling into new development areas, developers should consider topography, drainage, slopes, soil conditions, plant and animal communities, microclimates and human comfort, historic/cultural resources, public education, and significant views and vistas.

3.4 Cultural Heritage

The Municipality recognizes the importance of cultural heritage resources and will promote the identification, conservation, protection, restoration, maintenance, and enhancement of cultural heritage resources. In many cases, the cultural heritage resources are defining elements of existing neighbourhoods.

Cultural heritage resources include, but are not restricted to, significant built heritage, culturally significant heritage landscapes, archaeological sites, cemeteries and burials, buildings and structural remains of historical and architectural value, and human-made rural, hamlet, and urban districts or landscapes of historic and scenic interest.

3.4.1 Archeological Assessments

The Municipality recognizes that there may be archaeological remains of prehistoric and historic

habitation, or areas containing archaeological potential within the boundaries of the Municipality, both terrestrial and marine. The Municipality may require archaeological assessments conducted by archaeologists licensed under the Ontario Heritage Act for any development proposal affecting areas containing a known

Aboriginal communities shall be provided an opportunity to comment on development proposals where there are cultural heritage and archaeological resources.

archaeological site or considered to have archaeological potential. Archaeological assessment reports conducted by licensed archaeologists are to be in compliance with guidelines set out by the Ministry of Tourism Culture and Sport, as well as licensing requirements developed under the Ontario Heritage Act.

3.4.2 Cultural Heritage Bonusing

Subdivision/Condominium and site plan control development proposals will be encouraged to preserve and restore buildings considered by Council to be of cultural heritage value or interest. Where these buildings are incorporated into a project, the density of the residential development may be increased through bonusing provisions contained in policy 14.2 of the Official Plan, provided the overall maximum net density of

All new development proposals shall have regard for cultural heritage resources and shall, wherever possible, incorporate these resources into any new development plans.

All new development will be planned in a manner which preserves and enhances the context in which cultural heritage resources are situated.

the project does not exceed 60 units per gross hectare.

3.5 Accessibility

The North Grenville Accessibility Advisory Committee includes as part of its responsibilities to assist Planning & Development staff in the review subdivisions/condominium and site plans applications to ensure compliance with the *Accessibility for Ontarians with Disabilities Act* (AODA). Their goal is to enhance accessibility for residents, persons with disabilities, and visitors.

Subdivision/Condominium and site plan development projects will be encouraged to include pedestrian design features such as the widening of sidewalks, the provision of landscaped

areas accessible to pedestrians, and the development of grade-separated street crossings to link major developments, and street benches. Consideration will also be given to the upgrading of public streets to accommodate pedestrian traffic through measures such as the widening of sidewalks, the provision of weather protection, the use of accessibility design standards, and the development of at-grade, mid-block street crossings.

All future public spaces, including future municipal parks planned through the subdivision/condominium and site plan processes, shall be constructed in compliance with AODA standards.

Accessibility is not just a physical design issue but also has a visual element. Specific design elements of a subdivision/condominium or site plan applications must be able to be "visually accessible" in order that its intended function is realized. The example is of a public park which is located in the rear of housing and not seen from the street. Such parks are less accessible than those which have high street exposure. Accordingly, new development will ensure accessibility and connectivity of the site to the adjacent neighbourhood, community facilities, and destinations, including consideration of the circulation for automobile, pedestrians, cyclists and persons with disabilities.

4.0 Landscaping Standards

4.1 Landscaping Overview

North Grenville promotes a high standard of landscape design that is sensitive to the character of the surrounding uses and streetscapes, conducive to pedestrian accessibility, safety, circulation, and use, and that provides for the protection of significant natural features.

For the purpose of this document "landscaping" shall mean the installation and maintenance of any combination of the following elements:

- a) vegetation including trees, shrubs, hedges, ornamental plantings, grass, or other ground cover, or
- b) non-vegetative hardscaping materials such as brick, pavers, rock, stone, concrete, tile, and wood, excluding monolithic concrete and asphalt and any area used for parking, but including such features as a walkway, patio, deck, or in-ground pool, or
- c) architectural elements such as decorative fencing, walls, sculptures, gazebos, trellises, planters, benches, lighting, and other similar features

4.2 Landscaping Benefits

4.2.1 Landscaping and Energy Conservation

One of the benefits of well-planned landscaping is its contribution to energy conservation. Landscaping can provide summer shade and protection from winter winds. Landscaping should be used to conserve energy and water, enhance the appearance of building setback and yard areas, contribute to the blending of new and existing development, and screen parking, loading, garbage, and service facilities from adjacent properties and streets.

Landscape designs and energy conservation are explored in more detail in Section 6.2.2 of this Report.

4.2.2 Landscaping and Stormwater Management

In order to meet storm water quality objectives, the retention of existing tree cover or natural vegetation, and the provision of significant grassed and natural areas, shall be encouraged to facilitate absorption of surface water into the ground. Erosion and siltation control measures will be incorporated into any grading and drainage scheme.

It is understood that drainage control within a compact urban environment may result in the loss of existing tree cover or natural vegetation. In such circumstances, the landscape plan should provide for new tree planting, in appropriate locations to compensate for the loss of existing trees. It is understood that urban developments may result in fewer trees being planted than previously existed prior to development.

Innovative landscaping design which incorporates stormwater management systems, such as bioswales, rain gardens, and permeable pavement, is strongly encouraged wherever possible.

4.2.3 Landscaping and Watercourses

The retention or restoration of the natural vegetative buffer adjacent to watercourses, as the means of protecting water resources and its related ecological function from the negative impacts of development shall be a requirement for subdivision/condominium and site plan control developments.

Notwithstanding the required 30-metre vegetative buffer, a water access area of a maximum of 8 metres width may be permitted provided the natural shoreline is disturbed as little as possible and the balance of the waterfront outside of the access area is maintained in a natural state. Within the natural vegetative buffer, the pruning of trees for viewing purposes or the removal of trees for safety reasons may be permitted provided the intent of the policy is maintained.

The retention and/or establishment of mature tree cover and native shrubs and vegetative cover on lands within 30 metres (98 feet) of a high-water mark of a watercourse, shall be required in order to protect the riparian and littoral zones and associated habitat, to prevent erosion, siltation and nutrient migration, maintain shoreline character and appearance, and to minimize the visual impact of development.

4.3 Landscape Plans

All applications for subdivisions/condominium or site plan control shall be supported by a Landscaping Plan that considers the following:

- An inventory of existing trees and vegetation on the site prior to development, including identification of which stands of trees or individual trees warrant retention based on a preliminary assessment.
- ii. The retention of as much natural vegetation as possible, especially along watercourses, on steep slopes, in valued woodlots, in areas linking green spaces, and along roadways.
- iii. Measures for the protection of those trees or stands of trees being retained during construction.
- iv. Description of the area and nature of tree loss and compensation measures proposed. Such compensation measures may include off-site plantings.
- v. Tree planting or vegetative cover required to provide protection for watercourses or steep slopes.
- vi. The use of native species in tree planting strategies shall be encouraged. Monoculture tree plantings shall be discouraged.
- vii. Preparation of guidelines for property owners on the importance and care of trees on their property.
- viii. Impact on the environment during and after construction, and proposal of mitigation measures where there is substantial alteration of the existing tree cover on the site.
- ix. Natural features/functions that may be protected and enhanced by incorporating them into public open spaces, neighbourhood parks, recreational pathways, and/or stormwater management systems.

To the extent feasible, existing trees of desirable species should be retained and incorporated into the landscaping plans for new development. Also, designs for new development will consider the need for suitable locations to accommodate the planting of street trees.

Section 6.36 of the Zoning By-law sets out the requirements for Planting Areas. Development shall adhere to the planting area standards of Section 6.36 of the Zoning By-law.

When planting new trees, developers should reference "Choosing the Right Tree – A Landowners Guide to Putting Down Roots" (Appendix C). The information in this guide is for landowners, in Ontario's Great Lakes St. Lawrence Forest Region, who have made the decision to plant trees or shrubs and want to know what species are best suited to their particular site and needs.

This Guide recognizes that landscaping along boundary lines requires the involvement of neighbouring landowners. To this extent, efforts should be made to engage abutting property owners in discussions regarding tree planting, locations, species, and the alternative use of fencing along shared property lines.

4.4 Site Alteration

Site alteration of lands prior to or during the subdivision/condominium or site plan development review process shall be strongly discouraged and shall only be permitted through the prior approval of the Municipality. Unauthorized site alteration may result in delays in the approval process and/or restorative measures being imposed through the subdivision/condominium or site plan process.

For the purpose of this document, "Site Alteration" means activities such as the removal of topsoil from land, the placement or dumping of fill on land, the alteration of the grade of land, or excavation by any means, including the clearing or stripping of vegetation from the land, the compaction of soil, or the creation of impervious surfaces, or any combination of these activities.

Site alterations that are permitted without Municipal approval include:

- a) Site Alteration that is incidental to a Normal Farm Practice carried out by an Agricultural Operation, including, but not limited to, sod-farming, greenhouse operations, nurseries, field and forage crop or livestock production, but not including the removal of Topsoil or peat for sale, exchange, or other disposition.
- b) Site Alteration associated with the implementation of a development that has been approved by the Municipality under either the Planning Act or the Building Code Act.
- c) Site Alteration associated with the maintenance of services, including septic systems or wells, the installation and maintenance of fences, or the landscaping and maintenance of yards, provided that all such works are conducted in accordance with the other provisions of this by-law.

Site alteration, including the removal of vegetation shall not be permitted in, or within 120 metres of any natural heritage feature, including wetlands, fish habitat, ANSIs, or woodlands is prohibited except in accordance with Section 6.8 of the Official Plan.

4.5 Landscaping in Urban Areas

In urban areas, selective protection of significant trees or shrubs shall be promoted. Provisions relating to protection of vegetation may be incorporated into subdivision or site plan agreements.

Residential intensification projects will be encouraged to use landscaping, including fencing and planting buffers, to mitigate impacts of the proposed development on neighbouring properties.

Specific to highway commercial site plans, appropriate landscaping shall be provided along the road frontage to act as a visual buffer. There may be higher standards for landscaping along major entryways to the Municipality. Specifically, landscaping provisions on lands abutting County Roads #43 and #44 should include trees, grass, and berms located on a strip of land not less than 1.5 metres wide between the street line and any parking areas on the property.

The required play space shall be in one location in rear areas and ends of buildings, or in other suitable locations on the property in order to:

- permit direct access to and from the dwelling units without encountering traffic hazards;
- ii. not impair views for front entrances and living room windows within the dwelling units; and,
- iii. be located at least 4 metres (13.1 ft.) from the nearest wall of the nearest building.

Section 6.5 of the Zoning By-law establishes the standards for Amenity Areas and Place Space Areas for Multiple and Townhouse development. Development shall adhere to the amenity area standards of Section 6.5. As per Section 6.5 no amenity area is required for a multiple dwelling which contains three (3) dwelling units or less.

4.6 Landscaping in Rural Areas

In rural areas, site plan applications shall be encouraged to retain existing natural vegetation, especially along public roads. Those developing lands shall be encouraged to remove as little vegetation as possible when establishing roads, building sites, and servicing facilities. The intent is for new rural development to blend in with the natural landscape and not present an urban appearance. The retention of natural vegetation is not meant to include noxious weeds or invasive species.

5.0 Parkland Development Standards

A well-designed park system offers social, environmental, health, and economic benefits, and has the potential to bring people together. As the community grows, so too must the amount of parkland for the use and enjoyment of the residents of North Grenville.

5.1 Requirement for Parkland

Under the Planning Act, 1990, the Municipality is entitled to a dedication of land for park purposes as a condition on any application for plan of subdivision/condominium approval. For site plan developments, where there has been no previous parkland dedication, the Municipality is also authorized to obtain a dedication of land for park purposes as a condition of the approval of the site plan.

For lands to be used for commercial/industrial development, two (2) per cent of the land to be developed shall be provided for parkland purposes. For lands to be developed for residential purposes, five (5) per cent of the land to be developed shall be provided for parkland purposes.

In addition to the prescribed parkland dedication under the Planning Act, the Municipality may also pursue negotiations with the developer to acquire additional lands for park or open spaces purposes.

It is important to understand that

land conveyed to the Municipality for park purposes shall be used for park or other public recreational purposes but may be sold at any time. All agreements and offers of purchase and sale shall contain statements to this effect.

5.1.1 Cash-in-lieu of Parkland

The Planning Act also allows for Municipalities to request cash-in-lieu of parkland in situations where it has been determined by the Municipality that there is no need for additional parkland in the area. Cash-in-lieu may also be considered by the Municipality where the amount of land involved is small and, therefore, unsuitable for park development. This may be the case with many site plan developments.

The Planning Act allows for cashin-lieu of parkland dedication to be used towards "the erection, improvement, or repair of buildings and the acquisition of machinery for park or other public recreational purposes." Within North Grenville there is an identified need to increase the

The Municipality may use cash-in-lieu of parkland from developments to strengthen and improve existing parks and recreation facilities.

parkland supply. Cash-in-lieu funds could be used for additional parkland acquisition or improvements to existing parks.

The calculation of the cash-in-lieu of parkland for a plan of subdivision/condominium shall be consistent with the Planning Act and reflect the "value of the land as of the day before the day of the approval of the draft plan of subdivision/condominium."

The calculation of the cash-in-lieu of parkland for a site plan shall be consistent with the Planning Act and reflect the "value of the land the day before the day the building permit is issued in respect of the development or redevelopment or, if more than one building permit is required for the development or redevelopment, as of the day before the day the first permit is issued."

In determining the value of cash-in-lieu of parkland, the Municipality may require that the developer provide an appraisal of the valuation of the land by a qualified professional, and that such appraisal be subject to peer review.

5.2 Parkland Classification: Size and location & function

The North Grenville Parks, Recreation, and Culture Master Plan established the following park classification system to be consulted when acquiring additional parkland:

- 1. COMMUNITY PARK: Community Parks are generally drive-to locations that offer a wide variety of active and passive recreation spaces such as (but not be limited to) sports field complexes, outdoor pools, splash pads, indoor recreation facilities, and facilities found within Neighbourhood Parks. Supporting amenities may include parking, washrooms, pavilions, and other ancillary features. Community Parks may also contain natural environmental features, historical or cultural amenities, trail systems, and/or special event space. Generally, 4.0 hectares or larger in size.
- 2. NEIGHBOURHOOD PARK: Neighbourhood Parks provide a limited range of active and passive recreational opportunities through facilities such as playgrounds, courts, spaces for unorganized activities, and trail connections. They are often situated within subdivisions to promote walkability and may be coordinated with school sites. Sports fields and off-street parking are discouraged. Generally, 0.5 to 2.0 hectares in size.
- 3. PARKETTE/PLAZA: Parkettes or Plazas are publicly owned lands that are located in highly visible and accessible locations, typically in gateways or urban core areas. They serve to support the Municipality's social and cultural fabric and create a sense of place, and may contain elements of historic or cultural significance that are of local importance. They are typically characterized by floral gardens, hardscaped areas for events and gatherings, public art, seating areas, related civic uses, etc. Generally, 0.1 to 0.5 hectare in size.
- 4. OPEN SPACE: Open Space properties are predominantly used for conservation and/or passive recreational activities (e.g., walking, nature appreciation, education). These lands will be largely undeveloped and contain open space or natural heritage features such as woodlots, wetlands, conservation habitat, linear trail connections, etc. but should generally be publicly accessible. Open Spaces lands are generally not accepted as part of the parkland dedication as they do not meet active parkland needs (playgrounds, sports fields, courts, etc., are not permitted).

5.3 Parkland Priorities

To address growth-related needs the Municipality intends to maximize parkland dedication available through the Planning Act. Preference will be given to accepting developable (active) parkland that can support active outdoor recreation opportunities. Generally speaking, emphasis should be placed on:

- 1. Neighbourhood park development in areas of growth (e.g., within settlement areas).
- 2. Establishment of a new or expanded community park to meet growth-related sport and recreation needs (e.g., sports fields).
- 3. The establishment of waterfront parks.

It is anticipated that future parks established through plans of subdivision/condominium will be predominantly within the "neighbourhood park" classification. That said, there may be situations where Parkette/Plaza parks are appropriate and may be established through the approval process depending on location and need.

Within the Downtown Commercial Area, parkland dedication required of new commercial or

residential development may be taken in the form of setbacks, parkettes, public art, or landscaped plaza areas that enhance pedestrian circulation or contribute to the visual amenity of the Downtown Commercial Area.

The Municipality may request, as a condition of approval, the dedication of land for waterfront parkland in order to establish this open space pathway.

When planning for parklands, such lands shall generally be kept free of buildings and structures, except for

It is a priority to acquire and develop additional waterfront parkland in order to establish a continuous open space pathway along the South Branch of the Rideau River to, among other things, connect Residential areas with each other, to the Downtown, and to the Municipality's major park and recreational facilities.

those accessory buildings or structures which are necessary to serve the use and for those recreational buildings and structures such as arenas, pools, playground equipment, and ball fields.

5.4 Parkland Options

Where lands are dedicated for park purposes, the Municipality will accept only those lands suitable for park use.

5.4.1 Parkland Location

The location identified for parkland through the subdivision/condominium or site plan approval process shall be central to the design of the development lands. Parkland should not represent an afterthought or consist of the land "leftover" after the developable lands have been planned. Parkland should be a central, defining feature of any new development. It should be visually accessible with the majority of the lands abutting open and maintained streets. The location of

parkland behind development, accessed by pathways and with limited road frontage shall be discouraged.

When considering the location of parkland within residential subdivisions/condominium proposals, it is important to locate the parkland within close proximity to the highest density of development with the subdivision. This is based on the notion that the higher density residential development does not have the

The determination of the location of parkland should be discussed early in the development review process, ideally during the preconsultation phase with the Municipality.

same yards and open space as lower density development and therefore benefit from close proximity to the public parkland and open space.

Notwithstanding the above, there may be situations where parkland is best located to ensure protection of natural heritage features, protection of existing tree cover, or provision of waterfront access, and therefore may not be a central feature in the development.

The Municipality may encourage the use of floodplain lands for passive recreational uses which do not involve buildings or structures, and may acquire floodplain lands for these purposes. The Municipality may acquire these lands as part of any subdivision/condominium or site plan application, however the acquisition of such natural hazard lands may not be considered as part of the parkland dedication required under the Planning Act.

5.4.2 Parkland Accessibility

All lands to be dedicated as public parkland shall be designed to ensure accessibility for persons with disabilities.

Accessibility and inclusivity are important objectives of park design. Parks are a place for all, emphasizing the need to facilitate access for persons of all ages and abilities. Not all parks or areas within them are appropriate for universally accessible infrastructure (e.g., ecologically sensitive, or naturalized zones), however, community-focused spaces should consider the ability of all residents to access them, in keeping with the requirements of the Accessibility for Ontarians with Disabilities Act.

North Grenville is committed to universal accessibility and safety within parks through compliance with the Accessibility for Ontarians with Disabilities Act (AODA) and Crime Prevention Through Environmental Design (CPTED) principles (i.e. Territoriality/ Territorial Control, Natural Surveillance, Image and Milieu, and Access Control.

5.4.3 Waterfront Parks

It is an important priority that the Municipality obtain, wherever possible and practical, waterfront lands along the Rideau River and South Branch of the Rideau River, as parkland. It is the

Municipality's intent to provide for a continuous linear park / open space network by integrating waterfront areas along the Rideau River, the South Branch of the Rideau River and its tributaries.

5.4.4 Trails as Parkland

It is the intent of this Plan that the concept of recreational trails connecting various parts of the Municipality be considered as an integral part of the Municipality's future development.

Recreation trail systems are a unique community resource providing opportunities for public waterfront access, outdoor leisure and recreational activities, interpretation of the natural environment and historic context of the community, and diversity of tourism activities. The Municipality may consider acquiring lands for recreation trail purposes through parkland dedications.

Parkland dedication may involve lands for recreation trails, connections and linkages to recreation trails and recreation trail amenities such as trail heads, trail parking areas, and trail rest stops.

5.4.5 Open Space as Parkland

In situations where a development is proposed involving or within the vicinity of a Natural Heritage Feature, the dedication of open space parkland immediately adjacent to the Natural Heritage Feature may be considered in order to minimize the impact of development on the Natural Heritage System.

Acquisition of open space lands should be pursued over and above the Planning Act parkland dedication, particularly where they assist the Municipality in meeting the following objectives:

- i. linking and enhancing the active transportation network;
- ii. protecting natural habitat and areas of cultural significance, often in partnership with others; and/or
- iii. improving public access to the waterfront.

5.5 Parkland Design

When parkland dedication is required for a subdivision/condominium or site plan, the designated parkland block(s) will be identified on the development plans with sufficient detail to identify lot grading, drainage, landscaping, access, and other information as may be required. In certain cases, it may be a condition of approval for the developer to complete a park design plan to the satisfaction of the Municipality. This is further explained in Section 5.5.1.

The design and site preparation of the parkland and open space will take into account the intended and future passive and/or active recreational uses. General requirements for parkland preparation and conveyance include the following:

a) Size, topography, and configuration of the park must be acceptable to the Municipality so as to satisfy the standards for grading, drainage, setbacks, fencing and other municipal requirements. The Municipality retains the right not to accept the conveyance of land as parkland that is considered unsuitable, such as but not limited to hazard or

- flood-prone lands, natural heritage or valley lands, stormwater management facilities, lands containing easements or rights-of-way, etc.
- b) All dedicated parkland should be conveyed to the Municipality free and clear of any physical encumbrances above and below grade. In certain circumstances the Municipality may accept conveyed lands where there are minimal and reasonable encumbrances.
- c) If land required for a park exceeds the available amount through Planning Act parkland dedication, the Municipality may seek to acquire the balance at market values for unserviced developable land.
- d) Park location must be deemed appropriate by the Municipality for the population the park is intended to serve.
- e) To create an adequately sized parcel, land consolidation between development phases or multiple ownerships may be required. Where there are multiple phases of development, the upfront dedication of parkland for the entire development is encouraged. Under such situations, the phasing of the outfitting of the parkland will be detailed in agreements with the Municipality.
- f) Parks will have access to public roads. It is preferable for parks to have a minimum of 50% open frontage on abutting streets.
- g) All park designs shall include grading and drainage plans acceptable to the Municipality. Prior to acceptance of the parkland, the developer will complete pre-grading, drainage, fine grading, and seeding (4-inches of topsoil) to the satisfaction of the Municipality. Under no circumstances will topsoil will be removed from proposed parkland.
- h) Where an agreement has been implemented to front end the construction of a park, all costs associated with the design and the initial development of the parkland will be the sole responsibility of the developer.
- i) The developer will engage the professional services of a registered Landscape Architect or other qualified professional to prepare Detail Design/Technical Drawings to fully describe the construction of all park features.
- j) As part of the general subdivision development in areas with public services, the developer may be responsible for installing storm sewers serving the parkland in urban parks, as well as electrical and water services two (2) metres into the park property. In privately serviced areas, the developer must include an open ditch, culvert, and driveway in the road allowance; a well, constructed as applicable regulations; and hydro service 2metres into the park property. Sanitary serving may be required for higher-order community parks. Access for park maintenance should also be incorporated into the design.
- k) The developer will be responsible for identification and development of all pathway, trail, and/or sidewalk connections to parkland blocks. These connections shall not comprise part of parkland dedication.
- The developer will be required to post and maintain signage at all park locations, indicating that the site will be a future park along with agreed upon playground equipment or amenities, and when they will be installed.
- m) Any site work and designs will pay special attention to the care and preservation of natural wetland areas, where applicable.
- n) Stormwater management (SWM) facilities may be integrated into parkland and open spaces, where applicable, but not as part of the Planning Act parkland dedication.

- o) All parkland design and development will comply with the Design of Public Space Standards under the Accessibility for Ontarians with Disabilities Act, such as where walkways or trails are required through parklands.
- p) The developer will install permanent fencing around the park perimeter where property lines are shared with residential/commercial land uses or protected/hazard lands, to the specifications approved by the Municipality, where required.
- q) Parkland landscape plans shall comply with municipal tree planning standards, with an emphasis on native and non-invasive species. Opportunities for tree preservation shall be encouraged. A detailed Park Tree Preservation Plan may be required.
- r) Municipal property preserved as open space or intended for parkland development will not be used for the purposes of temporary stockpiling or storage of earth, construction supplies, debris, or any other materials without express permission of the Municipality.
- s) The timing of conveyance of parkland in accordance with the Planning Act, will be stipulated in the Subdivision Agreement. The Municipality will typically require conveyance be completed upon registration of the first phase of a subdivision.
- t) Park construction will include the installation of permanent signage, including park identification signs, regulatory signs, interpretive signs, and trails signage, as specified, and located by the Municipality.
- u) Parkland design should include comfort amenities such as pathways, seating, washrooms, and shade (e.g., trees and pavilions). Comfort amenities benefit everyone and can position the parks system to be used for outdoor special events and festivals. To further promote health, consideration shall be made for providing sufficient shade structures (e.g., trees, built structures), seating, bicycle parking, and a source of free, potable water in parkland design.

5.5.1 Responsibility to Outfit Parkland

Parks will generally be constructed by the Municipality upon 50% occupancy of a residential subdivision. The Municipality may consider a combination of parkland and cash-in-lieu of parkland to be able to finance the outfitting of the park. It is understood that developed parkland may be a selling feature for the development and that early outfitting of the park is desirable. In such situations the developer needs to negotiate with the Municipality of "front-ending" the development of the parkland, to be detailed in an agreement with the Municipality.

6.0 Sustainable Design Standards

Sustainable design is defined as the "design of communities, neighbourhoods, and buildings in ways which reduce their

environmental footprint, including reduced reliance on fossil fuels, and support human health and productivity. In comparison to conventional design, sustainable design takes advantage of natural processes to generate less waste, less pollution, and reduce their overall environmental footprint."

It is the intent of the Municipality to support development that is environmentally sustainable, energy efficient, and that conserves the natural features and characteristics of the land and rivers.

The following sustainability principles shall be considered by all development:

- 1. Promote sustainable development that maintains the integrity of natural areas and preserves groundwater quality and quantity.
- 2. Preserve and enhance the water quality, ecological integrity, and biodiversity in the Rideau River and its riparian area.
- 3. Permit the development of alternative energy sources where such installations will not detract from the quality of life within the area.

6.1 Protection of Natural Heritage Features

No development or site alteration shall be permitted within provincially significant or locally significant wetlands, significant woodlands, ANSIs or fish or wildlife habitat, with the exception of sustainable forestry, conservation, wildlife management, passive outdoor recreation, and educational activities, excluding buildings and structures.

The Municipality will encourage measures that protect and enhance the ecological function and integrity of the area's natural heritage in a sustainable manner, and shall manage development to avoid natural hazards and significant natural features. The Municipality shall encourage owners of identified natural heritage features to retain these lands in their natural state.

6.2 Sustainable Design Principles

Fundamental to sustainable design is the need to understand and respect natural processes and features in creation of the design concept.

The Municipality's Sustainable Design Principles include:

- i. Protect the Municipality's natural heritage system and take an ecosystem approach to design that supports natural functions, such as natural drainage, groundwater recharge and discharge, and wildlife habitat.
- ii. Protect, integrate, and enhance vegetation cover and significant woodlands, corridors, natural landscapes, and existing topography, where possible and appropriate.
- iii. Reduce resource consumption.
- iv. Reduce the release of contaminants into the environment.

v. Maximize energy-efficiency and promotion of sustainable design which will reduce the resource consumption, energy use, and carbon footprint of the built environment.

6.3 Sustainable Design Elements

For subdivision/condominium and site plan development proposals, the following Sustainable Design Elements should be considered in coordination with the Municipality's Engineering Standards:

- i. Orient roadways and development to maximize opportunities for passive solar gain and use energy efficient development forms and building measures.
- ii. Consider use of renewable energy and alternative energy systems.
- iii. Maximize opportunities for sustainable transportation modes (walking, cycling, transit facilities and connections), including accommodation of active transportation, including the provision of bike rack parking areas. For medium to high density residential development there will also be the requirement to provide for the indoor storage of bikes.
- iv. Minimize impervious surfaces by reducing driveway and surface parking areas and providing permeable or semi-permeable surface materials as alternatives to concrete or asphalt.
- v. Maximize reuse and recycling of resources and materials.
- vi. Incorporate sustainable design elements such as green roofs or walls, sun traps, and reflective or permeable surfaces.
- vii. Utilize green building technologies and rating systems such as Leadership in Energy and Environmental Design (LEED).
- viii. Utilize native species for all landscaping design.
- ix. Use of Low Impact Development (LID) standards where possible to manage snowmelt and rainwater on site through evaporation, infiltration, and water re-use.
- x. Preserve natural drainage flow and incorporate vegetated swales, where appropriate.
- xi. Promote efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality.

For all new commercial/industrial or multi-residential development proposals, there will be an expectations that the site plan incorporates Electric Vehicle (EV) charging stations, or as a minimum the planning for the eventual installation of EV charging stations.

6.3.1 Energy Conservation

Landscaping, layout of roads, and general site design can contribute to energy conservation. South-facing buildings and windows that are designed to reduce summer thermal gain can maximize solar energy potential. Landscaping can provide summer shade and protection from winter winds. When reviewing development applications, the Municipality will require new development to take advantage of energy conservation design techniques including consideration of the following:

- 1. When reviewing development applications, the Municipality will:
 - i. Encourage the design of local road layout to provide opportunities for passive solar gain such as south facing windows.
 - ii. Require, where feasible, buildings be oriented to maximize the potential from solar energy.
 - iii. Encourage consideration of alternative energy systems.

- 2. Landscape designs shall consider energy and water conservation through the following measures:
 - Provide for energy conservation through appropriate location and choice of species to provide shade and cooling during summer and provide for wind protection in winter.
 - ii. Utilize native species and species with low watering requirements wherever possible.
 - iii. Utilize permeable, light coloured or landscaped surfaces wherever practical to reduce heat retention and encourage natural infiltration of storm water.
 - iv. Design of the building and exterior lighting shall be dark skies friendly.
- 3. Design and orientation of subdivisions and developments should maximize the opportunity for use of alternative and renewable energy systems by:
 - i. Maximizing solar exposure through street and building orientation.
 - ii. Ensuring that opportunities presented by access to sunlight are not impaired on adjacent properties.

6.3.2 Green Infrastructure

Developers are encouraged to incorporate green infrastructure in their design.

The management and control of stormwater is a critical element of sustainable design. It is recognized that the utilization of "green engineering" techniques such as Low Impact Development (LID) where stormwater is allowed to infiltrate into the ground and not be piped to a stormwater management facility can be extremely effective management of stormwater under certain circumstances.

As extreme weather events become common place, the need for enhanced stormwater management becomes critical. As such, care and consideration must be given to locate and effectively manage snow storage to ensure there is no conflict with the SWM system and that freeze thaw occurrences can be effectively managed.

The use of pervious materials for parking lot design is encouraged to allow for more groundwater infiltration.

6.4 Telecommunication Infrastructure

Modern, efficient, and robust telecommunication infrastructure is becoming increasingly essential for a sustainable lifestyle. Ensuring future developments are equipped with robust telecommunication infrastructure will provide enhanced options to enable working from home and thereby reduce the need to commute to the workplace.

Innovative options such as FTTP (Fibre to the Premises) or FTTH (Fibre to the Home) should be explored to ensure telecom infrastructure is robust enough for future needs. This Guide supports the 50/10 Canadian Telecommunication Initiative.

All subdivision/condominium and site plan

development will need to demonstrate the provision of robust telecommunication capabilities. To this extent, new subdivisions/condominium developments will be encouraged to install advanced telecommunication backbone infrastructure within the development.

7.0 Street Right-of-way Standards

When planning for site plan development or a plan of subdivision/condominium the consideration of the street right-of-way and the resulting streetscape are critical elements of design. Whether the new development is an infill project within an established neighbourhood, or greenfield development abutting existing neighbourhoods, there is a need to ensure that the new development protects and enhances the character of the existing established neighbourhoods.

Ensuring consistent right-of-way widths for all new roads, both private and public, is the first order of protection of the character of existing neighbourhoods and the integration of new development into the community.

7.1 Roadway Design Elements

All roadways within North Grenville should be designed to accommodate the following design elements in coordination with the Municipality's Engineering Standards:

- Active transportation sidewalks, pathways, bike routes
- Emergency vehicle access
- Sanitary and stormwater controls and services
- Water services
- Curbs and gutters
- On-street parking
- Snow storage
- Lighting
- Utility corridors
- Traffic calming & signage
- Daylighting
- Landscaping, trees, boulevards

Right-of-way widths must be large enough to accommodate all the above street elements yet narrow enough for buildings and trees to frame the street.

7.2 Road Design Standards

The design of street elements, including road classification, geometric design elements, detailed design elements (i.e., curves, intersecting streets, curbs, daylighting, cul de sacs, turnarounds, utilities, and community mailboxes), traffic controls, pavement design, sidewalks, driveways, and street lighting shall be consistent with the direction provided in the Municipal Engineering Design Guidelines.

The Municipality shall have regard for, but not be limited to, the following road related considerations when reviewing new development proposals for plans of subdivision/condominium and site plan control applications:

- 1. Where new roads are required to serve a developing area, a logical hierarchy of roads shall be identified and designed with the capacity to accommodate anticipated traffic generated by the development.
- 2. The design of the road provides for the safe movement of vehicles and pedestrians.

- 3. The carrying capacity of the adjacent roads is sufficient to accommodate the anticipated traffic generated by the proposed development, as well as anticipated growth in levels of background traffic.
- 4. The carrying capacity of existing and proposed arterial and major collector roads shall be protected by:
 - i. the use of shared access, where appropriate, for new development;
 - ii. limiting the number of entrances/exits for non-residential developments located adjacent to these roads;
 - iii. discouraging the intersection of local streets and arterial/major collector roads through the land subdivision process; and
 - iv. the new roads shall provide access to lands designated for development which are currently underdeveloped or underutilized and are required to meet the future needs of the Municipality.
- 5. Within the road right of way, hydro lines and telecommunication utilities should be placed underground to avoid visual intrusion of the streetscape.

7.2.1 Collector Roads

The Municipality shall consider the following guidelines that take into account development applications which include collector roads as part of the development:

- 1. In areas of new development where heavy traffic volume is projected, residential lots shall be encouraged to back onto collector roads or be accessed by a lane parallel to and intersecting the collector roads.
- 2. Traffic controls shall give priority to travel on the collector over travel on local roads.
- 3. Street lighting shall be provided, and a sidewalk shall be located on at least one side of a collector road.

7.2.2 Development Adjacent to Highway 416

Where a draft plan of subdivision/condominium is proposed adjacent to Highway 416, approval from MTO will be required for the subdivision layout. Subdivisions should be designed such that the lots back onto the Provincial highway and front onto a local internal street.

Subdivision layouts where a local road runs parallel to a Provincial highway with no lots between the local road and Provincial highway will be discouraged, as this restricts the Province from effectively acquiring land for future highway purposes. Ideally, rear yards should back onto a Provincial highway.

7.3 Road Widening

For plans of subdivision/condominium or site plan control applications, the United Counties or the Municipality may require land to be conveyed for the purpose of widening the existing road right-of-way as a condition of approval. The required lands for road widening shall be in accordance with the functional classification of the road outlined in Section 13.2.7 of the Official Plan. Specifically:

- a) County Road 43 will maintain a minimum right-of-way of 30.5 metres; and,
- b) All other County roads will maintain a 26.2 metre right-of-way, wherever feasible.

Land for widening of the road right-of-way shall generally be sought equally from both sides of the right-of-way. In certain situations, exemptions or modifications to the requirements may be necessary to reflect site constraints, existing physical development or encroachments,

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placement of buildings, heritage structures, scale of proposed development, and pedestrian safety.

7.4 Active Transportation

Enhancing existing active transportation opportunities is a priority for the Municipality. Proposals for plans of subdivision/condominium or site plan control, shall be planned with an emphasis on street connectivity, active transportation connectivity and active transportation infrastructure.

Development will incorporate or facilitate the enhancement of the preferred cycling network as identified in the Municipality's Commuter Cycling Plan.

7.5 Complete Streets

The opportunity for complete streets shall be identified during the preconsultation stage of the application review.

The concept of complete streets involves the creation of streets that are designed and operated to prioritize safety, comfort, and access to destinations for all people who use the street, and to ensure streets are safe and accessible for all ages and users, especially pedestrians and cyclists.

The promotion of complete streets is an intentional move away from the auto-centric street systems that have been developed over the past 70 years.

The location, size, and nature of the development will determine whether sidewalks are needed on both sides or one side of the street and whether bike lanes are necessary.

Common themes in complete streets include:

- **Inclusion of multi modal transportation systems.** Complete streets generally include a variety transportation systems for pedestrians, cyclists, cars/trucks, public transit, subways, street cars, etc.
- **Emphasis on safety.** This can include features such as curbs, rest stops (seating), shade trees, lighting, "clearways", bright markings (bike lanes), etc.
- **Inclusion of active transportation.** The inclusion of these methods is generally expected when planning complete streets in order to make streets functional for all.
- "Greening" and stormwater management. These are important aspects to complete streets and are important for managing stormwater runoff, reducing the "urban heat island", and improves safety by buffering between modes of transportation, as well as removing storm water from impervious surfaces that can become dangerous when water pools.

7.5.1 Complete Street Design Principles

The design of complete streets shall include consideration of the following:

1 **Prioritize safe and accessible options for people** such that on any street, regardless of the priority mode, all users should feel safe. This reflects the reality that pedestrians and cyclists are more vulnerable than vehicular road users, and that supporting active modes of transportation often results in health benefits, to both individuals and the

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- community. Streets should be designed to be inclusive and accessible and the various needs of users of all ages and abilities should be accommodated to the maximum degree possible.
- 2 Ensure context sensitivity such that land use and the adjacent transportation infrastructure are integrated where appropriate and supportive of each other. The design recommendations for each street classification should recognize important neighbourhood characteristics (including established land uses and functions). This includes the consideration of the civic functions performed by different streets in the Municipality.
- 3 **Embed sustainability** into the design of streets through minimizing environmental impacts and emissions and supporting energy efficiency. This primarily includes prioritizing active modes of transportation such as walking and cycling. Ecological and urban resilience features such as trees, planters, vegetation, and low impact development elements that facilitate groundwater recharge should also be considered. Decisions should consider the lifespan of the street, and be cost-effective, avoiding undue short- or long-term financial burden on the Municipality for construction, operations, and maintenance.
- 4 **Prioritize connectivity** by designing complete streets and communities with block sizes, building orientations, neighbourhood configurations, and street patterns that maximize connectivity for pedestrians, cyclists, and transit users. This includes consideration of new connections and greenways that allow more residents to be within a ten-minute walk of major civic and community facilities.
- 5 **Emphasize vitality** such that new and renewed streets attract pedestrians with an enhanced sense of place, benefiting local commuters, businesses, and property owners. Whether out for a relaxing stroll, running errands, or meeting with friends, pedestrians bring economic and social activity to North Grenville's streets.

7.6 Private Roads

For the purpose of this Guide, a Private Road shall be defined as per Section 13.2.5 of the North Grenville Official Plan.

Private roads are intended to be designed to function as a local residential street and discourage the movement of through traffic. Private Road right-of-way widths shall be established in accordance with the Municipal Engineering Standards. Reductions to the minimum right-of-way width may be considered where it is demonstrated that the right-of-way width can safely accommodate all of the required servicing infrastructures for the proposed development and is compatible with the surrounding neighbourhood.

The following shall govern new private roads.

- 1. There is no legal obligation on the part of the Municipality to maintain or repair private roads or otherwise provide services to any development located on a private road, nor is there any responsibility acknowledged for the provision of school bussing.
- 2. New private roads shall be developed under agreement with the Municipality and will be required to meet a minimum standard of construction and maintenance to ensure that access can be gained for emergency vehicles in accordance with the Ontario Building Code.

- 3. The Municipality may, at its sole discretion, register notice on title or require that an owner enter into an agreement acknowledging that the Municipality will not be responsible for the repair or maintenance of private roads or the provision of services to any development located on a private road, and further that the Municipality may not be able to provide emergency services to development located on a private road due to the condition of the road.
- 4. The design and construction of a private road will be undertaken by a professional engineer or other persons competent in road construction, as approved by the Municipality.
- 5. In circumstances where a private road is not being maintained to an acceptable standard, the Municipality may make improvements to bring the road to an appropriate standard and assess any costs relating to the work to the relevant parties. This action shall not be interpreted as the Municipality assuming responsibility for the private road.

8.0 Agreements & Administrative Control

The Plan of Subdivision/Condominium and the site plan control approval processes authorize the execution of an agreement between the Municipality and the developer in order to implement various terms and conditions associated with the approval of the development proposal.

8.1 Standard Agreements

8.1.1 Standard Subdivision & Site Plan Agreements

The Municipality's standard subdivision/condominium and site plan agreements are comprised of two components. The first component is the "body" of the agreement which details general terms and conditions related to provision of services, financial requirements, notifications, consultation, engineering and maintenance requirements, and phasing of development. These are generally standard elements of the agreement which are consistent through the various development proposals and are not typically changed for individual development proposals.

The second component of the subdivision/condominium agreement is the "schedules" of the agreement which detail the specific, unique elements of the development proposal including: legal descriptions, details of scope of work and cost estimates, specific financial requirements, acknowledgement of studies undertaken, special terms and conditions related to development, including the

Agreements can address on-site development issues as well as off-site matters, such as the extension of services, off-site mitigation/ compensation, and external benefiting properties.

implementation of recommendations from various studies and reports. These are generally the elements which are unique to a given development proposal and are changed for each individual development proposal.

It is typical that the subdivision and site plan agreements will contain terms and conditions required by other public bodies that participated in the development review process. Where required, it is anticipated that the subdivision and site plan agreements will contain a Schedule detailing the terms and conditions required by external public bodies. In most cases, the external public bodies will be presented a draft of the agreement with their specific terms and conditions for review and approval, prior to the execution of the agreement.

It is always recommended that the developer ensure that any agreement to be executed with the Municipality is reviewed by their own independent legal counsel prior to signing the agreement.

In order for the execution of the agreement to be deemed finalized, all financial matters, such as the posting of securities, shall be completed to the satisfaction of the Municipality.

8.1.2 Other Standard Agreements

Certain subdivision/condominium or site plan proposals may also involve the need for execution of additional agreements above and beyond the standard subdivision or site plan agreements.

Development proposals involving the provision of communal services will require the developer to enter into Servicing Responsibility and Maintenance Agreements, governing the construction, operation, and financial arrangements associated with the provision of communal services.

There may be situations where agreements with external bodies are required. Agreements with MTO, Conservation Authorities, United Counties, and Parks Canada may be required depending on the specifics of the development proposal. It may be appropriate where the specific terms and conditions with the external bodies can be reflected in the subdivision or site plan agreement. There may be other situations where the external agreement is separate and distinct from the subdivision agreement. Where the agreements are separate and distinct, it is recommended that the subdivision or site plan agreements acknowledge the external agreements. Such agreements may be registered on the title of the subject property by the external body at the sole expense of the developer.

Where rights-of-way or easements have been identified through the subdivision/condominium or site plan approval processes (drainage, utilities, environmental, heritage, etc.), there may be a need for separate right-of-way or easement agreements.

8.2 Security Estimates

In most cases, plans of subdivision/condominium and site plans require the posting of securities to cover the cost of the works to be done. Typically, security estimates are based on detailed costing estimates for the site works prepared by the developer's engineer. Site works consist of all "non-building" activities, including but not limited to the street construction, provision of services, sidewalks, stormwater management, landscaping, signage, lighting, parking etc.

Through the approval process, the developer is required to provide a detailed list of site works, including their estimated costs. This list is typically prepared by a qualified individual (engineer) and is reviewed by the Municipality. All cost estimates provided to the Municipality must be acceptable to the Municipality.

8.2.1 Subdivision Security

For subdivision developments, securities will typically represent 100% of the cost estimates. This is based on the assumption that roads, parks, and stormwater pond (i.e., site works) for the subdivision will be transferred to the Municipality as "public" assets at the end of the development process. Where site works will be transferred to the Municipality, the required security shall represents 100% of the site work costs.

Securities posted with the Municipality shall be in a form acceptable to the Municipality. Generally, it is expected that securities will be in the form of a letter of credit (LOC) or cash security. LOC securities should use the Municipalities accepted form.

8.2.2 Condominium/Site Plan Security

For condominium and site plan proposals, securities will represent 25% of the cost estimates. This is based on the assumption that the site works will remain under private ownership and not transferred to the Municipality. Should there be a need for the construction of "public" assets through the condominium or site plan processes, the securities required for such elements will be 100% of the estimated cost of the works.

Securities posted with the Municipality shall be in a form acceptable to the Municipality. Generally, it is expected that securities will be in the form of a letter of credit (LOC) or cash security. LOC securities should use the Municipalities accepted form.

8.2.3 Phased Security

Where the development of a Subdivision/condominium or site plan is proposed to be phased, provisions can be made in the respected agreement for the phasing of securities. In such situations, the Municipality may require an update to the cost estimates for future phases of development so that the security estimates reflect the current pricing.

When phasing of the development results in a phasing of securities, the securities of each phase shall be treated as a separate and distinct arrangement. Securities from one phase of development should not be rolled into another phase of security.

8.3 Agreement Registration

In all situations, subdivision/condominium and site plan agreements entered into with the Municipality, shall be registered on the title of the subject property and binding on future successors of title.

The Developer shall be responsible for the registration of the agreement(s) on title at the Land Registry Office. All costs associated with the registration of agreements will be the responsibility of the developer.

8.4 Administrative Controls

There are a number of tools authorized under the Planning Act, 1990, that provides the Municipality and approval authorities with administrative controls to regulate the development of land in conjunction with the above noted agreements.

8.4.1 Use of Holding Provisions

In many situations, the Municipality may impose a "Holding (h)" provision to various zones. The Municipality may place certain lands within a holding category in the implementing Zoning Bylaw when the principle of development has been established, in order to:

- i. Prevent or limit the use of land in order to achieve orderly phased development.
- ii. Ensure that the private or municipal servicing and design criteria established by the Municipality have been met and any required special studies completed prior to removing the holding symbol.
- iii. Allow for the implementation of special design features in specific locations or developments.
- iv. Where development is to occur by registered plan of subdivision.
- v. Where a site plan agreement is a requirement of the development process.
- vi. Ensure that all conditions of development, including financial requirements and agreements in accordance with the provisions of this Plan and/or the Planning Act, have been complied with.

8.4.2 Effects of Holding Provisions

Lands which are subject to holding provisions will be identified in the Zoning By-law by the symbol 'h' in conjunction with the appropriate zone symbol denoting the eventual usage of the land, and will be subject to the following policies:

- i. Lands in a holding zone will generally be limited to existing uses or uses which will not preclude the future development of the lands, such as agricultural uses, forestry uses, conservation uses, and park and open space uses.
- ii. New development proposed on land zoned for holding purposes will not be permitted until the Municipality deems it appropriate to remove the holding symbol through an amending By-law in accordance with the conditions outlined below.

8.4.3 Removal of Holding Provisions

An application for removal of the holding symbol will be reviewed by the Municipality in consideration of the following criteria:

- i. The proposed use of lands is in conformity with the requirements of the Zoning By-law.
- ii. The required services are provided or can be provided.
- iii. Any required tests or reports are completed to the Municipality's satisfaction.
- iv. The financial requirements of the Municipality have been fulfilled.
- v. The phasing and design of the proposed development is approved by the Municipality.
- vi. Any agreements have been completed to the Municipality's satisfaction.

8.4.4 0.3 Metre Reserves & Temporary Turning Circles

The Municipality may implement the use of 0.3 m reserves as a tool to manage the phasing of subdivision/condominium development. Typically, 0.3 m reserves are placed across a road-rights-of-way at the end of a phase of development. Such 0.3 m reserves are deeded to the Municipality and are used as a "no-trespass" control which legally stops through traffic and effectively prohibits the next phase of development until the 0.3 m reserve is removed. Such reserves are reflected in a reference plan or the draft plan of subdivision as a block.

In addition to the use of the 0.3 m reserve, where the 0.3 m reserve is placed at the end of a road, there will also be a requirement for a temporary turning circle to be established, impacting the abutting lots. The temporary turning circle will be removed once the 0.3 m reserve is lifted and through traffic is permitted. The lands impacting the abutting lots will be transferred back to the impacted lots as part of the lifting of the 0.3 m reserve.

The removal of the 0.3 m reserve and temporary turning circles is an administrative exercise of Council when they are satisfied that a future phase of the development is in a position to proceed. Typically, this requires the execution of the subdivision/condominium agreement for the next phase of development and the depositing of securities for the next phase.

APPENDIX A

Studies, Scope and When Required

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
nvironmental Site	Potentially man-made	Development proposals	Qualified	Reviewed by		For sites identified as being	Should the site be required	Section 5.6 of the Official
Assessment (ESA) &	contaminated sites are sites	involving a change in land	Professional - as		submission for a plan of	contiminated and requiring		Plan outlines the policies
Records of Site	where the environmental	use from a commercial	outlined in			remediation prior to the	new sensitive land use,	related to man-made
Condition (RSC)		and/or industrial use to a		contamination is		introduction of the sensitive	there is a requirement for	contaiminated sites
		sensitive land use		identified, the Ministry	person confirming that a	land use, there is a	the proponent to apply to	
	may have potential for	(residential, institutional)		of Environment,	Phase 1 Environmental Site		MECP for a a "Record of	
		shall require and ESA be		Conservation and	Assessment (ESA) has	which certifies the site is	Site Condition" which	
		undertaken to identify		Parks (MECP) will	been completed in	suitable for the sensitive	demonstrates that the site is	
		potential man-made		receive the ESA.	accordance with Ontario	land use. Typically it is a	suitable for the new	
	order to minimize or prevent			Once remediation			sensitive land use. This	
	the potential for	Phase 1 ESA indicates that		has been completed	plan applications where a	the subdivision or site plan	external approval can take a	
		the property is may be		the proponent must		that the RSC be received.	significant amount of time to	
		contaminated, confirmation				Conditions related to the	receive and is required prior	
		that a Phase 2 ESA has		a "Record of Site	development review	RSC can be placed in the	to development proceeding.	
	property or to the natural	been completed in		Condition" which	process as potentially	subdivision or site plan		
		accordance with Ontario		demonstrates that the		agreement. Where an RSC		
	prior to permitting	Regulation 153/04, will be				has been made a condition		
	development, to identify	required. Should the site be		new sensitive land		of subdivision or site plan		
		required to be remediated		use.		approval, a building permit		
	they are suitable or have	prior to the new sensitive				may be issued in regard to a		
	been made suitable for the	land use, there is a				property on a phased basis		
	proposed use in accordance					to allow for site assessment		
	with provincial legislation	proponent to apply to MECP				and remediation/risk		
		for a a "Record of Site				management. Where		
		Condition (RSC)" which			extension may be applied to			
		demonstrates that the site is			the zoning requiring a	property extends onto a		
		suitable for the new				municipal right-of-way and		
		sensitive land use.				filing of a RSC in the		
					site plan. The site plan	Environmental Site Registry		

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	RREVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Geotechnical Investigation	such as Karst, unstable soils such as marine clay or organic soils .	associated with erosion, unstable soils or bedrock	Qualified Professional - typically an engineer	The Municipality and/or and/or the Conservation Authority	When triggered, Geotechnical investigations will be required for submission of the site plan or subdivision applications to be deemed complete	The results and recommendation of a Geotechnical Investization shall be implement through the subdivision or site plan agreements.	Geotechnical Investigations bypically require bore holes and require heavy equipment to a site. Geotechnical Investigations may also required under the Ontario Building Cede for determination of footings and foundations	erosion hazards, Section 5.4 deals with unstable bedrock, Section 5.5 outlines detailed policies on Geotechnical

STUDY TYPE DE	ESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Traffic Impact A Statement (TIS) is to the control of the control	Traffic Impact Statement to the determination of affici impact and mitigation easures to address impact proposed development. affic impact Statement is be prepared in coordance with the MTO semental Guidelines for the reparation of Traffic impact decisions of the proposed in purpose a traffic impact sessement is of the proposed of t	Traffic Impact Statements (TIS) shall be required for all development proposed within 800 m of MTO's 418 Corridor, all Commercial and Industrial subdivision or site plan proposals including lands designated Economic Enterprise and located along the Highway 43 and	Qualified Professional - typically a transportation engineer	In the case of development within 800 m of the MTO 416 Corridor, MTO	When triggered, TIS will be required for submissions of the site plan or subdivision applications to be deemed complete.	The results and recommendation of a Traffic Impact Statement shall be implement through the subdivision or site plan	Traffic impact statements are often required as supporting information for Official Plan or Zoning Bylaw amendments that introduce new development. In cases where the TIS is	The clearest direction in the Official Plan regarding TIS is found in Section 13.2.7.1 under the MTO transportation policy

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Noise Impact	Determination of	For any proposed	Qualified	In the case of	When triggered, a Noise	When triggered, the Noise	Noise Impact Assessments	Section 2.14 sets out
Assessment	compliance with NCP-300	residential development in	Professional -	development within	Impact Assessment will be	Impact Assessment	typically result in mitigation	general polies related to
	(MECP Environmental	close proximity to a major	typically an	close to railway	required to be submitted	recommendations will be	measures that involve site	noise. Section 13.5 sets out
	Noise Guideline - Stationary	source of noise, such as a	engineer	corridors, the railway	with the site plan or	implemented through the	works (i.e. berms, fensing,	the direction for Noise
	& Transportation Source)	Provincial highway, an		authority will be	subdivision application in	subdivision or site plan	vegetation) or certain	Assessment Studies.
	,	airport, a railway or		responsible to	order to be deemed	agreements to be registered	archetural details (window	Section 13.5.1 sets out
		aggregate operation; or			complete	on title of the property.	openings, central air,	specific noise policies
		where a development which		the Noise Impact	•	Carried States and Contract Property of States of	increased insulation/wall	related to railway lines.
		could be a major source of		Assessment, For			thinkness) and so it is	,
		noise proposes to locate in		development within			important that this work is	
		close proximity to existing		the close proximity to			completed early in the	
		residential development;		the MTO 416			development concpet	
		submit a noise feasibility		Corridor, MTO will be			process. Detailed noise	
		study, to determine whether		responsible to			studies may be required for	
		the proposal is feasible due		comment and review			any new sensitive land use,	
		to noise levels, for any		the Noise Impact			including residential uses,	
		sensitive use within: 100 m		Assessment. For			industrial uses, mineral	
		of a principle railway, 50 m		development within			aggregate operations, and	
		of a secondary railway, 100		close proximity to a			stationary noise sources	
		m of the Highway 416, and		County Road, the			proposed within 500 metres	
		any non-residential use with		United Counties of			of a principal railway main	
		potential for noise close to		Leeds and Grenville			line or the Highway 416 right	
		existing residential		Highway Department			of-way; 250 metres of a	
		development.		will be responsible for			secondary railway main	
				the review and			line;100 metres from all	
				comment on the			other railway lines or roads;	
				Noise Impact Study.			or,where a non-residential	
							development which could be	
Demoleles:	Distriction of foreigning	Annual sales describes at	01964	The Manufall of the	The residence	Overdelse Outland and	a major source of noise	0
Servicing Options/Feasibility	Determination of feasibility of sanitary, water and	Any application for a plan of subdivision/condominium or		The Municipality	The servicing option/feasibility	Servicing Options are typically refined to specific	Servicing Options/feasibility Assessment is typically a	general servicing policies.
Assessment	stormwater servicing	site plan application	civil engineer	(typically peer reviewer)	assessment is required with	engineering drawings for the		Section 12.19 of the OP
Assessment	constraints and preferred	site plan application	civil engineer	reviewer)	the submission of a plan of	subdivision or site plan.	document which is further	sets out specific servicing
	servicing options				subdivision or site plan		refined and detailed in	requirements.
	servicing options				application to be deemed	can be referenced in the	servicing civil drawings.	requirements.
					complete	subdivision or site plan	servicing over drawings.	
						agreement.		
						-9		

STUDY TYPE Servicing Design Plan		TRIGGER Typically identified as a condition of daft approval and submitted following daft approval and prior to final registration. A site plan application may skip the Servicing Option study and proceed straight to detail design as part of their application submission.		REVIEWER The Municipality (typically peer reviewer)	WHEN IN PROCESS Required as a condition of draft approval. The details maybe submitted with application for site plan and not as a condition.	IMPLEMENTATION Implemented through subdivision agreement and site plan agreement registered on title of the property	KEY POINTS TO KNOW The detailed design of the preferred servicing option.	OFFICIAL PLAN Section 2.5.4 sets out general servicing policies. Section 12.19 of the OP sets out specific servicing requirements.
Stormwater Management Plan (SWM)	Identification of the detailed plans for stormwater management	Typically identified as a condition of daft approval and submitted following draft approval and prior final registration. A site plan application may skip the Servicing Option study and proceed straight to detail design as part of their application submission.	Qualified Professional - civil engineer	The Municipality (typically peer reviewer)	Required as a condition of draft approval. The details maybe submitted with application for site plan and not as a condition.	Implemented through subdivision agreement and site plan agreement registered on title of the property	The detailed design of the preferred stormwater management solution. Plans typically include erosion and sediment control.	Section 13.6 of the OP addresses stormwater management.

STUDY TYPE Archeological Assessment	DESCRIPTION/SCOPE Determination of archeological features and mitigation plan in compliance with Standards and Guidelines for Consultant Archaeologists (MHSTCI 2011);	TRIGGER Any development proposal affecting areas containing a known archaeological site or considered to have archaeological potential. The enteria for determining pareas of archaeological potential is defined by the Ministry of Tourism, Culture and Sport, and may include. The presence of known archaeological sites within 300 metres of the property. The presence of a water source (primary, secondary, ancient) within 300 metres of the property. The presence of a known burial sile or cemetery adjacent to the property; Elevated topography; Pockets of sandy soil in a clay or rocky area; etc	The Municipality (typically peer reviewer), Indigenous Communities (AOO),	WHEN IN PROCESS When triggered, an Archeological Assess is required for submission of the site plan or subdivision applications to be deemed complete.	IMPLEMENTATION Implemented through subdivision agreement and site plan agreement registered on title of the property	KEY POINTS TO KNOW Phase 1 Archeological Assessment is typically a table top exercise. Phase 2 requires field work (May to Nov). Any required Phase 3 work requires a significant amount of time and field work. Reports must be filed with MHSTCI.	
Neighbourhood Character Statement	Determination of defining characteristics of neighbourhoods and compatibility with proposed development	Residential Intensification subdivision/condominium or site plan applications within the Residential, Hamlet or Downtown Commercial designation, or requesting Bonus Zoning pursuant to policy 14.2.	The Municipality	When triggered, a neighbourhood character statement is required for submission of the site plan or subdivision applications to be deemed complete.	Implemented through subdivision agreement and site plan agreement registered on title of the property	The exercise is to identify defining elements of the neighbourhood and to design an intensification proposal that is consistent with those defining elements.	Section 10.2.6.2 and 10.2.6.3 set out policies on residential intensification. Section 10.2.8.1 sets out detailed requirements for a Neighbourhood Character Statement

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Heritage Impact Assessment	Identification of heritage resources and mitigation of impact on heritage resources		Qualified Professional - Heritage Expert or Land Use Planner	The Municipality	When triggered, a Heritage Impact Assessment is required for submission of the site plan or subdivision applications to be deemed complete.	Implemented through subdivision agreement and site plan agreement registered on title of the property	A Heritage Impact Statement is required to demonstrate how the heritage values, attributes and integrity of the protected horitage property are to be conserved and how any impacts may be mitigated.	Section 2.7.5 contains general policies related to heritage impact assessments. Specific heritage policies found in Sections 12.7 and 13.2.4
Risk Management Plan	Identification of uses and mitigation of impact on Municipality's Wellhead Protection Areas.	All subdivision/condominium and site plan applications located within a Weilhead Protection Area with a vulnerability score of 10		Risk Management Official (who is the Rideau Valley Conservation Authority)	When triggered, a Risk Management Plan is required for a submission of a site plan or subdivision application to be deemed complete	Implemented through notice from Risk Management Officer. If required, the subdivision agreement and site plan agreement can contain clauses related to recommendations in the Risk Management Plan	Lands shown as WHPA-A, WHPA-B and WHPA-C on Schedules Af and B1 are areas where Planning Act and Building Code Act applications shall require a clearance notice from the Risk Management Official prior to approval.	Section 2.6.4.1, Source Water Protection policies in the OP relate to Risk Management Plans

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Land Use Compatibility Assessment	Determination of compatibility between land uses in accordance with MECP D-8 Series Guidelines Ministry of the Environment and Climate Change Guideline on Compatibility Between Industrial Facilities and Sensitive Land Uses Site Plan Control.	Plan of Subdivision or Site Plan applications involving new or expanded industrial uses in order to regulate the physical character of industrial development and to ensure compatibility with established land uses. Plans of Subdivision or Site Plans of Subdivision or Site Plans of Subdivision or Site Plans of Subdivision or Site Plans of Subdivision or Site Plans of Subdivision or Site Plans of Subdivision or Infili projects require a statement of compatibility, where it is clearly demonstrated that the proposed project is sensitive to, compatible with, and a good fit within, the existing surrounding neighbourhood based on, but not limited to, a review of both existing and proposed built form, massing, and architectural treatments.	Land Use Plan	The Municipality	When triggered, a Land Use Compatibility Assessment is required for a submission of a site plan or subdivision application to be deemed complete	Use Compatibility	distances, buffering using	Section 10.2.8.2 sets out compatibility policies for residential intensification projects. Section 12.13 contains the policies related to land use compatibility.
Urban Design Study	Determination of how a site should be developed and details the design principles for a site relate to matters of visual character, aesthetics and compatibility of land use		Applicant - typically with assistance of Land Use Plan	The Municipality	When triggered, an Urban Design Study is required for a submission of a site plan or subdivision application to be deemed complete.	Urban Design Study recommendition may be implemented through the site plan agreement or subdivision agreement. If mitigation measures relate to setbacks, height, mass, there may be a need to implement through the Zoning By-law.	create the development	Section 2.7.2 sets out urban design goals, Section 2.7.6 sets out urban design sets out urban design stragegies, Section 10.3.3 sets out Downtown urban design objectives. Section 10.10 sets out the urban design principles. Section 10.10.9 details urban design reports.

STUDY TYPE Planning Impact Analysis OR Planning Rational Report	To determine the appropriateness of a proposed change in land use, and to identify ways of reducing any adverse	All subdivision/condominium and site plan development proposals shall be required to prepare a Planning Impact Analysis or Planning Rational Report.	STUDY AUTHOR Qualified Professional - typically a Land Use Planner	The Municipality	WHEN IN PROCESS When triggered, a Planning Impact Analysis or Planning Rational Report is required for the submission of a subdivision/condominium or site plan applications to be deemed complete.	Recommendations of a Planning Impact Analysis or	All subdivision/condominium or site plan applications will require a PIA or PRR.	OFFICIAL PLAN Section 10.2.7 speaks to planning impact analysis for residential intensification proposals, Section 10.4.4 speaks to planning impact analysis for commercial development, Section 10.8.7 speaks to planning impact analysis for industrial development.
Hydrogeological & Terrain Analysis	groundwater for domestic water supply and the terrain for individual sewage disposal systems in accordance with MECP guidelines and the Ontain Drinking Water Objectives. Lot sizes for the dovelopment will be based on the approved studies.	services, all site plan applications for golf	Professional - typically a Hydrogeologist or engineer	typically involves peer review by outside subject matter expert.	When triggered a hydrogeological and terrain analysis is required for the submission of a plan of subdivision/condominium or site plan application to be deemed complete	analysis is implemented through the subdivision or site plan agreement registered on title of the	determines the suitability of the site for development on private services and should be conducted early in the	Section 4.8 related to golf course development, Section 9.2 related to rural residential subdivisions, Section 12.2 related to subdivision approvals.

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Aggregate Impact Asssessment	To determine whether development would preclude or hinder the astablishment of new operations or access to the resources	All subdivision/condominium and site plan applications within 150 metres for the boundary of an area licened for a pit above the water table, 300 metres for a pit below the water table and 500 metres for a quarry, within 500 metres (influence area) of the lands identified as "Bedrock Resource", within 500 metres of adjacent lands designated Mineral Aggregate on Schedule 'A' to the Official Plan.	Professional - typically a land use planner	The Municipality	When triggered an aggregate impact assessment is required for the submission of a plan of subdivision/condominium or site plan application to be deemed complete.	site plan agreement. There	Development which would preclude or hinder the establishment of new operations or access to the resources will only be permitted if: resource use would not be feasible, or the proposed land uses or development serves a greater long term public interest; and issues of public health, public safety and environmental impact are addressed.	Section 7.2 of OP deals with Mineral Aggregate and setback and study requirements.
Minimum Distance Separation (MDS)	To ensure appropriate separation from and compatibility with existing livestock operation	Rural Subdivisions and site plans shall comply with the minimum distance separation (MDS) formulae. MDS does not apply to development within designated settlement areas		The Municipality	When triggered a MDC calcuation is required for the submssion of a plan of subdivision/condominium or site plan application to be deemed complete.	through the subdivision agreement or site plan agreement (notices on title). There may be situations where the recommendation are better implemented	As per provincial policy, MDS calculations are not required for development within designated settlement areas. Specific regulations related to the implementation of the MDS Guidelines are identified in the Zoning By-law.	Section 4.2 relates to MDS and rural residential decelopment. Section 12.5.2.4 relates to farm related commercial and industrial development. Section 12.18 includes reference to MDS separation requirements.
Waste Disposal Impact Study	To assess the potential adverse impacts or risks to health and safety and to recommend necessary remedial measures	Subdivisions and site plan applications within 500 metres of the perimeter of an open or closed landfill site to consider factors such as ground and surface water contamination by leachate, adour, lister, dust, noise, visual impact, air emissions, vectors and vermin, and landfill generated gases, especially methane gas.		The Municipality	When triggered a Waste Disposal impact Study is required for the submission of a plan of subdivision/condominium or subdivision/condominium or site plan application to be deemed complete	through the subdivision		Section 4.6 of OP deals with Wast Disposal Sites

STUDY TYPE Floodplain	DESCRIPTION/SCOPE Determination of the	TRIGGER All subdivisions and site	STUDY AUTHOR	RREVIEWER The Municipality and	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW the intent of this Plan to take	OFFICIAL PLAN
-roodpain Assessment	Determination of the floodplain on a subject property	All suborisions and site plans which include lands identified as floodplain by the Conservation Authority where a flood line study has not been completed. The proponent may also challenge the CA's engineered floodplain mapping through their own floodplain assessment.	dualined Individual - typically and OLS	The winnicipality and the Conservation Authority		include recommendation to be implemented through the subdivision agreement or site plan agreement. It is typical for floodplains to be identified in the Zoning By- law land use schedules.	a restrictive approach to	Section 5.2 contains floodplain policies
Retail Market Study	Determination of impact that the commercial development may have on existing retail uses within the market area.	Any subdivision or site plan application that proposes to establish or expand a retail commercial development having a per unit gross leasable floor area in excess of 1,805 square metres may be required to include a retail market impact study		The Municipality	When triggered a Retail Market Study is required for the submission of a plan of subdivision/condominium or subdivision/condominium or site plan application to be deemed complete.	implemented through the	development having a per unit gross leasable floor area in excess of 1,850 square metres may be required to include a retail	Section 10.4.3 and 10.5.6 adderss the need and scope of a Retail Market Study
Affordable Housing Report	Determination of the affordability of the proposed development	Any subdivision/condominium preposing new residential development	Qualified Individual - typically a plannor	The Municipality		Affordable Housing Report recommendations may be implemented through the subdivision agroement.	The Municipality shall attempt to have 25% of all now residential construction affordable. In a given year the residential development may meet, exceed or fall short of the 25% target and therefore, to achieve a more realistic picture of the progress made in achieving this target, three year averages shall be used to meet affordable housing objectives.	Section 11.3.2 of the Official Plan sets out the policies for affordable housing.
STUDY TYPE Headwater Drainage Features Assessment;	DESCRIPTION/SCOPE Determiniation of impact on and mitigation measures to be implement to ensure protection of Headwater Drainage Features	TRIGGER Any subdivision or site plan application which has the potential to alter a Headwater Drainage Feature.	STUDY AUTHOR Qualified Individual	RREVIEWER The Municipality and the Conservation Authority	WHEN IN PROCESS When triggered a headwaters drainage features report is required for the submission of a plan of subdivision/condominium or ste plan application to be deemed complete		Headwater Drainage	OFFICIAL PLAN Section 6.2.7 establishes the HDF policies of the OP

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	REVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Municipal Financial Impact Assessment;	An assessment demonstrating the potential financial implications of the proposed development on the Municipality	Major site plan development proposals and plans of subdivision require a complete financial impact analysis	Qualified Individual	The Municipality	When triggered a Municipal Financial Impact Assessment will be required to be submitted with a subdivision or site plan application to be deemed complete	implemented throug the subdivision or site plan agreement.		

STUDY TYPE DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR	RREVIEWER	WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Photometric plan To demonstrate that the installation and maintaining of outdoor lighting fixtures will direct sufficient light downward and minimizes light trespass and blinding glare.	application are required to include a photometric plan	Qualified Individual	The Municipality	When triggered a Photometrick Plan will be required to be submitted with a subdivision/condominium or site plan application to be deemed complete	Recommendation of the Photometric Plan can be implemented through the site plan or subdivision agreement.	Light spillage from new development and redevelopment projects onte adjacent properties and reades shall be avoided. The target light levels at the development property's boundaries shall be 0.0 foot-candles. All exterior light futures shall be properly shielded to prevent glare and to direct light downwards and onto the development property. Light wattages may have to be reduced where reflective surfaces on the site may cause secondary (reflected) glare and light trespass.	

STUDY TYPE	DESCRIPTION/SCOPE	TRIGGER	STUDY AUTHOR		WHEN IN PROCESS	IMPLEMENTATION	KEY POINTS TO KNOW	OFFICIAL PLAN
Wildland Fire Assessment	To assess for the risk of high to extreme wildland fire behaviour on the subject lands and adjacent lands and to identify measures that outline how the risk will be mittigated.	subdivision/condominium	Qualified Individual place typically biologist and typically done as part of an EIS	The Municipality	When triggered a Wildland Fire Assessment will be required to be submitted with a subdivision/condominium or site plan application to be deemed complete	Recommendations of the Wildland Fire Assessment can be implement through the site plan or subdivision agreement.	Consideration of the wildland fire assessment and mitigation standards, as identified by the Ministry of Natural Resources and Forestry is required. Wildland fire mitigation measures shall not be permitted in lands designated as Provincially Significant Wetland. Wildland fire mitigation may include the following: Entering into a site plan agreement with the Municipality of North Cernville which utilizes the principles outlined in "The Home Owners Fire Smart Manual" prepared by The Province of Ontario which suggests mitigation methods. Undertaking a site review to assess the risk of high to extreme wildland fire behaviour on the subject lands and adjacent lands.	Section 5.7 sets out the Wildland Fire policies.

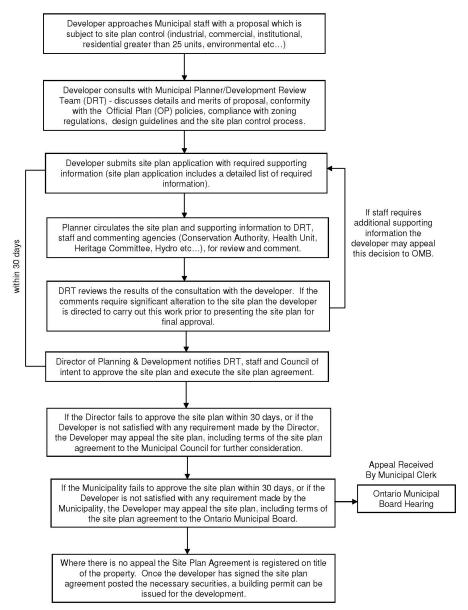
APPENDIX B North Grenville Site Plan Review Process

North Grenville

Development Review Process

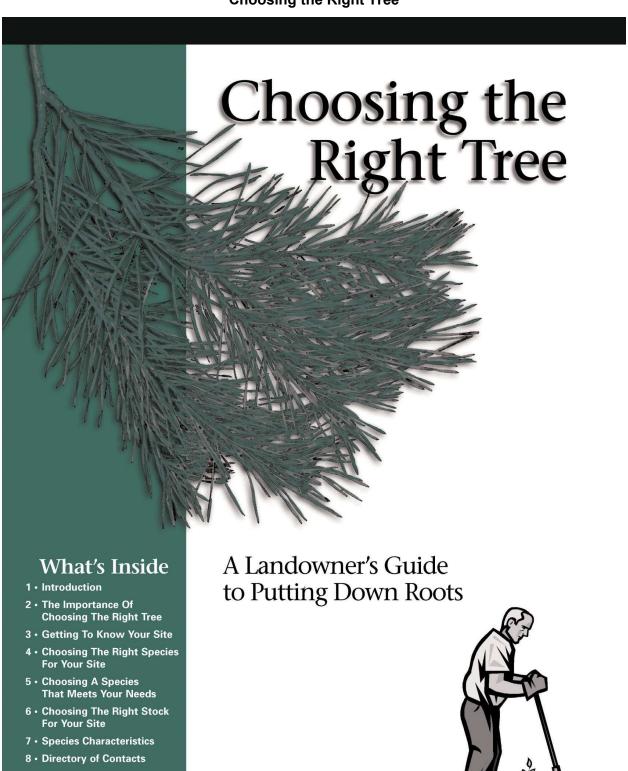
For Request For Approval of an **Application for Site Plan Control**

(Sec 41 of Planning Act, Amended 2006 by Bill 51)



24/09/2008

APPENDIX C
Choosing the Right Tree



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CHOOSING THE RIGHT TREE A Landowner's Guide to Putting Down Roots

Choosing The Right Tree is the result of a collaborative effort of the Ferguson Forest Centre (FFC), the Forest Gene Conservation Association (FGCA), and the Eastern Ontario Model Forest (EOMF) – who are working toward a better forest for tomorrow.







EOMF's vision of forests for seven generations is a mosaic of healthy forest ecosystems within a landscape of rural and urban areas throughout eastern Ontario, providing long-term economic, social, and spiritual benefits, while ensuring a healthy environment that is valued by all.

The publication of this booklet was made possible because of the financial contributions of the following supporters:

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CHOOSING THE RIGHT TREE A Landowner's Guide to Putting Down Roots

About This Guide

The information in this guide is for landowners, in Ontario's Great Lakes St. Lawrence Forest Region, who have made the decision to plant trees or shrubs, and want to know what species are best suited to their particular site and needs. This booklet will help you:

- Get to know your site
- Choose the right species for your site
- Choose a species that meets your needs
- Choose the right stock for your site

Introduction

Virtually everyone would agree: trees and forests provide our society with so many benefits that they have become fundamental to our quality life. In fact, even the idea of a treeless city or countryside is unimaginable to most people. Even so, we have tended to take the future of forests for granted – we have severely disturbed and continue to disturb what was once a natural forested landscape. We must take better care of the trees we have. And, just as important, we need to plan for the forests of the future.

Whether it's to attract wildlife, grow timber or improve the local environment, each spring private landowners plant thousands of tree seedlings across Ontario. Although there can be any number of reasons why these seedlings are planted, each and every landowner starts off with the same overall objective – to have as many of the trees as possible survive to grow another year.

Now more than ever, landowners are asked to demonstrate good stewardship and to do it with a fraction of the public support they were once accustomed to. In Ontario, the large-scale, heavily subsidized planting programs that resulted in thousands of hectares of land returned to forest are a thing of the past. Although some planting programs are available, most require a significant investment on behalf of the landowner. In many

cases landowners are choosing to purchase and plant trees on their own. Often they are unfamiliar with planting methods that will ensure good survival and, as a result, every summer many trees die unnecessarily. While it can be expected that some of the trees will die, it is important to minimize the chance of unnecessary and excessive mortality caused by either poor planting technique or improper species selection. One of the most important things a landowner can do is choose the right tree for the right site. Keep in mind that tree planting is expensive, and no tree planting operation is more expensive than a failed one. Choosing the right tree is the first step to ensuring that the landowner's efforts and money are not wasted.

Although you may never sit in its shade, plant a tree for those who will.

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The Importance of Choosing the Right Tree

Jane Landowner spent a lot of time and money planting 10,000 red pine seedlings on her 4 hectare field. Her decision to plant red pine was primarily based on the cost and availability of the seedlings – at the time about 32 cents per tree. Unfortunately for Jane, the site was poorly drained and most of the trees died during the following spring. If Jane had spent more time assessing the site, and her choice of species she would have known that red pine does not do well in wet soils. She should have purchased a more suitable species like eastern white cedar and, although she may have had to pay more per seedling, the survival rate would have been much higher. In this case, the only thing that wasn't poorly drained was Jane's bank account!

Even if you know very little about how our native trees and forests grow it is probably a good bet that you are aware that different species of trees are found on different sites. Like all other types of plants, trees have specific growing requirements. As a result, each site has its own capability, and in the same way, its own limitations for growing trees. In the example, it was unfortunate that Jane had to find out the hard way that the relationship of species and site is an important one.

In this case, a lot of money was wasted planting a species of tree that was unsuitable for the site available. Obviously, one of the most important first steps a landowner can make is to ensure that the right species is chosen for their site.

Choosing the right species for the site does not always guarantee success, but choosing the wrong species is sure to guarantee failure. So spend some time determining what your site characteristics are and if you are still unsure, consult a professional.

Getting to Know Your Site

When forest managers refer to site characteristics, they are talking about a broad range of physical and chemical properties. Once you know a site's characteristics, you can determine what species will grow well (and those that won't!). In most cases, there will be a few species that should do well on the site – think about the many different species you find in most natural forests. This gives you a chance to base your final species selection on additional considerations like long-term objectives, species availability and cost.

Although your site may have several unique characteristics that separate it from others, only two, soil type and drainage, influence how well one species will do compared to another.

Soil Type

Although you don't have to be a soil scientist to plant trees, knowing a little about soil is valuable. Trees depend on soil to anchor them in place, provide moisture and nutrients, and to act as a seedbed for future generations. All soils are made up of four main ingredients: mineral particles (the bulk of the material), air spaces between the particles, water in varying amounts, and some organic matter from plant and animal debris. Classifying soils is primarily a quantification of the different ingredients found within it.

Mineral particles range from boulders as large as basketballs, to tiny particles so small they can't be seen without a powerful microscope. Soil texture is the relative proportion of the individual particles. A handful of dirt rubbed between your fingers will have a certain amount of 'grittiness' to it. The more abrasive the soil feels the larger the individual particles; the smoother the soil feels the smaller the particles. This grittiness (or the lack of it) is a relative measure of three main soil particle sizes – sand, silt and clay.

Sand has the largest particles, which feel "gritty". Silt has medium-sized particles that feel soft, silky or "floury". Clay has the smallest particles and feels "sticky". The amount of sand versus silt versus clay within the soil directly affects a tree species' ability to grow on a site.

There are three broad texture classes: sandy soils, loamy soils and clay soils. The term loam refers to soils with more equal proportions of sand, silt and clay. Although there can be many combinations of classes such as sandy loam, loamy sand or even clay loam, it is only really necessary to determine which of the three general classes you have.

Table 1 lists some common properties to look for when assessing a soil texture class. Grab a handful of soil – does it feel gritty or smooth? Squeeze the soil in your hand. Does it form a cast (clump)? Lightly wet the soil and try it again. Try to make a soil ribbon (Fig.1) by lightly wetting the soil until it feels like moist putty. Then, try to squeeze it between your thumb and forefinger upwardly into a thin flat ribbon – if a ribbon forms the soil contains clay. The longer the ribbon, the more clay it contains.



Source: www.gsfc.nasa.gov/globe/stories/clays.htm

CHOOSING THE RIGHT TREE A Landowner's Guide to Putting Down Roots

Soil texture	Visual appearance	Reaction when squ	ueezed in the hand	Ability to form a ribbon	
class		DRY SOIL MOIST SOIL			
Sand soils	- Granular with easily detectable particles easily falls apart	- Will not form a cast or, cast easily	- Forms a cast that crumbles	- Cannot form a ribbon	
Loam soils	- Low to moderately granular - Can form clumps/ clods when dry	- Forms a cast that can be handled relatively easily	- Forms a cast that can be easily handled	- Pure loam cannot form a ribbon - Loam with more silt and clay will form a fragile ribbon	
Clay soils	- Fine texture with very few large particles - When dry, forms hard clumps	- Forms a cast that can be handled freely	- Forms a cast that can be worked and is cohesive	- Forms a long, flexible ribbon	

Adapted from the US Department of Labor Web site: www.osha-slc.gov/doc/outreachtraining/htmlfiles/soiltex.html

Drainage

Drainage is the second site characteristic that needs to be assessed before making a species selection. How well your site holds water can have a dramatic impact on the long-term survival of different species. Drainage is influenced by soil texture. The smaller the particle size, the more water the site holds – a clay soil can hold considerably more moisture than a sandy soil. Soil depth, recent precipitation, topography, depth to the water table, and the amount and type of vegetation also influence drainage in one way or another.

Soil drainage can be classified into four different categories:

Well Drained water drains from the site rapidly;
water seldom pools on the site
even during a heavy rain or after
snow melt:

Moderately Drained water may pool but only for brief periods;

Imperfectly Drained water pools on the site, sometimes for extended periods especially

during the spring or in wet years;

Poorly Drained water drains slowly from the site throughout the year; soil may appear wet below the surface.

Determining the drainage of your site is relatively easy and usually comes from observing what happens to the site in the spring and fall, as well as during and after a rainfall.

Site Variability

The area you intend to plant may not be uniform especially if there is variation in topography. You should assess the entire site looking for differences that might affect your choice of species. If your site differs in either soil texture or drainage you may need to choose different species for certain areas.

Mary Landowner planted 100 red oak trees along her sloping laneway. After five years most of the trees were still alive although Mary noticed that the oaks in the higher, well-drained, end of the laneway were thriving while those in the lower portion which flooded every spring were just barely hanging on. Mary should have chosen a more suitable species for a wetter area such as green ash or tamarack.

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Choosing the Right Species for Your Site

Now that you have determined both soil texture and drainage of your site, you can start to narrow down your species choice(s). Each species is adapted to a range of site conditions, which are categorized in Table 2.

More detail on the specific site requirements for the many different species is provided in the following pages. In addition, there are many other sources of information on individual tree species, their requirements, how they grow and how to look after them – consult one of the partners who helped produce this publication. Information on these agencies and others is listed at the back of this publication.

Soil Texture	Natural Drainage					
	WELL TO MODERATE	IMPERFECT TO POOR				
Sand	white pine, red pine, *European larch,*Norway spruce, red oak, white cedar, *hybrid poplar, *black locust	white pine, tamarack, black spruce, willow, green ash				
Loam	white pine, red pine, *European larch, *Norway spruce, white spruce, black spruce, white cedar, sugar maple, red maple, white ash, green ash, red oak, black cherry, beech, basswood, black walnut, bitternut hickory, *hybrid poplar, *black locust, butternut, bur oak	white cedar, tamarack, black spruce, silver maple, red maple, willow, green ash				
Clay	white pine, *European larch, *Norway spruce, white ash, green ash, white cedar, beech, *hybrid poplar, *black locust, black walnut, butternut, bur oak	tamarack, black spruce, silver maple, green ash, willow				

^{*} not native to Ontario



6 Choosing a Species That Meets Your Needs

Choosing the right species is not just a matter of determining which ones will survive on your site and which won't. You need to consider your own long-term objectives for the trees. Are you planting a windbreak along a field, or are you establishing a stand of trees for wood products? Do you want to attract birds to your garden, or do you want to rehabilitate your cottage shoreline? What you want to do on the

property affects how you will do it. The most appropriate choice of tree species is one that will thrive on your site once it is planted, and one that will also grow to meet your personal needs in the future. Table 3 lists some species that are suitable for some of the common tree planting objectives. Look for the species that are suited to your site and your objectives.

Susan Landowner would like to see a sugar maple forest returned to her old pasture. However, the current site is exposed and the loamy sand soils are somewhat compacted and undernourished after many years of grazing. She could plant thousands of sugar maple seedlings, but a local forest manager suggests that maple, which naturally regenerates in a shaded moist soil, will struggle and not do well for many years. He suggests planting white or red pine, which can handle the light drier soils and open conditions. As the pine grows it will shade the site. Sugar maple and white ash seed from Susan's neighbour's forest will seed in among the pine. Susan will also benefit from harvest and sale of the pine on her way to a naturally regenerated sugar maple forest.

Table 3: Commonly planted species by property objective	
Objective	Species (* = non-native species in Ontario)
Wildlife (cover or mast)	Fruiting shrubs, ironwood, red oak, bur oak, black cherry, cedar , hemlock, black walnut butternut
Timber	red pine, white pine, white spruce, white ash, red oak, hard maple, *Norway spruce
Christmas trees	white spruce, *Norway spruce, balsam fir, *fraser fir, *scotch pine, white pine
Windbreaks	*Norway spruce, white spruce, cedar, *hybrid poplar

In Table 3, the species in **bold** font are those that should do well on an average planting site – open and exposed old-field sites with varying amounts of competition from other plants such as grasses. The remaining species are those

which regenerate naturally beneath a forest canopy in cool, moist forest soils that have lots of organic matter. These species, although they can survive in the open, do better when planted under or among existing trees.

Bill Landowner wanted to create a windbreak along the field behind his barn. He assessed his site and knows its soils are shallow and dry. From Table 3, he sees that cedar as well as white and Norway spruce would eventually provide adequate protection from the prevailing winds. But he chooses to plant only cedar because his shallow, dry site is not recommended for spruce (Table 2).

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6 Choosing The Right Stock For Your Site

Seed Source

Now that you have chosen a species that is adapted to your site and that meets your needs, it is time to ensure that the trees you order from the nursery will be adapted to your climate. That is, make sure they were grown from seed that came from an area with a climate similar to the area where they will be planted.

Nurseries grow seedlings from seeds or from cuttings. Although most tree species grow across large geographic areas, over many generations local populations have evolved to be specially adapted to local climatic conditions and, as a result, seedlings need to be planted in the area from which their seed came. There are examples where trees have flourished once

moved to a different area – but these situations must be viewed as lucky experiments. In many cases moving trees from one climate to another is an experiment that does not work out so well – ecologically or economically!

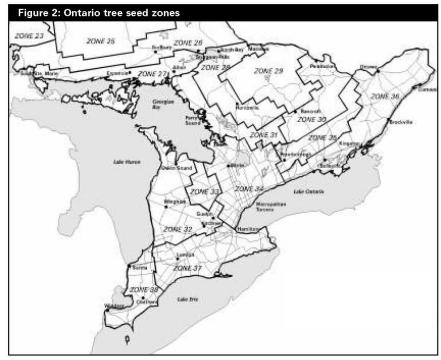
The map on the following page shows the different tree seed zones for Ontario. Trees grown from seed collected within one seed zone are genetically adapted to the climate of that zone and can be safely planted within the same zone. It is important to ensure that your stock came from the zone of your planting site. Ask about it when you order the stock. For more information on seed zones contact the Forest Gene Conservation Association (contact information appears at the back of this publication).

Tom Landowner lives outside Peterborough and his brother has a farm in the Niagara area. Tom wanted to reforest an area behind his house and tried to save some money by transplanting red oak seedlings from his brother's farm. Although the site was well suited to red oak, and the seedlings grew several feet each year, they were frequently killed back by the fall frosts and never grew that well. If Tom had known that seed source matters, he might have saved himself a lot of work.

Stock Type and Size

There are still some choices to make now that you've picked your species and seed source. The following tables describe bareroot stock that does well on open field planting sites. Small, container seedlings of many kinds are increasingly popular with nurseries, and larger trees are available as potted or balled and burlaped stock. Consider your site type and the resources you have for planting and tending before you choose. Ask your nursery or forest consultant for advice on what stock types will do well in your situation.

Tree Seed Zones of Southern Ontario



Source: OMNR 1996



Q

Species Characteristics

Native Evergreen Conifers

PINE

WHITE

Pinus strabus

(115 fact) 100* years

Bareroot Seedlings

3 years old 15-35 cm tal

Арреаталсе:

Ontaria's tallest tree and provincial tree

Clusters of 5 soft, long, bluish-green needles.
Smooth, young bank dank, ridged mature bank.
Best on well drained to moist, sand and loams. Tole rates shade when young. Site and soils: Rural plantings:

Reforestation, timber plantations. Plant at 6ft. spacing. Grows 2-2 feetly ear once established. Plant under canopy of taller trees to help avoid white pine weevill problems. Grows well with red pine, maple, ash and beech. Prune for landscaping purposes; sensitive to salt and air pollutants. Southern and central Ontario

Uπban settings; Native to:

RED PINE

9

Pinus resinasa

25 metres

Bareroot Seedlings

(80 feat) 100* years

Highest yielding conifer plantation species

Арреаталсе:

Clusters of 2 brittle, long, shiny dark green needles. Scaly, pinkish-gray bark, burrowed with age.

Good on infertile, well-drained, sandy, gravelly soits. Needs full sunlight.

Reforestation, timber plantations. Plant at 8 feet by 8 feet. Grows 2-3 feet/year
once established. Periodically thin to maintain health and growth. Grows Site and so its: Rural plantings:

well with white pine, aspen.

Reddish bark is striking with dark green to lage; doesn't thrive in inner city. Urban settings: Native to:

WHITE SPRUCE

Picea glavca

25 metres (80 feat)

100° years

Bareroot Seedlings

23 years old 12-35 cm tal

Арреаталсе: Short, whitish or bluish-green needles; wide form.

Best on well-drained, moist sifty soils. Tolerates poorly drained and heavy soils. Site and so its: Avoid dry sites. Tolerates shading. Slow initial growth, then 1-2 feet/year or

good sites once established. Reforestation, timber plantations, Christmas trees. Plant at 8 feet by 8 feet, but thin periodically to maintain health and growth. Grows well with many species. Rural plantings:

Orban settings: Native to: Wind breaks, landscaping Central and northern Ontario

RED SPRUCE

Picea rubens

25 matres (30 feat) 100° years

Bareroot

Seedlings

3 years old 15-35 cmt a

3 years old 15-35 cm tal

Арреаталсе: Yellow to dark green needles, often pressed close to yellow-orange twig.

Broad, open form.

Site and soils: Well-drained, moist, silty soils: cool moist sites. Very tolerant of shade. Best

planted under taller trees or in small openings. Reforestation, wildlife cover. Grows well with white pine, balsam fir, yellow Rural plantings:

birch, sugar maple.

Orban settings: Native to: Uncommon Central Ontario (but uncommon)

WHITE CEDAR Thuja accidentalis

Арреаталсе: 15 metres (50 feat)

Yellow to green scale-like leaves, turning bronzy green in winter Broad, dense, columnar form: thin red-brown young bark: gray-brown mature

80+ years Site and soils: Bareroot Rural plantings: Transplant Seedlings

Does well on many sites; dry, wet or shallow soils. Tolerant of shade. Reforestation, site restoration, wild life plantings for browse and cover. Slow growing. Grows well with white pine, balsam tir, yellow birch, sugar maple. Common as hedges, wind breaks. Easily pruned.

Native to:

.IACK PINE

Pinus banksiana

24 years old

20 metres (65 feat) 80+ years Bareroot Seedlings 2 years old 15-35 cm tall Appearance:

Urban settings:

Clusters of 2 short, yellow-green needles. Thin, reddish-gray young bark: dark brown fally and ridged mature bark.

Does well on many sites. Will tolerate sandy, gravelly sites. Needs full sunlight

Restoration of droughty sites, timber plantations on better sites. Grows in pure stands or with birch, aspen, red pine.
Unknown Rural plantings:

Urban settings: Native to:

Northern and central Ontario

Native Evergreen Conifers (Continued)

EASTERN HEMLOCK

30 metres (100 feet) 100+ years

Tsuga canadensis

Appearance: Site and soils:

Flat, blunt, finely toothed needles with shiny green top and whitened underside. Flat, built, improvided energies with shiply great by and whitehed indested Slender twigs, angled lead shoot; reddish-purple layers in outer bark. Various soils but best on a cool, moist, well drained site. Very shade tolerant.

Found on drier but cool sites (northern slopes) in warmer southern part of

Rural plantings: Found in pure stands or mixed with yellow birch, white spruce, white pine, sugar maple and beech. A late successional species - shade tolerance makes it

best suited to under planting or stand conversion, and not most afforestation situations. Deer browsing damage is usually very high.

Uncommon - not tolerant or urban situations which often include exposed sites, air pollution, heat extremes and compacted soils.

Central and southern Ontario

Urban settings:

Native to:

PITCH PINE



Pinus rigida

20 metres (65 feet) 100 years

Appearance:

Bareroot Seedlings 2 years old 12-20 cm tall

Only native conifer able to sprout from damaged/cut stumps

Clusters of 3 brittle, long, yellow-green needles. Scaly, pinkish-gray bark, Tolerates extreme sites - wet or shallow, dry soils. Needs full sunlight.

Restoration of droughty sites. Grows in pure stands or mixed with species Site and soils: Rural plantings:

such as white oak, gray birch. Drought and salt resistant, interesting form.

Urban settings: Native to: Small area along St. Lawrence River - east of Kingston, Ontario.

BALSAM FIR



Abies balsamea 20 metres

60 years Bareroot Transplant Seedlings 4 years old 15-35 cm tall

Appearance

(65 feet) Site and soils: Rural plantings:

Only native fir in eastern Canada

Short, dark green needles, arranged along twig for flat branch effect. Very regular conical form, with spire-like tip. Gray, smooth, young bark with resin blisters; brownish, scaly older bark.

Adapted to a variety of soils. Very tolerant of shade.

Reforestation, Christmas trees. Grows well in pure stands or with birch, aspen, white spruce or hemlock.

Urban settings: Native to: Windbreaks, landscaping. Central and northern Ontario

Native Deciduous Conifers

TAMARACK Larix laricina



25 metres 80 years Bareroot

Seedlings 1-2 years old 15-35 cm tall

Loses needles in autumn

Tufts of many soft, short, bluish-green needles; yellow and fall off in autumn. Thin, smooth, gray young bark; reddish-brown, scaly, mature bark Grows best on moist, sandy soils. Tolerates wet, poorly drained sites. Needs full sunlight.

Northern and central Ontario

Reforestation. Fast initial growth on good sites. Grows well in pure stands or with birch, aspen, spruce. Sensitive to chemical weed control. Uncommon, but has brilliant yellow autumn colour, light green spring colour.

Exotic Evergreen Conifers

NORWAY SPRUCE

Picea abies



30 metres (100 feet) 100+ years

Bareroot Seedlings 2-3 years old 12-35 cm tall Appearance:

Urban settings: Native to:

Appearance:

Site and soils:

Rural plantings:

Urban settings:

Native to:

Short, dark green needles. Thin, reddish-brown young bark; dark purplish-brown, scaly, mature bark.

Site and soils: Best on well-drained to moist, sand and loams (similar to white pine). Avoid wet or dry sites. Tolerates some shade. Rural plantings:

Timber plantations. Plant at 8 feet by 8 feet. Grows 2-3 feet/year on good sites. Windbreak species, distinctive drooping branches, drought susceptible. Europe and Asia; adapted to southern and central Ontario

SCOTS PINE



25 metres (80 feet)

Bareroot Seedlings

Pinus sylvestris

Site and soils: 80 years Rural plantings:

Urban settings: Native to:

Appearance:

Can be invasive and displace native species in natural areas

Clusters of 2 short, bluish- to grayish-green needles. Thin, orange, papery

young bark; gray-brown, scaly plates on mature bark.
Sandy, gravelly sites; other poor quality sites. Needs full sunlight.
Common Christmas tree, otherwise not recommended. Fast growth.
Subject to insect and disease damage, especially in a pure stand.
Common; distinctive orange, papery inner mature bark.

Europe and Asia

Exotic Evergreen Conifers (Continued)

AUSTRIAN PINE

11

Pinus nigra

20 metres

(65 feat) 80* years

Bareroot

Seedlings 2 years old 10° cmtall



Арреаталсе: Clusters of 2 long, dark green needles; broad form. Yellow-brown, flaky young

bank; dank gray-brown, furrowed mature bank.

Site and so its: Tolerates a wide variety of soils.

Not recommended. Rural plantings:

Urban settings: Very common ornamental; drought and salt resistant; interesting form.

Native to: Southern Europe

MUGHO

PINE

Pinus muqa

Lowstrubto small tree Medium-lived Арреаталсе:

Long, darkgreen needles; upsweeping branches, low spreading form.

Dankgray, scaly bank Adapted to a variety of soils; used for erosion control.

Site and so ils: Rural plantings: Urban settings: Seedlings

Not recommended. Very common ornamental (requires pruning to keep good form); salt tolerant;

common along roadways

Mountains of southern Europe

2 years old Native to:

Exotic Deciduous Conifers

EUROPEAN Larix decidua LARCH

Loses needles in autumn



25 metres (80 feat) 80 years Barer oct

Seedlings 2 years old

Арреаталье: Rural plantings:

Tufts of many soft, short, bright green needles. Yellow and fall off in autumn. Grows best on moist, sandy soils. Needs full sunlight. Plantations for wood products at 8 feet by 8 feet spacing. Fast initial growth on good sites. Sensitive to chemical weed control.

Urban settings: Ornamental, brilliant autumn colour; pretty, bright green spring colour. Native to: Europe

JAPANESE LARCH

15+ cmtall Larix kaemoferi 25 metres

(80 feat) 80 years

Barer oct Seedlings 2 years old

15+ cmtdl

Арреаталсе:

Lases needles in autumn: limited frast hardiness

Tufts of soft, short, grayish or bluish-green needles. Orange-brown twigs;

Site and so its: Rural plantings:

lufts or sort, short, grayish or pruising reen necesses. Orange brown brigg, need les turn yellow and fall off in autumn.

Grows best on moist, sandy soils. Needs full sunlight.

Plantations for wood products at 9 feet by 9 feet spacing. Fast initial growth on good sites. Sensitive to chemical weed control.

Ornamental, brilliant autumn colour; pretty, bright green spring colour.

Urban settings:

Mountains of Japan

Native Broadleaf Trees

SUGAR MAPLE

Acer saccharum

Canada's National tree



30 metres (100 fact) 100* years

Bareroot Seedlings 2 years old 15° cmtall

Арреаталке: Site and so its:

Rural plantings: Urban settings:

Deep yellow-green loted leaves, broad-spreading open grown form.

Native to:

Smooth, young bark; dark, irregularly-ridged mature bark.

Best on deep, fertile, well-directed to moist loams. Tolerates shade when young. Responds well to thinning.

Reforestation, maple sugar orchards. Grows well with white pine, hemicek and other broadleaf trees.

Sensitive to salt and air pollutants; hot, dry conditions and compacted soils. Brilliant autumn colour Central and southern Ontario

BLACK MAPLE Acer migram

as for Sugar Maple

Note: Closely related to sugar maple; known for its higher sugar content. Leaves have a droopy appearance and a fuzzy underside.

SILVER MAPLE

Acer saccharinum



80 years Bareroot Seedlings 1.7 years old

25 metres (80 feat)

Rural plantings: Urban settings:

Арреата псе: Site and so its:

Light green (lighter below), deeply out leaves; spreading, open grown form. Smooth, young bark; gray-brown, shaggy, mature bark. Best on deep, fertile, moist loams (withstands seasonally wet soils). Needs full

sunlight

Reforestation, plantations for pulp and timber. Grows fast. Aggressive roots and brittle branches make it unsuitable to inner city areas.

Pale vellow autumn colour. Central and southern Ontario

Native Broadleaf Trees (Continued)

MAPLE

RED

Acer rubrum

25 metres (80 feat) 80 years Bareroot Seedlings 2 years old 15° cmtall

Арреаталсе: Site and so its:

Light green (lighter below), loted, toothed leaves; wide open grown form. Smooth, young bank: gray-brown, scaly, ridged, mature bank."

Adapted to a variety of soils - wet and dry, Best on moist sites. Tolerates some

shade when young. Reforestation, plantations for pulp and timber. Rural plantings: Umban settings: Common ornamental, brilliant autumn colour - deep red.

Native to: Central and southern Ontario

RED

OAK

Quercus rubra

Арреаталсе: Dull green bristle-tipped leaves. Smooth, lined young bank grooved and ridged, dark, mature bark.

25 metres (80 feet) 100° years Best on deep, well-drained sandy loam. Tolerates drier conditions. Avoid heavy, wet soils. Tolerates some shade when young. Responds well to thinning. Reforestation, timber plantations, wildlife food source. Grows well with pines Site and so its: Rural plantings: Bareroot

and other broadleaf trees.

Urban settings: Large, attractive ornamental. Tolerates urban conditions.

Native to: Southern and central Ontario

WHITE OAK

Averous alba

30 matres (100 feat) 100* years

Bareroot

Seedlings

2 years old 15* cmtall

Seedlings

1-2 years old 12-20 cm tal

Арреаталсе: Site and soils:

Bright green, round, lobed leaves. Pale gray, scaly young bark; similar mature bankwith a reddish cast.
Best on deep, well-drained loams. Avoid dry or poorly drained conditions.

Tolerates some shade when young. Rural plantings: Reforestation, timber plantations, wildlife food source. Grows well with pines,

hem lock and other broadleaf trees. Urban settings: Native to: Large, attractive ornamental. Southern and eastern Ontario

BUR **Averaus** macrocarpa OAK

Арреаталсе:

Shiny, green, round lobed leaves; corky twigs and branches. Rough, furrowed young bark: deeply furrowed mature bark.
Adapted to a range of soils - dry to moist, sand or clay. Tolerates some shade. Site and soits: Rural plantings: Reforestation, timber plantations, wildlife food source. Grows well with pines, hem lock and other broadleaf trees. Tolerant of urban conditions. Large, attractive ornamental.

Urban settings: Native to: Southern and eastern Ontario

WHITE

ASH

Seedling 2 years old 15+ cmtal

2 years old

15+ cmtall

25 metres (80 feat)

200+ years

Barer oct

Fraximus americana

Appearance:

Dank green compound leaves with 5-9 leaflets. Light gray young bank: finely

furrowed mature bank

30 metres Site and so its: (100 fact) 100 years

Deep, well-drained upland soils. Avoid dry, infertile sites. Tolerates some shade.

Reforestation, mixed species timber plantations. Grows well with white pine,

Rural plantings: Represent. balsam fir, yellow birch, sugar maple Seedlings Urban settings:

Common urban tree, columnar form, yellow-purple autumn colour.

Southern and central Ontario Native to:

Fraximus pensylvanica

Арреаталсе:

Yellow-green compound leaves with 5-9 leaflets. Light gray young bank linely

furrowed mature bank

20 metres Site and so its: (65 feat) 60 years

Adapted to a wide range of soits. Can tolerate some flooding. Tolerates some shade when young.

Rural plantings: Urban settings: Native to:

Reforestation, Grows well with silver maple, cottonwood and willow. Common urban tree, columnar form, Yellow autumn colour.

Southern and central Ontario

Barer oct 1-2 years old 12-20 cmt =

Native Broadleaf Trees (Continued)

BLACK ASH

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Fraximus migra

20 metres (65 feat) 100 years Barer oot Seedlings 2 years old 15+ cmtal

Dankgreen compound leaves with 7-11 leaflets. Light gray, soft, conky young Арреаталсе: bark: scaly mature bark. Site and soils:

Adapted to imperfectly drained soits. Can tolerate some flooding. Needs full Reforestation. Grows well with cedar, balsam fir, silver and red maple. Common urban tree, columnar form. Rural plantings: Urban settings:

Native to: Ontario

HACKBERRY Celtic accidentalis



15 metres (SO feat) 100 years Bareroot Seedlings 2 years old

Арреаталсе:

Site and so its: Rural plantings: Simple, bluish-green leaves with elongated tip. Gray to light yellow-brown bark with warty, irregular ridges.
Adapted to a range of soils - moist or dry. Tolerates some shade.

Reforestation, wildlife food source. Grows well with cedar, balsamitir, silver and red maple.

Urban settings: Native to: Small, elm-like tree. Tolerant of urban conditions. Southern and eastern Ontario

WHITE ELM

Ulmus americana

10.30 matras (30-100 feat) 30-100 years Represent

Seedlings 1 year old 15+ cmtall

Арреаталсе: Simple toothed, dark green leaves; arching umbrella crown. Gray-brown

Simple bottom, cark green leaves, aloning unrolled clowin, class-blowing furrowed bank; ash-gray with age.

Adapted to a range of sites. Tolerates most sites. Moderately shade-tolerant. Windbreaks, restoration. Can be short-lived due to Dutch elm disease. Site and so its: Rural plantings: Umban settings: Tolerant of urban conditions.

Ontario Native to:

BLACK WALNUT



Jugians nigra

Арреаталсе: 30 metres Site and so its: (100 fact) 100+ years Rural plantings: Barer oct

Seedlings 1 year old Urban settings: Native to: 15+ contall

Edible muts

Yellow-green compound leaves with 14-22 leaflets. Light brown, scaly young bark; dark, broad ridges on mature bark. Best on deep, well-drained, fertile sites. Avoid dry sites. Needs full sunlight. Reforestation, timber plantations, wildlife food source. Grows fast on good sites. Grows well with other broadleaf trees. Produces jugione, which can be

toxic to some tree species (pines).
Large, attractive ornamental: for larger green spaces. Southwestern Ontario: becoming naturalized in eastern Ontario

BUTTERNUT Jugians cinerea



25 metres (30 feat) 30 years Bareroot Seedlings 1 year old 15+ cmtall

Edible muts; susceptible to butternut canker

Yellow-green compound leaves with 11-17 leaflets. Pale gray, smooth young bark: pale gray, widely ridged mature bark.
Best on well-drained fertile loams. Avoid drier and poorly-drained conditions.

Site and so its: Needs full sunlight. Rural plantings: Reforestation, timber plantations, wild life food source. Grows well with other

broadleaf trees. Large, attractive ornamental. Southern and eastern Ontario Orban settings: Native to:

BLACK CHERRY





20+ matres (65 feat) 80 years Represent Seedlings 2 years old 15+ cmtall

Appearance:

marks: dark, rough, scaly mature bark. Adapted to a wide range of soils. Needs full sunlight. Site and so its: Rural plantings: broadlear trees. Urban settings:

Арреаталсе: Simple, bright, shiny green leaves. Smooth, dark young bark with dash-like

Reforestation, timber plantations, wild life food source. Grows well with other

Attractive: while spring flowers and dark, scaly bark. Southern and eastern Ontario Native to:

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Native Broadleaf Trees (Continued)

WHITE BIRCH

Betula papyrifera

俪

(80 feat) 80 years Bareroot Seedlings Seedlings old

Site and soils: Rural plantings: Urban settings:

Simple, dull green, toothed leaves. Thin, smooth, dark red young bark: while, Арреаталсе: papery mature bank. Adapted to a wide range of sites. Needs full sunlight.

Reforestation. Grows well with pines, spruce, poplar, balsam fir, yellow birch

and sugar maple. Common urban tree Native to: Ontario

OHO BUCKEYE

Aesculus glabra

2 years old 15° cmtall

(SO feet) 80 years

Exercet. Seedlings 1 year old 12-20 cmtal Appearance:

Site and soits: Rural plantings: Urban settings: Native to:

Yellow-green, palmately compound leaves with 5-7 leaflets. Light gray young bark: Rough, dark brown, furrowed and scaly mature bark. Adapted to a wide range of sites. Can tolerate some flooding.

Not recommended outside its native range.

Showy, late spring flowers.
Southwestern Ontario. Has demonstrated some cold hardiness for a reas.

beyond its natural range, such as eastern Ontario.

HONEY LOCUST

Gleditsia triacanthos



20 metres (65 feat) 90 years Experiod Seedlings

Арреаталсе: Site and soils:

Rural plantings: Urban settings: Native to: Bright green compound leaves with 14-30 leaflets; spiny twigs. Smooth, brown, spiny young bark: Scaly-ridged mature bark. Adapted to moist, rich, bottomland soils. Needs full sunlight.

Not recommended. Common ornamental. Casts a light shade. Tolerant of urban conditions.

Extreme southwestern end of Ontario

Exotic Broadleaf Trees

BLACK LOCUST

Robinia pseudoacacia

Spreads readily by seed and rootsprouts; invasive in open sites



25 metres (80 feat) 90 years Bareroot 1 year old

Site and soils: Rural plantings: Urban settings: Native to:

Dull green compound leaves with 7-19 leaflets; spiny twigs. Smooth, brown, Арреаталсе: spiny young bark thick, brown, furrowed mature bark. Adapted to a wide range of soils. Best in moist soils. Needs full sunlight. Site restoration (mine spoils, gravel pits). Good species for honey production. Showy, late spring flowers.

Eastern USA, naturalized in southern and eastern Ontario

HORSE CHESTNUT

Aesculus hippocastanum



25 metres (80 feat) 100 years Bareroot Seedlings 1 year old 12-20 cm tal

Арреаталсе: Site and soits: Rural plantings: Umban settings: Native to:

Yellow-green, palmately compound leaves with 5-9 leaflets; green, spiked husk on nuts. Smooth, dark gray young bark: Fissured, scaly mature bark. Best on well-drained deep soils. Not recommended. Can be invasive in forest conditions. Showy, white flowers. Tolerates urban conditions.

Southeastern Europe

HYBRID **POPLAR**

Papulus hybrids



(80 feat) 40 years Bareroot Seedlings

Appearance: Site and soils:

Rural plantings: Umban settings: Native to: 1 year old

Simple, dark green leaves. Smooth, green young bank: light yellow-gray, rough,

Best on moist to well-drained loams. Plantations for pulp. Grows very fast, but is short-lived.

Ontario and Europe (hybrids of poplars from both areas)

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Native Small Trees and Shrubs

JUNEBERRY Amelanatrier species

Edible fruit



5-10 matres (15-30 feet) Bareroot Seedlings 2 years old 15° cmtall

Арреаталсе: Site and soils:

Rural plantings: Urban settings: Native to:

lines: rough, soaly mature bank. Adapted to a wide variety of sites. Best in moist to dry sites. Tolerates some shade. Best in full sunlight.

Reforestation, wildlife food source. Showy, white flowers; small, shrubby or tree form. Ontario

RED Sambucus pubers ELDERBERRY

欁

Bareroot Seedlings 2 years old 15+ cmtall Арреаталсе:

Site and so its: Rural plantings: Urban settings: Native to: Large shrub or shrubby tree; compound leaves with 5-7 leaflets; plump, red buds. Warty, gray-brown mature bank. Adapted to a wide range of soits. Best in moist soits. Best in full sunlight. Reforestation, wild life food source.

Large shrub or shrubby tree; compound leaves with 5-11 leaflets.

Small tree: simple green leaves. Smooth, gray young bank manked by vertical

White late spring flowers. Tolerant of air pollution.

BLACK **ELDERBERRY**

Sambucus canadensis

Edible autumn fruit

Appearance:

3 metres (10 feet) Site and so its: Rural plantings: Bareroot Seedlings 2 years old 15* cmtall Urban settings: Native to: Warty, gray-brown mature bark.

Adapted to low ground sites. Tolerates some shade. Best in full sunlight. Reforestation, wildlife food source.

Fragrant: white early summer flowers: small shrubby tree form.

PIN CHERRY



爾

10 metres (30 feat) 40 years Bareroot Seedlings 2 years old 15° cmtall

Prunus pensylvanica

Small tree: simple leaf with a tapered tip. Smooth, dark, reddish young bark: Арреаталсе: Site and soils: Rural plantings: Urban settings:

Native to:

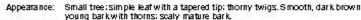
mature bank has horizontal papery strips. Adapted to many sites. Needs full sunlight. Reforestation, wildlife food source. White spring flowers: small tree form. Ontario

WILD PLUM

Prunus nigra

9 metres

Edible late summer fruit



Site and so its: (30 feet) Rural plantings: Bareroot Urban settings: Seedling Native to: 1 year old 15° cmtall

Best on moist loam soils. Needs full sunlight. Reforestation, wildlife food source. White, their pinkspring flowers; small tree form. Southern and eastern Ontario

WILLOW

Salix species

Ask for native species (many exotios are grown)



Shrub and tree

Exercet Seedlings 1 year old 30° cmtall

Арреаталсе: Site and so its: Rural plantings: Urban settings:

Large shrub to large tree forms; simple green leaves. Smooth, gray young bank; rough, furrowed mature bank.

Adapted to many sites. Tolerates flooded conditions. Needs full sunlight.

Site restoration, wildlife cover. Small shrubby or small tree form. Ontario

NANNYBERRY Vitamum lentago





5 metres (15 feet) Barer oct Seedlings 3 years old Арреаталсе:

Native to:

Site and soils: Rural plantings:

Large shruib or small tree; simple ye llow-green leaves, blue-black autumn berries. Gray-brown, fine, scaly, mature, bank.

Adapted to a wide range of soils. Best in moist soils. Best in full sunlight. Tolerates some shade Restoration, wildlife food source. White late spring flowers: shrub or small tree form.

Urban settings: Native to: Ontario

Native Small Trees and Shrubs (Continued)

CRANBERRY

HIGHBUSH Vibornom trilabum

Can be confused with European species

Large shrub: lobed maple-like leaves. Smooth, wiry branches: rougher mature Appearance:

bark Adapted to moist sites. Best in full sunlight.

3 metres (10 feet) Seedlings

Site and soils: Rural plantings: Urban settings: Native to:

Restoration, wildlife food source. White spring flowers; red berries; shrub form.

Ontario

REDOSER DOGWOOD

Cornus stalanifera

Appearance: Low shrub; simple leaf; bluish-white autumn berries.

2.3 matres (6-10 feat) Barer oot

Site and so its: Rural plantings: Urban settings: Native to: 2 years old 15* cmtall

Smooth, red bark. Damp lowland sites. Needs full sunlight.

Restoration, wildlife food source. White spring flowers: small shrub; bright red winter stems.

Ontario

ALTERNATE Comus alternitolia

M

LEAF DOGWOOD

Appearance: Simple, smooth, margined leaf. Thin, reddish-brown young bank: shallow-ridged

mature bark.

Site and so its: Best on moist loam soils. Tolerates shading.

Rural plantings: Site restoration (roots readily to stabilize soils), wild life food source. Urban settings: Native to: White spring flowers: small tree form with flat layered branching. Southern and eastern Ontario



10 metres (30 feat) 40 years Bareroot Seedlings 2 years old 15° cmtall

GRAY DOGWOOD

Cormus racemasa



23 metres (6-10 feet) Bareroot Seedlings 2 years old 15° cmtall

Site and so its: Rural plantings: Urban settings: Native to:

Appearance: Large shrub; simple, smooth, margined leaf; white August berries. Thin, reddish-brown young bark; shallow-ridged mature bark. Best on moist loam soils. Tolerates shading. Best in full sunlight. Reforestation, wildlife food source.

White spring flowers: small tree form with flat layered branching. Southern and eastern Ontario

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Oirectory of Contacts

Eastern Ontario Stewardship Councils

Ontario Stewardship Councils link landowners to information, expertise and funding to ensure that good forest management practices flourish.

Ottawa Stewardship Council

Box 599, 5524 Dickinson Street, Manotick, ON K4M 1A5 (613) 692-0014 joff.cote@mnr.gov.on.ca

Prescott-Russell Stewardship Council

Box 430, 31 St Paul Street, Alfred, ON KOB 1AO (613) 679-0936 suzanne.lafrance@mnr.gov.on.ca

Resource Stewardship S. D. & G. Box 429, 18045 County Road #2, Cornwall, ON K6H 5T2

(613) 933-7671 jim.hendry@mnr.gov.on.ca

Grenville Land **Stewardship Council** Box 605, Oxford Avenue

Brockville, ON K6V 5Y8 (613) 342-8528 jack.henry@mnr.gov.on.ca

Leeds County Stewardship Council

Box 605, Oxford Avenue Brockville, ON K6V 5Y8 (613) 342-8526 gary.nielsen@mnr.gov.on.ca

Community Stewardship **Council of Lanark County**

Box 37, Sunset Boulevard Perth, ON K7H 3E2 (613) 267-4200 ext.153 jeff.ward@mnr.gov.on.ca

Ontario Ministry of Natural Resources

P.O. Bag 2002 Kemptville, ON KOG 1J0 (613) 258-8204 www.mnr.gov.on.ca

For other councils see

www.ontariostewardship.org

Eastern Ontario Conservation Authorities

A network of organizations dedicated to conserving and managing natural resources on a watershed basis.

Cataraqui Region

Box 160, 1641 Perth Road Glenburnie, ON KOH 1SO (613) 546-4228 crca@cataraquiregion.on.ca

Mississippi Valley

(Ottawa west, Lanark) Box 268 Lanark, ON KOG 1KO (613) 259-2421 info@mvc.on.ca

Raisin Region (Cornwall area) Box 429, 18045 County Road 2 Cornwall, ON K6H 5T2 (613) 938-3611 info@rrca.on.ca

Rideau Valley

(Ottawa, Leeds & Grenville) Box 599, 1128 Mill Street, Manotick, ON K4M 1A5 (613) 692-3571 postmaster@rideauvalley.on.ca

South Nation Conservation

(Ottawa east, Stormont, Leeds and Grenville, Dundas and Glengarry) Box 69, 15 Union Street Berwick, ON KOC 1G0 (613) 984-2948 ppiitz@nation.on.ca

For other Conservation

Authorities see

www.conservation-ontario.on.ca

Other Contacts

Ferguson Forest Centre

Growing primarily native species of tre and shrubs hardy to the south central Ontario climate.

275 County Road 44 Kemptville, ON KOG 1J0 (613) 258-0110 info@seedlingnursery.com

Landowner Resource Centre

A one-window information shop for landowners. Box 599, 5524 Dickinson Street, Manotick, ON K4M 1A5 (613) 692-2390 info@lrconline.com

Ontario Woodlot Association

A network of regional chapters offering a greater voice to the woodlot owner. 275 County Road 44 Kemptville, ON KOG 1JO (613) 258-0110 info@ont-woodlot-assoc.org

Domtar Inc.

Box 40, 810 Second Street West Cornwall, ON K6H 5S3 (613) 932-6620 www.domtar.com

Boisés Est A Francophone organization promoting sound management of private woodlots. 770, 3° Concession Plantaganet, ON

japsoucy@alumni.uottawa.ca

Bog to Bog An opportunity for landowners to help create an ecological connective corridor between Mer Bleue and Alfred Bog. Box 633, 4858 Champlain Street,

Bourget, ON KOA 1EO (613) 487-3183 b2b@eisa.com

Eastern Ontario Certified Forest Owners

A group of landowners who have or are seeking group forest certification for their woodlots. P.O. Box 2111 Kemptville, ON KOG 1J0 (613) 258-8422 sdavis@eomf.on.ca

Mohawk Council of Akwesasne

Department of the Environment CIA #3, 101 Tewasateni Road Cornwall Island, ON K6H 5R7 (613) 936-1548 hlickers@akwesasne.ca

Forest Gene Conservation Association

Suite 233, 266 Charlotte Street Peterborough, ON K9J 2V4 (705) 755-3284 barb.bovsen@mnr.gov.on.ca www.fgca.net

Municipality of North Grenville

Engineering Standards for Design, Approval, and Construction



August 2022

Municipality of North Grenville

Engineering Standards for Design, Approval, and Construction



August 2022

This document is current as of the date noted above. Periodic updates will be available on the Municipality of North Grenville website at www.northgrenville.ca. It is the user's responsibility to check for updates prior to using this document. Any updates will form part of the current Municipal Engineering Standards and Specifications.

Record of Revisions

Version	Date	Description
i	May 6, 2022	Draft – Circulation for Comments
ii	June 15,2022	Draft – Circulation to Council
iii	July 22, 2022	Draft – Revisions based on Comments
iv	August 3,	Final Draft
	2022	
1	October 28,	Final Version
	2022	

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SECTION A - GENERAL INFORMATION



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

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A1.00 Definitions

In this specification, the following definitions shall apply:

"AODA" means Accessibility for Ontarians with Disabilities Act.

"As Constructed" Drawings shall mean the Design/Contract and Shop Drawings incorporating all revisions, field changes and as-built surveys that occur during the construction phase of the work. Refer to PEO Guideline 'Preparing As-Built and Record Documents.'

"AWWA" shall mean the American Water Works Association.

"BMP'S" means best management practices.

"CA" shall mean the Rideau Valley and/or South Nation Conservation Authorities.

"Consultant" shall mean professional engineers licensed to practice in Ontario and shall be responsible for the preparation of drawings and specifications to the satisfaction of the Municipality. The Consultant shall act on behalf of the Developer/Owner.

"Contractor" shall mean the firm of Contractors, the company, or individual acting as the Contractor and having entered into a contract with the Developer/Owner to install the services.

"CSA" shall mean the Canadian Standards Association.

"County" shall mean United Counties of Leeds and Grenville

"Developer(s)/Owner(s)" shall mean the person(s) appearing on the subdivision agreement/site plan with the Corporation of the Municipality of North Grenville.

"Developer's Representative" shall mean the person(s) identified by the Developer to act on their behalf.

"DFO" shall mean the Department of Fisheries & Oceans, Canada.

"Director" shall mean the Municipality of North Grenville Director of Public Works, their representative, or designate.

"LID" shall mean Low Impact Development.

"MECP" shall mean the Ontario Ministry of Environment, Conservation and Parks.

"MNRF" shall mean the Ontario Ministry of Natural Resources and Forestry.

"MOE/MOECC" shall mean Ontario Ministry of the Environment and Climate Change

"MTO" shall mean the Ontario Ministry of Transportation.

"Municipal Representative" shall mean any person assigned to a project by the Municipality to carry out work on their behalf. The name of the Representative shall be specified prior to the start of construction on any project.

"Municipality" shall mean the Municipality of North Grenville.

"OBC" shall mean the Ontario Building Code.

"OHBDC" shall mean the Ontario Highway Bridge Design Code.

"OPSD" shall mean the - Ontario Provincial Standards Drawings.

"OPSS" shall mean the Ontario Provincial Standard Specification.

"OTM" shall mean Ontario Traffic Manuals.

"PEO" shall mean Professional Engineers Ontario

"SHG" shall mean specific house grade / ground elevation at house location

"SWM" shall mean Stormwater Management.

"TAC" shall mean Transportation Association of Canada

"TCP" shall mean Traffic Control Plan.

A2.00 Introduction

The material presented herein is to be used as a guideline for the design of roads and services for land development and construction projects within the Municipality of North Grenville (Municipality). These guidelines are to be used in conjunction with industry standard practices and appropriate provincial and federal guidelines and standards for design and construction (e.g. OPSS, OPSD, MTO, TAC, MECP, OBC).

The design of all municipal services in the Municipality is to be based upon the specifications and standards in effect at the time of submission. It is incumbent upon the Developer's Representative to ensure the latest specifications are being utilized. All plans are to be accepted by the Municipality before they are used for construction, however, such acceptance in no way relieves the Developer and the Developer's Representative(s) from providing a design and constructed works that comply with current municipal requirements and applicable codes and standards.

The Municipality reserves the right to apply discretion in the interpretation of these guidelines and to require the use of other applicable guidelines and good engineering judgment when reviewing each project.

These guidelines will be subject to revision as local and provincial requirements continue to evolve particularly in areas of low impact development and sustainability.

It is understood that while there is flexibility, if a standard is not being met by a developer and they wish to proceed with a design and construction (if approved) the following may apply: increased municipal costs, third party costs, increased approval timeline, increased inspection costs, and extension of warranty.

A2.01 Familiarization

Design work is to adhere to the Municipality's Master Plans and the requirements set out in the "North Grenville Developer's Guide". Technical servicing issues must be designed and detailed within the engineering submissions, regardless of the source of the information (geotechnical, acoustic, landscaping, etc.).

All engineering design and submission procedures and requirements are outlined herein, or in the "North Grenville Developer's Guide". It is incumbent upon the Developer's Representative to familiarize themselves with these documents prior to proceeding to engineering servicing design.

The "North Grenville Developer's Guide" can be obtained from the Municipality's Planning Department.

A3.00 General Submission Requirements

A3.01 Study and Plan Requirements

Refer to North Grenville's Developer's Guide for general submission requirements and confirm specific requirements with the Director as part of a consultation meeting.

A3.02 Ministry of the Environment, Conservation, and Parks (MECP) Applications

The Developer will be responsible for obtaining all necessary approvals from the Ministry of the Environment, Conservation, and Parks (MECP). After the engineering design and drawings are prepared to the satisfaction of the Director, completed Environmental Compliance Approval (ECA) Forms are to be submitted to the Municipality for signature of the Director. The Developer's Representative will then make application to the MECP for approval under the Ontario Water Resources Act.

Approval from the MECP will not be required for water distribution systems as the Municipality is a holder of a Municipal Drinking Water Licence under Part V of the Safe Water Drinking Act. Any addition, modification, replacement or extension of a water distribution system is to be designed by a Professional Engineer. The Engineer shall submit three duplicate-completed "Form 1 – Record of Watermain" forms together with three copies of the General Services Plans showing the watermains to the Municipality for review and signature of the Director. One copy of the form signed on behalf of the Municipality will be returned to the Developer's Representative for record purposes. The Municipality's Licence Number will be provided by the Director and is to be inserted into Part 1 of the Form.

A3.03 Miscellaneous Approvals

The Developer's Representative is required to determine all approval requirements and make all submissions and representations necessary to obtain approvals from all other affected authorities. This includes but is not limited to:

- i. United Counties of Leeds and Grenville
- ii. Ministry of Transportation
- iii. Ministry of Natural Resources
- iv. Department of Fisheries and Ocean's Canada
- v. Conservation Authority
- vi. Railways
- vii. Canada Post Corporation
- viii. Utility Companies

The Developer's Representative shall copy the Director on pertinent correspondence relating to the progress of these submissions.

A3.04 Original Drawings

After acceptances have been received from all applicable agencies, the original (sealed) drawings shall be submitted to the Director for review and/or acceptance.

A3.05 Requirements Prior to Commencement of Construction

Prior to the commencement of construction, the Developer's Representative shall submit the following information to the Municipality:

- i. Three sets of full-size issued for construction drawings and specifications along with two sets of reduced size drawings (16" x 24"), PDF versions, and CADD drawings.
- ii. The names of the proposed Contractor and any Sub-contractors.
- iii. The Contractor's list of suppliers. If not available prior to commencement, provide planned supplier and if the supplier changes, provide an update prior to beginning the work.
- iv. Securities as outlined in the Subdivision Agreement in a form acceptable to the Municipality's Director of Finance.
- v. Proof of public liability insurance naming the Corporation of the Municipality of North Grenville and the Municipality's Consultant(s) of Record as additional insured in amounts and form satisfactory to the Municipality's Director of Finance.
- vi. Emergency contact information for the Developer's Representative and Contractor.
- vii. Any other information as required by the Municipality or as specified in the Subdivision Agreement.

Once the above has been provided and deemed to be acceptable the Director will provide a letter authorizing the Developer to proceed with construction. The Developer's Representative will arrange for a kickoff/ startup meeting required prior to construction with the Public Works Department Representative in attendance.

A3.06 Requirements During Construction

For subdivisions and other works to be assumed by the municipality, full time on-site supervision is to be provided by the Developer's Representative/Consulting Engineer for all underground, concrete, and asphalt works. Part-time inspection may be considered for road building, landscaping, and utilities; written approval from the Director is required.

For private services and site plan, comply with the site plan agreement and the owner's commitment to have general review undertaken by architects and/or professional engineers per Ontario Building Code requirements.

Construction meetings are to be held with the Municipality at; start up, temporary water plan review, and watermain commissioning plan review. The Municipality will be provided with a construction schedule noting sanitary, storm watermain, services, concrete, asphalt, and utility work.

See Appendix 1 for certification requirements.

Failure to provide the required certifications outlined in the appropriate OPS standard and these design guidelines may result in the municipality requiring any or all of the following at the Developer's cost:

- Destructive testing
- Removal and replacement
- Monetary penalties.

A3.07 Subdivision Notice Signage

Once the roads have been constructed to base course asphalt, the Developer is to provide and erect, in a prominent location at the "entrance" to the subdivision, a Subdivision Notice Sign as per Municipality of North Grenville Standard Drawing A-01

A4.00 Engineering Drawing Requirements

A4.01 Title/Cover Sheet

A title/cover sheet is required for the drawings.

A4.02 Latest Version of AutoCAD

All drawings shall be prepared using AutoCAD 2022 (or latest version). All drawings are to be prepared in a neat and legible fashion. All plans shall be prepared on standard 600 mm x 900 mm sheets.

A4.03 Title / Revision Blocks and Version Control

Standard title blocks shall be used indicating the name of the development and having provision for a table for revision notes within the block. The revision number, description, and date for each deliverable is to be include on each submission to the municipality.

A4.04 Elevations

All elevations shown on the drawings are to be of geodetic origin and reference to the geodetic benchmark is required.

A4.05 Lot and Block Numbers

All existing and proposed lot and block numbers, and intended purpose for blocks (i.e., school, park, etc.) are to be included on the drawings. All easements are also to be shown on the drawings.

A4.06 Natural Hazards

Natural hazards are to be indicated on all plans affected including but not limited to:

- Floodlines
- Unstable bedrock
- Unstable slopes
- Retrogressive landslide areas.

Additional review and discussion with the municipality and conservation authority may be required depending on the hazard.

A4.07 North Arrow

A North arrow shall be referenced on all drawings. North shall generally point to the top or right on the drawings.

A4.08 Key Plan

A key plan shall be shown on all Plan and Profile Drawings as well as the General Services Plan. The area covered by the drawing shall be clearly identified.

A4.09 Engineer's Stamp / Seal

All engineering submissions shall be stamped/sealed by a Professional Engineer in accordance with PEO guidelines.

A5.00 General Services Plan

A5 01 Scale

A drawing showing General Services shall be prepared for all developments at a maximum scale of 1:1000.

A5.02 Division of Drawings

When more than one General Services Plan drawing is required for any development then the division of drawings shall reflect the limits of the Registered Plans as closely as possible. An overall drawing layout plan with sheet numbers is acceptable.

A5.03 Benchmarks

The reference geodetic benchmark and the site benchmarks to be used for construction shall be identified on the General Services Plan.

A5.04 Drawing Index

A drawing index shall be shown on all General Services Plans to identify the Plan and Profile Drawing Number for each street or easement shown. An overall drawing layout plan with sheet numbers is acceptable.

A5.05 Street Names

All streets shall have the approved street names indicated.

A5.06 Line Types

It should be clear on the plans what is existing and what is proposed. All existing services, utilities and abutting properties are to be shown in shaded lines. All proposed services to be constructed are to be shown on the General Services Plan in bold lines.

A5.07 Maintenance Holes, Catchbasins and Additional Structures

All structures will be shown and are to be numbered in accordance with the design drawings. Storm and Sanitary Maintenance Hole Numbering will be approved by the Municipality.

A5.08 Sewers

All existing and proposed storm and sanitary sewers are to be shown including size, length, grade, direction of flow and type of the sewer. Services must be shown for all lands to be registered. Services are to be terminated at the limits of the developed lands where future extension is expected, of if required by the Director.

A5.09 Watermains

All watermains, valves and hydrants are to be shown. Watermains are to be identified by size and material.

A5.10 Curbs and Sidewalks

All curbs and sidewalks are to be shown, including details of connections to existing sidewalk networks.

A5.11 Fencing

All fencing is to be indicated by height and type. Consult with the Director to confirm type and

height required. Refer to details A-02 – A-07.

A5.12 Exterior Electrical

All street lighting poles, disconnects and hydro transformers are to be shown.

A5.13 Floodplains

If a subdivision encroaches on an existing floodplain, the extent of the natural hazard and the associated lands regulated by the Conservation Authority.

A5.14 Existing Buildings and Structures

All existing buildings and structures on the lands are to be shown, including ones to be removed.

A5.15 Coordination Plan

As part of final approval to proceed to construction, a detailed plan view shall be provided that overlays utilities including:

- i. Poles
- ii. Signs
- iii. Mailboxes
- iv. Landscaping elements
- v. Underground services
- vi. Curbs
- vii. Sidewalks
- viii. Pathways
- ix. Trees
- x. Any other structures

This detailed plan view is required to confirm potential conflicts have been reviewed and impacts have been mitigated.

A6.00 Plan and Profile Drawings

A6.01 Scale

All Plan and Profile Drawings shall be prepared at a maximum scale of 1:500 horizontally and 1:50 vertically for rural projects and 1:250 horizontally and 1:50 vertically for urban projects. A complete legend shall be provided on each drawing.

A6.02 Plan and Profile Drawings

Plan and Profile Drawings are required for all roads, blocks, and easements (rear yard and side yard storm sewers excluded) where services are proposed, as well as for all outfalls and all boundary roadways abutting the development.

A6.03 Line Types – Shaded

All existing or future services, utilities and abutting properties shall be shown in shaded lines.

A6.04 Line Types - Bold

All services to be constructed are to be shown in bold lines.

A6.05 Road Allowances, Lots, Etc.

All road allowances, lots, blocks, easements, and reserves are to be identified.

A6.06 Curbs, Gutters, and Sidewalks

All curb, gutter and sidewalks are to be shown and dimensioned on the plan portion of the drawings.

A6.07 Sewers and Culverts

All sewers and culverts shall be shown and dimensioned on the plan and shall be plotted on the profile of the drawings to true scale size. All sewers and culverts shall show the type, size, slope, length, material, and direction of flow on both the plan and profile portion of all drawings.

A6.08 900 mm+ Diameter Sewers

All sewers 900 mm in diameter or larger shall be shown with two lines on the plan view of drawings.

A6.09 Maintenance Holes

All maintenance holes shall be shown on the plan and profile portion of the drawings. The maintenance holes shall be identified by number on the plan portion and by number, size, invert elevations and applicable Ontario Provincial Standard Drawing on the profile portion of the drawing. Sanitary maintenance holes shall include the letter "SA" after the number designation. Numbering is to be approved by the Municipality. Maintenance holes that have safety platforms or drop connections shall be noted. Maintenance holes are to be drawn to scale showing the outside of the structure and the location of the lid.

A6.10 Catchbasins

All catchbasins and catchbasin connections shall be shown. All grate and invert elevations for rear lot catchbasins are to be shown.

When streets are of a length that requires more than one drawing, match lines are to be used.

A6.11 Reference Drawings Numbers

The reference drawing numbers for all intersecting streets and match lines shall be shown on all Plan and Profile Drawings.

A6.12 Watermain, Hydrants, etc.

All watermains, hydrants, valves, etc., shall be described and dimensioned on the plan portion of the drawings. The watermain is to be plotted to true scale size on the profile portion of the drawing and shall be described.

A6.13 Service Connection Locations

The location of all storm, water and sanitary service connections shall be shown and dimensioned on the plan portion of the drawings or on a typical detail.

A6.14 Centreline of Construction

The centreline of construction with 20.0 m stations shall be noted with a small cross on the plan portion of the drawings. Chainage shall generally start on the left side of the sheet and increase from left to right on all drawings. Existing and proposed centreline elevations shall be shown at 20.0 m intervals along the bottom of the profile.

A6.15 Original Ground at Centreline

The original ground at centreline and the proposed centreline road grade shall be plotted on the profile. The proposed profile shall be fully described (length, grade, vertical point of intersection [V.P.I]. elevations, vertical curve data, etc.) with all elevations shown to three decimal places. Chainage for the centreline of construction as well as the chainages for V.P.I., beginning of vertical curve (B.V.C.), end of vertical curve (E.V.C.) shall be noted on the profile portion of the drawings.

A6.16 Gutter Grades

Details of the gutter grades for cul-de-sacs and crescents shall be provided on the grading plan as a separate detail at a scale of 1:200.

A6.17 Chainage for Centreline of Construction

Chainage for the centreline of construction, including chainages for point of intersection (P.I.), beginning of curve (B.C.), and end of curve (E.C.) and horizontal curve data shall be shown on the profile portion of the drawings.

A6.18 Proposed Pavement Structure

The proposed pavement structure design and dimensions shall be noted on the profile portion of the drawings using a note and leader to signify the area between the top of asphalt and subgrade.

A6.19 Existing Utilities and Services

All existing utilities and services shall be shown on the plan view of the drawings. Utility locates may be required to determine the extent and location of existing utilities. It may be necessary to dig test holes/hydrovac to determine the actual elevations of these services to avoid conflicts with new construction. These elevations shall be shown on the profile portion of the drawings. The Director may request utility elevations to be confirmed by test holes/hydrovac prior to approving design drawings. This does not relieve the Developer from their responsibility for the planning, design, and construction of the works.

A6.20 Roadway Profiles

Profiles of roadways shall be produced sufficiently beyond the limits of the proposed roads to confirm the feasibility of future extensions.

A6.21 Details for Plan Portion of Drawings

In addition to the above, the following details shall be shown on the plan portion of the drawings:

- i. the curb radii at all intersections
- ii. any special notes

A7.00 Lot Grading Plans

A7.01 Criteria

All Lot Grading Plans shall be prepared in accordance with the criteria outlined in Section F of this document.

A7.02 Scale

The plans shall be prepared at a minimum scale of 1:500 or as required to clearly show the works.

A7.03 Plan Content

The plans must show overall lot fabric with lot and block numbers, street names, right-of-way limits, road curb and gutters, catchbasins, sidewalks, all aboveground street furniture, driveway locations, culverts, wells, septic systems, pools, and any other proposed structures.

A7.04 Road Grades

Road grades shall be shown at 20 m intervals and at all changes in grade. Directional arrows shall be provided indicating the overland flow route.

A7.05 Existing Grades

Existing grades along with proposed elevations at the lot corners shall be indicated along with elevations at any break points and swales.

A7.06 Lots Requiring Engineered Fill or Specialized Structural Design

The grading plan shall identify development areas noted in the site geotechnical report as requiring specialized construction requirements.

A7.07 Maximum Building Envelope

The maximum building envelope shall be shown on all lots inclusive of private services.

A7.08 Flow

Directional arrows shall be provided on all lots indicating the direction of flow and grade of flow in percent (%) along side lot lines and rear lot lines.

A7.09 Existing Trees

All existing trees are to be shown. All trees are to be clearly identified with appropriate shading as "to be preserved" or "to be removed."

A7.10 Existing Structures

Any existing structures shall be shown with notes clearly identifying whether they are to be retained or demolished/decommissioned.

A7.11 Other Constraints

Development constraints including but not limited to; easements, buffer zones, no touch zones, tree buffers, Ontario Building Code setbacks for private services, and agency setbacks are to be noted.

A8.00 Composite Utility Plans

A8.01 Criteria

A Composite Utility Plan (or Plans) is to be prepared in accordance with the criteria outlined in Section G of this document.

A8.02 Scale

The plans shall be prepared at a minimum scale of 1:500.

A8.03 Plan Content

The plans must show overall lot fabric with lot and block numbers, municipal addresses provided by the municipality, street names, right-of-way limits, road curb and gutters, catchbasins, sidewalks, street trees, all aboveground street furniture and driveway locations.

A8.04 Road Cross-sections

Typical road cross-sections must be included on the plans.

A8.05 Public Utility Clearance Requirements

Public Utility Clearance Requirements must be included on all plans to clearly indicate minimum separation distances and clearances from hydro, communications, gas and municipal infrastructure, signs, driveways, etc. This could be in the form of a table or typical detail.

A8.06 Location of Utilities

The location of all utilities must be clearly shown (hydro, telecommunications, gas, cable, street lighting) along with Canada Post mailbox locations.

A8.07 Location of Utility Services Locations to Lots

The location of all utility service locations to lots must be clearly identified along with storm, sanitary and water connections.

A8.08 Details

Details shall be included indicating location and spacing requirements of services for the various lot types in the development.

A8.09 Signature Block or Written Confirmation of Acceptance

A signature block may be included for each utility to sign indicating acceptance of the layout as shown. In lieu of a signature box, written acceptance from the utility representative can be provided.

A9.00 Other Drawings

A9.01 Traffic Management Plans

When requested by the Municipality, Traffic Management Plans at a minimum scale of 1:1000 are to be prepared indicating the location and details for all traffic control, information signage

and line painting. Plans are to be in accordance with the OTM Book 7 and as approved by the municipality.

A9.02 Drainage Plans

Drainage plans for the storm and sanitary sewer design shall be prepared in accordance with the criteria provided in Sections C and E of this document.

A9.03 Erosion and Sedimentation Control Plans and Tree Protection Plans

Prior to any site disturbance taking place, plans will be required indicating the measures that will be put in place to protect any trees to be preserved and to prevent the migration of any silts from the site or other adverse impacts on the environment. The plans shall clearly indicate the order in which all activities are to take place. The plans shall show the location and details for all tree protection fences, silt control fences, earth or rock check dams, sediment ponds, mud mats and any other measures necessary to protect trees and control silt or other elements that may adversely impact the environment. Topsoil stockpile locations shall also be indicated on the drawings.

To assist with review by the conservation authority, include:

- Identification of who is responsible to install inspect, maintain and remove the control measures
- Identify the inspection and maintenance schedule (how, when, how often i.e. daily/weekly)
- Indicate which control measures are proposed, their location and corresponding OPSD number
- Indicate that it is to be considered a "Living Document" which may be modified in the event the control measures are insufficient
- What measure is taken to protect the outlet from erosion?

A9.04 Detail Drawings

The Municipality's Standard Drawings shall be used whenever applicable. In the absence of a Standard Drawing the latest revision of the Ontario Provincial Standard Drawings shall be used. Individual details shall be provided by the Developer's Representative for all special features not covered by any of the above. All details shall be reproduced or drawn on standard size sheets and shall be included as part of the engineering drawings.

A9.05 Landscaping Drawings

Drawings indicating the location and species of street trees, stormwater management pond landscaping, park design, boulevards, open space landscaping, areas of ecological preservation,

restoration, and enhancement recommended by environmental studies, and community mailbox location shall be prepared in accordance with the requirements of the Municipality.

A10.00 Record Drawings & Asset Inventory

A10.01 General

The Record Drawings constitute the original (design) engineering drawings which were accepted by the Municipality and which have been amended to incorporate the construction changes and variances in order to provide accurate information on the works as installed in the development. Submission of Record drawing information shall be accompanied by revised design calculation sheets sealed by the design engineer, which confirm the capacity of the constructed condition of the sewers. Drawings shall be submitted during the maintenance period, prior to issuance of Final Acceptance. Record Drawings shall be prepared in accordance with PEO guidelines.

A10.02 As-constructed Field Survey

The Record Drawing revisions shall be based on a final survey of all the subdivision services and the Developer's Representative's construction records. The final survey shall include a final check of the following items:

- i. location of all maintenance holes, including invert and top of cover elevations
- ii. distances and pipe slopes between all maintenance holes
- iii. location, rim and invert elevations for all roadway and rear lot catchbasins
- iv. location and ties to all valve boxes and chambers and any other relevant watermain appurtenances
- v. hydrant flange elevations
- vi. service elevations at property limits
- vii. road centreline elevations
- viii. site benchmarks
- ix. location of all service connections to all lots and blocks

A10.03 Materials

The Record Drawings must clearly label the installed material. Information for the following installations is required as a minimum:

- i. mainline storm, sanitary sewers including service tees
- ii. sanitary and storm sewer laterals

- iii. watermain
- iv. watermain valves and hydrants and service valves
- v. maintenance hole, valve chamber and catchbasin frames and covers
- vi. precast concrete maintenance holes, catchbasins and valve chambers

A10.04 Drawing Revisions Construction

The original drawings shall be revised to incorporate all changes and variances found during the field survey and to provide ties and additional information to readily locate all underground services.

All sewer and road grades are to be recalculated to two decimal places to reflect the as-built condition.

All house numbers are to be indicated on the As-built Drawings.

All street names, lot numbering, and block identification(s) shall be checked against the Registered Plan and corrected as necessary.

The As-built Drawing revision note(s) shall be placed on all drawings in the revision block and dated based on the date of the surveys.

The Developer's Representative shall be required to explain in writing any major difference between the design and the "Record" data, providing verification that the alteration(s) does not adversely affect the function of the subdivision services.

A10.05 Submission of As-built Drawings

The submission of the Record Drawings in paper and electronic format (PDF and CADD) must be completed before "Final Acceptance" of the subdivision will be granted by the Municipality.

A10.06 Asset Inventory List

Prior to final acceptance of the subdivision, the Developer's Representative will be required to submit to the Municipality a chart in Excel format summarizing the assets which the Municipality will be assuming as part of the subdivision. Include as a minimum the following:

- i. total number of maintenance holes
- ii. total number of road and rear lot catchbasins including length and size of catchbasin leads
- iii. lengths of sewers including description of sewer type and material
- iv. length of watermain including size, material, number and size of valves, valve chambers and fire hydrants
- v. number and type of traffic signs

- vi. number of streetlights
- vii. length of roads including description of width
- viii. length of sidewalks including description of width
- ix. number of street trees including description of species

The materials list should be provided on a street-by-street basis with subtotals for each street and totals for the entire subdivision. The Developer's Representative is to request a template from the Director that will be generated at the time of development.

Closed-circuit television (CCTV) inspections of all sewer lines including video record provided on DVD and printed report are to be submitted to the Director.

A11.00 Survey Control Monuments

Prior to the assumption of the subdivision, the Owner's Ontario Land Surveyor shall establish a network of monuments and benchmarks.

Horizontal control monuments and vertical control benchmarks, shall be established at approved locations to the satisfaction of the Director, using the following criteria:

- i. Two horizontal control monuments and two vertical control benchmarks for the first 50 ha (or less) subdivided by the plan, and one additional horizontal control monument and vertical control benchmark for every additional 50 ha (or less) subdivided by the plan.
- ii. In addition, every existing horizontal control monument and vertical control benchmark destroyed during subdivision or site plan construction must be replaced.
- iii. The new horizontal control monuments and vertical control benchmarks (including replacements) shall be certified by an Ontario Land Surveyor.
- iv. The horizontal control monument shall be as per Municipality's Standard Drawing A-08. The location, description and pertinent information with respect to the monuments shall be indicated on all engineering drawings.

A12.00 Excess Soils

Ontario Excess Soils Regulation (O. Reg. 406/19): On-Site and Excess Soil Management requirements are to be met by the Developer.

A Qualified Professional is to complete a workplan, testing, and all other requirements to comply with the regulations.

SECTION B - TRANSPORTATION



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

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B1.00 Classifications and Right-of-way Widths

All roadways in new developments shall be classified according to the Transportation Master Plan (2019) which includes the following:

- 1. Arterial Roads (23m -45m Right-of-way Width)
- 2. Collector Roads (20m-26m Right-of-way Width)
- 3. Local Roads (18m-22m Right-of-way Width)

The proposed classification of all streets planned in new development areas shall be confirmed with the Municipality prior to the commencement of the design. Roadways within urban areas are to be designed and constructed to urban cross-sections. Roadways supporting industrial, commercial, and institutional land uses are also to be built to urban design standards.

Typical cross sections can be found in Appendix 3. Note that cross sections are under development and final requirements for each application are to be confirmed with the Director. The municipality remains open to alternative layouts that are deemed to be beneficial for traffic calming, vehicular movement, and maintenance.

Requirements for paved shoulders, multi-use pathways, and other site features are to be confirmed with the Director.

B2.00 Supporting Traffic Studies / Statements

The requirements for a Traffic Impact Study / Statement (TIS) will be agreed upon between the Developer and the Municipality. County input will be required where the development is deemed by the County to have an impact on the County road network. The level of analysis and specific requirements are to be agreed upon by the Developer's Representative, their traffic specialist, the Municipality, and, where applicable, the County.

The TIS should consist of a main document supplemented by technical appendices containing the required detailed analyses. A suggested report structure is as follows:

- i. Description of the Proposal (with site plan or plan of subdivision if applicable);
- ii. Study Area (with map identifying the study area and site);
- iii. Horizon Year(s) and Time Periods for Analysis;
- iv. Considerations for compliance with Municipal and County guidance documents including but not limited to; Official Plan, Transportation Master Plan, Cycling Master Plan
- v. Existing Conditions (exhibits required);
- vi. Background Traffic Demand Existing and Future Background (exhibits required);
- vii. Site Generated Traffic Demands (exhibits required);

- viii. Total Traffic Demand Future Background plus Site Generated Traffic (exhibits required);
- ix. Evaluation of Impacts of Site Generated Traffic;
- x. Access Location Analysis;
- xi. Improvement Alternatives Required to Mitigate Traffic Impacts, including Traffic Impacts for Future Background and Total Traffic with and without Mitigation Measures (tabular summaries); and
- xii. Recommendations.

Maps, graphs and tables should be placed adjacent to relevant text.

B3.00 Geometric Design Elements

Designs are to comply with Transportation Association of Canada and Ministry of Transportation Ontario guidelines. Typical Sections for Local, Minor Collector, and Primary Collector Roads are included in Municipality's Standard Drawings B-01 to B-04.

B3.01 Curb Return Radii at Intersections

The curb return radii for all local streets shall allow for traffic movement and snow plowing operations. For retrofit applications consult the Municipality.

B3.02 Daylighting Requirements at Intersections

Daylighting site triangles at all intersection quadrants shall be included in the road allowances to provide for uniform boulevard widths. Specific design features and longer-term planning needs may require larger daylighting triangles. At a minimum, daylighting shall conform to the Comprehensive Zoning By-law as follows:

Table 1 - Daylighting Requirements

Daylighting Requirements					
Local to Local	3 m x 3 m				
Local to Collector	3 m x 3 m				
Collector to Collector	5 m x 5 m				
Collector to Arterial	5 m x 5 m				
Arterial to Arterial	5m x 5 m				

B3.03 Turning Basins / Cul-de-sacs

Turning Basins / Cul-de-sacs should be avoided wherever possible. When deemed appropriate, they shall be constructed per MTO OPSD 500.010, 500.020, or 500.030. Minimum gutter grades of 0.5% shall be maintained along the flow line of the gutters around the cul-de-sac.

The maximum permissible down gradient into a cul-de-sac is 4%.

B3.04 Temporary Turning Circles and Turnarounds

Generally, temporary turning circles are to be paved with a minimum 50mm thick surface course asphalt. At the sole discretion of the Director, alternatives for short term temporary conditions will be considered. The road structure is to be in accordance with the site geotechnical report.

B3.05 Location of Utilities

The placement of utilities within the road allowance shall be in accordance with Chapter G of this document and the Municipality's Standard Road Cross-Sections Drawings.

B3.06 Community Mailbox Requirements

Community mailboxes shall be placed in locations approved by the Municipality and Canada Post. Community mailboxes shall have direct hard surface access. In urban areas, access is to be to a sidewalk.

B4.00 Traffic Controls

The proposed location and type of all street name signs, traffic control signs, signalization, and pavement markings shall be shown on the Traffic Control Plan (and Landscape Plan). The Traffic Control Plan shall be prepared by a Professional Engineer. All traffic control devices (warning and regulatory signs, street signs, parking restrictions, etc.) shall conform to the Ontario Ministry of Transportation, Ontario Traffic Manuals (OTMs) and Transportation Association of Canada (TAC) guidelines.

B4.01 Signage

All regulatory signs must be installed by the Developer at the completion of the base course asphalt and maintained by the Developer until "Final Acceptance" by the Municipality. All signs indicating parking restrictions are to be installed prior to the first occupancy in residential developments. The Developer will be responsible for installing all street signs and supporting hardware, as well as maintaining all signs in the subdivision until assumption of the subdivision by the Municipality. Temporary street name signs are to be installed by the Developer prior to the issuance of the first building permit in the subdivision. Prior to final assumption, the Developer will install all permanent street name signs. The cost for these signs will be paid by the Developer.

B4.02 Street Name Signs

Location: Street name signs shall be placed on a dedicated post or other non-regulatory signpost at each intersection and shall identify each street at the intersection. The location of

the street name signs is to be shown on the Traffic Control Plan. Street names are typically noted in the subdivision agreement.

Type: Temporary street name signs are to be ordered and installed by the develop. All permanent street name signs are to be ordered through the Municipality.

B4.03 Traffic Control and Advisory Signage

Location: Traffic control and advisory signs shall be shown on the Traffic Control Plan and shall be located in accordance with OTM and TAC guidelines. All traffic control and advisory signs shall be approved by the Municipality.

Type: Traffic control and advisory signs shall conform to the current revised standards of the OTM and TAC. All signs are to be of engineering grade reflective materials.

B4.04 Pavement Markings

Pavement markings for traffic control shall be provided and shall conform to current OTM and TAC standards. All markings are to be completed with approved traffic paint in accordance with OPS specifications.

Any road which intersects an Arterial Road shall have thermal-plastic paint used at the intersection and back to a minimum distance of 100 m from the Arterial Road.

Pavement markings shall be indicated on the plans for all stop bars, pedestrian crossings, centre and lane lines, and as required or directed by the Municipality for all streets.

At a minimum, painted stop bars c/w 15m yellow 'tail' are required at all urban stop intersections.

Pavement markings are to be completed by the Developer.

B5.00 Road Structure Design

B5.01 Road Structure Requirements

The minimum pavement design for all streets shall be as follows:

Table 2- Minimum Road Structure Requirements

Local Road	Arterial/Collector Road
40 mm HL3 or 12.5mm Superpave PGAC 58-34	40 mm HL3 or 12.5mm Superpave PGAC 58-34
50 mm HL8 or 19mm Superpave	60 mm HL8 or 19mm Superpave
150 mm Granular "A"	150 mm Granular "A"
300 mm Granular "B"	450 mm Granular "B"

To confirm the minimum pavement design is sufficient, a qualified Geotechnical Consultant shall be engaged by the Consultant to sample, test and design a suitable pavement section.

Copies of the geotechnical report including all test results and proposed road designs shall be submitted with the engineering drawings. In no case will a pavement design be less than the minimum as noted above.

The Developer's Representative/Geotechnical Consultant shall perform testing and approval of all granular materials at the designated pits prior to placement, as well as performing subsequent in-situ verification tests. OPSS 501 Construction Specification for Compaction and OPSS 310 Construction Specification for Hot Mix Asphalt.

B5.02 Subdrains

The requirements for a sub-drainage system are to be identified in the site geotechnical report. At a minimum 150 mm diameter perforated subdrains, wrapped with a knitted sock geotextile, are to be installed at all catchbasins a minimum three (3) metres up and down chainage below the subgrade level. Subdrains shall discharge into the side wall of maintenance holes, catch basins, and ditch inlets through a 1 m section of nonperforated pipe. Subdrain and outlet pipe connections to existing concrete maintenance holes, catch basins, and ditch inlets shall be cored and grouted to provide a watertight seal.

When a geotextile wrapped trench is specified in the Contract Documents, wrapping of the subdrain with a knitted sock geotextile shall not be required. The Municipality reserves the right to require video inspection of sub-drains.

It will be the responsibility of the Developer's Representative to justify deviation from this standard by submitting a geotechnical report from a licensed Geotechnical Engineering Consultant. Sub-drains may be omitted if it can be shown that the subgrade is sufficiently permeable to ensure adequate drainage of the road base.

B5.03 Hot Mix Asphalt Requirements

Mix designs are valid for the calendar year in which they were prepared. A minimum of ten (10) days before placement of the mix, the Developer's Representative must electronically submit the mix designs to the Director for review and approval. The mix design and Job Mix Formula (JMF) documents submitted at the time of mix design submissions shall be signed, dated, and certified correct by the person accountable for the engineering and management responsibility of the laboratory that conducted the work.

Only mix designs approved by the Director shall be used. It is the responsibility of the Developer to ensure that mixes approved by the Director and meeting all the contract requirements are used. Furthermore, approval of the mix design by the Director does not relieve the Developer's Representative of the responsibility for ensuring the specified Materials and Workmanship.

When requested by the Director, the Developer's Representative shall remove and replace any unapproved mixes with an approved mix at no cost to the Municipality.

B6.00 General Construction Requirements

B6.01 Placing of Base Course and Final Surface Course Asphalt

Requirements that are to be met prior to the placement of base course asphalt are indicated in Appendix 1.

The placement of surface course asphalt shall not commence in any area until all of the following conditions are met:

- i. A minimum period of one year has expired from the completion date for the placement of the base course asphalt.
- ii. 75% of the dwellings have received Occupancy Permits.
- iii. All undeveloped lots are graded generally in accordance with the current and accepted lot grading plans.
- iv. Preliminary Approval from the municipality has been received.
- v. All deficiencies and settlements have been repaired in asphalt and concrete areas.
- vi. Certification of the works has been provided to the Director from the Developer's Representative/Consulting Engineer.
- vii. The approval of the Director is obtained in writing.
- viii. Favourable weather conditions are present, as defined by OPS specifications.

B6.02 Other Requirements

Whenever it is necessary to cut through an existing Municipality roadway external to the development, the Developer's Contractor will be responsible to obtain a road cut permit from the Director. The placement and compaction of the backfill material and the restoration of the surface pavement shall be done in accordance with the standards and specifications of the Municipality. All road crossings shall be completed by horizontal drilling unless explicitly approved otherwise by the Director. Any open road cut shall be backfilled with non-shrink concrete material. The work shall be under warrantee from cracking and settlement for a period of one year from time of acceptance by the municipality.

Before implementing detours, a Traffic Control Plan (TCP) is to be submitted to the Director for review and approval. For County Roads, a TCP is to be submitted for approval from the County with a copy to the Director. In all cases, the Fire Department, Police Department, Ambulance

Services and School Bus Companies must be notified by the Developer's Representative or its Contractor, in writing, a minimum of three (3) working days prior to implementing the approved TCP. A copy of the notification is to be provided to the Director.

B7.00 Road Structure

Roads are to be constructed to provide a smooth uniform surface and a comfortable ride. Asphalt paving is to comply with OPSS 310 and OPSS 311. Granular base, subbase, surface, and shoulder are to comply with OPSS 314. Subdrains are to comply with OPSS 405.

B8.00 Concrete Curb and Gutter

The construction of concrete curb and gutter, setbacks, gutter outlets, and bullnoses together with the installation of catch basin frames and grates which lie within the flow lines of the curb and gutter system are to be as per OPSS 353.

Concrete curb and gutter conforming to OPSD 600.040 shall be used on all new urban roads subject to the discretion of the Director.

Driveway depressions shall be formed in the curb according to the detail and location as per OPSD 351.010. A mechanical curb cutting machine is not permitted to saw cut driveway depressions (unless specifically approved by the Director).

All curb and gutter are to be protected from damage from heavy equipment and vehicles.

Prior to starting the work, the Developer's Representative is to provide ACI Flatwork Certification per OPSS 353.

B9.00 Sidewalks

Sidewalk construction is to comply with AODA requirements and OPSS 351. Boulevards are to be minimum 1.0m width for snow storage.

Sidewalks are to be installed at locations as shown on the Typical Road Cross-Sections.

The width of sidewalks (not including curb) for all streets shall be a minimum of 1.5 m and a minimum thickness of 125 mm.

At street intersections, the curb and the sidewalk shall be depressed to meet the roadway elevations as per OPSD 310.030

Prior to starting the work, the Developer's Representative is to provide ACI Flatwork Certification per OPSS 353.

B9.01 Tactile Walking Surface Indicators

Tactile Walking Surface Indicators (TWSIs) are to comply with AODA requirements and are to be constructed in accordance with OPSS 351, OPSD 310.030, OPSD 310.031, and OPSD 310.030.

B9.02 Concrete and Asphalt Walkways

Walkways are to comply with AODA requirements and are to be constructed with a hard surface in accordance with OPSS 311 and OPSS 351.

Prior to starting the work, the Developer's Representative is to provide ACI Flatwork Certification per OPSS 351.

B9.03 Multi-Use Pathways (MUP)

Multi-Use Paths (MUPs) are to comply with AODA requirements and are to be constructed in accordance with OPSS 311. The designer is to allow for a wide range of users. MUPs are located off-road or situated in boulevards within the right-of-way.

MUPs are to be designed in accordance with TAC Design Guidelines and OTM requirements.

- 1. Minimum width is to be 3m with 1.0m clearance on either side.
- 2. Site specific conditions may require sheet drain or cross drainage. Minimum slope of two (2) percent for drainage is preferred.
- 3. Surface to be minimum 50mm surface course asphalt.

B10.00 Entrances, Fire Lanes, and Loading Bays

Entrances are to be paved with a minimum of 50mm thick surface course asphalt.

Entrances are to generally comply with OPSD 301.010, OPSD 301.020, and OPSD 301.030 for rural entrances and OPSD 350.010 and OPSD 351.010 for urban industrial, commercial, and apartment entrances and residential entrances respectively. The minimum width of any driveway shall be 3 m with the width governed by the Municipality's Comprehensive Zoning Bylaw. Curb depressions shall extend 0.3 m beyond each side of the driveway.

The desirable maximum permissible design grade for any residential driveway on private lands shall be 6% (desirable maximum) and the minimum shall be 1%.

Loading bays and fire lanes are to comply with Ontario Building Code requirements.

B11.00 Boulevards

All boulevard areas are to be graded according to the details shown on the Municipality's standard road drawings and to the satisfaction of the Municipality. The final grade of the sod

shall match the finished grade of the top of the concrete curb and sidewalk. Concrete or asphalt boulevards will require the approval of the Director.

All debris and construction materials shall be removed from the boulevard area upon completion of the base course asphalt and shall be maintained in a clean state until the roadway section is completed.

Clean, weed free topsoil shall be placed on all boulevard areas that are to be sodded. The minimum depth of topsoil shall be 100 mm.

Drought and salt resistant sod shall be used for all areas that are to be sodded.

B12.00 Testing

In general, material sampling, testing and reporting is to comply with Ontario Provincial Standards. The Developer's Representative is to submit a reporting plan to the Director for approval. The plan is to include in tabular format the material, standard of acceptance, testing frequency, and mitigating measures to correct deficiencies should they occur.

B13.00 Grade Certification

The Developer's Representative is to submit a certification of grade elevation/crossfall form per OPSS 314 for subgrade, top of granular B, and top of granular A. These forms are to be submitted to the Director prior to paving.

B14.00 Traffic Calming

Refer to the municipalities Traffic Calming Policy for requirements. All works are to be in accordance with the Transportation Association of Canada. The Developer's Representative is to submit a certification of grade elevation/crossfall form per OPSS 314 for subgrade, top of granular B, and top of granular A. These forms are to be

SECTION C – STORM DRAINAGE AND STORMWATER MANAGEMENT



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

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C1.00 Storm Drainage Policies

This section outlines the policies, design criteria, and applicable parameters for the design and implementation of storm drainage facilities within the Municipality. These policies are to be adhered to in the production of all stormwater management (SWM) facilities, including sewers, surface drainage, related environmental facilities, and water resources components. This is a comprehensive/living document to ensure sustainable development conditions. The Municipality has built in flexibilities in the document. Therefore, it is recommended that the Developer's Representative consult with staff prior to conducting analysis or design.

C1.01 Planning, Policies and Design Criteria

The most current version of the following Ministry of the Environment, Conservation, and Parks (MECP); Conservation Authority guidelines; and Ministry of Transportation policies and standards apply to the design of storm drainage facilities in the Municipality of North Grenville:

- i. MECP (i.e., Stormwater Management Planning and Design Manual, March 2003)
- ii. Conservation Authority Watershed Development Policies (Rideau Valley Conservation Authority or South Nation Conservation Authority)
- iii. existing Watershed or Subwatershed plans within the Municipality
- iv. Credit Valley Conservation and Toronto and Region Conservation Authority (Low Impact Development Stormwater Management Planning and Design Guide, 2010)
- v. MTO (i.e. Drainage Management Manual, 1997; and Highway Drainage Design Standards, 2008)

The Developer's Representative is also required to confirm design criteria and obtain approvals from any other relevant ministries or agencies (i.e., Ministry of Transportation, Ministry of Natural Resources, Department of Fisheries and Oceans, etc.).

The planning and design of SWM facilities shall be discussed with the Director and the Conservation Authority early in the planning process and shall focus on minimizing the number of pond facilities. Individual on-site SWM facilities are discouraged unless for private industrial and commercial usage. Water quality and quantity control in new development areas are to be provided in Municipality-owned blocks. In the case of infilling proposals, on-site SWM concepts may be considered by the Municipality in conjunction with any potential off-site storm drainage improvements. Off-site storm drainage requirements will be determined during the preconsultation process.

The planning and design process shall begin with Low Impact Development (LID) features where possible to minimize reliance on larger end-of-pipe facilities and to optimize water balance. Where ponds are used, the planning and design of each pond shall focus on opportunities to

integrate the pond with the surrounding topography and land uses. Ponds are to be created as public amenity features and are to be safe, visible, aesthetic, and accessible to the general public. Opportunities are to be maximized for linkages through the use of trails to larger open space, floodplain areas, or other SWM facilities.

The planning and design of SWM works are to have full regard for riparian rights of both upstream and downstream landowners as well as the potential responses of the receiving waterbody. The Developer must adequately address any change in flow rates, volumes, or water levels that would occur as a result of the development, SWM drainage areas, and/or instream works to neighbouring private properties. Written permission from affected landowners must be sought in cases where acknowledged impacts are proposed and governing legislation must be strictly followed.

C1.02 Rainfall Data

The Municipality has adopted the MTO IDF Curve:

(http://www.mto.gov.on.ca/IDF_Curves/terms.shtml)

Intensity/Duration/Frequency (IDF) curves at the intersection of Highway 416 and County Road 43 for the 1:2 to 1:100-year storms.

The City of Ottawa IDF data taken from Ottawa Airport may be considered appropriate for the Municipality of North Grenville where the project area is using background information established with the City of Ottawa data. It is recommended that the Developer's Representative consult with the Director prior to conducting analysis or design to establish the appropriate IDF Curve. Rainfall IDF curve as defined by Equation 1 and defined by Table 1 are to be used.

Equation 1: $I = At^B$

Where: I= Intensity (mm/hr)

A = is the value of the IDF curve at the 1 hr storm duration

T = Time of Concentration (in hrs)

B = The slope for each line on the IDF log-log plots.

Table 1 - Rainfall IDF Curve Equations

Storm	А	В
1:2 year	20.1	-0.699
1:5 year	26.7	-0.699
1:10 year	31.1	-0.699
1:25 year	36.6	-0.699

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1:50 year	40.7	-0.699
1:100 year	44.7	-0.699

C1.03 Hydrology and Hydrologic Modelling

The hydrologic evaluation for the distribution and movement of stormwater runoff in both the existing and proposed conditions can be completed using a variety of methods. Care should be taken in the selection and application of a method, with consideration of the advantages and limitations of each method. The methods available for stormwater runoff, including applicable uses, are described below.

Rational Method/Modified Rational Method

The Rational Method is a runoff estimation method based on an empirical formula relating the peak flow rate to the drainage area, rainfall intensity and a runoff coefficient. The Rational Method is typically used to design storm sewers and estimate peak flow rates from small urban areas. Its application should be limited to scenarios where the time of concentration (t_c) is less than 30 minutes and with drainage areas that have direct flow (i.e. no storage within the drainage area). The Rational Method is formulated as follows: Q = 2.78 CiA

Where: Q = Peak Flow (I/s)

C = runoff coefficient

i= Intensity (mm/hr)

A = drainage area (ha)

The Modified Rational Method may be used to design detention storage systems for small sites, generally less than 5 ha. It may also be used where the time of peak storage closely coincides with the time of concentration for the peak flows (e.g. storage above a catchbasin). The volume of required detention storage in an area shall be computed using the table headings as follows:

Time	i	Qactual	Qallowable	Qstored	V _{stored}
(min)	(mm/hr)	(l/s)	(l/s)	(l/s)	(m^3)

Where: Time = time (minutes) starting with 5-minutes and increasing by 5-minute

intervals.

i= Intensity (mm/hr) for the storm event being evaluated at that time interval

Q_{actual} = Calculated flow (I/s) using the rational method

Q_{allowable} = Pre-determined allowable flow (I/s)

 $Q_{\text{stored}} = Q_{\text{actual}} - Q_{\text{allowable}}$

 V_{stored} = required storage in m³, calculated by converting Q_{stored} to m³/s and multiplying it by the total amount of seconds at that time interval

The time of concentration (t_c) shall be determined as outlined in Section C1.04.

Single Event Computer Modeling

The estimation of peak design flow rates can be done using computer model simulation. Computer analyses are best suited to large urban areas, rural areas, and designing SWM facilities. Generally accepted computer modeling software is: Visual Otthymo, SWMHYMO, PCSWMM, EPASWMM, and AutoDesk Storm and Sanitary Analysis. Other programs may be considered as acceptable, but it is recommended to consult with the Director ahead of modelling to confirm if there is an acceptable level of understanding (for review purposes).

A computer model requires the input of a variety of design parameters including the design storm. The design storm is used to generate a runoff hydrograph to determine how an area will respond and perform. Numerous types of design storms can be used ranging from historical storms to IDF curve-derived storms. When choosing a design storm, the designer should perform a sensitivity analysis using various storms and use the one that is most conservative.

When using a design storm, the designer must be careful in choosing the right storm time step. The storm's duration should be greater than twice the basin's time of concentration. A time step that is too small may overestimate peak flows. Should it be required to maintain a storm time step less than 10 minutes, consideration should be given to averaging the peak intensities to a 10-minute or greater average.

The applicable design storms are summarized below.

Chicago

The Chicago storm distribution was developed by C.J. Keifer and H. Chu and is based on 25 years of rainfall record in the City of Chicago and is widely used in the Eastern Ontario area. This storm distribution, which is derived with IDF curves, is generally applied to urban basins where peak runoff rates are largely influenced by peak rainfall intensities.

In general, the time step for this type of design storm should not be less than 10 minutes for most urban applications. The duration of the storm should also be chosen carefully, as it will have an impact on the peak flows. In general, it is recommended to use a 3-hour, 4-hour, or 6-hour duration, with consideration that the storm's duration should be greater than twice the basin's time of concentration.

SCS Type II

The Soil Conservation Service of America (now known as Natural Resource Conservation Service) developed the SCS Type II distribution in 1973 for applications in agricultural and rural areas and is commonly used in the Eastern Ontario area. The SCS storms are generally

applicable to undeveloped or rural basins where peak flow rates are largely influenced by the total depth of rainfall. The designer should use both the 12-hour and 24-hour storm to see which one has the greater impact. SCS storms are also checked when the peak volume is at issue in the urban area, suggest using the 6-hour storm.

Regional Frequency Analysis/Single Station Frequency Analysis

As noted in the Ministry of Transportation Drainage Management Manual 1997 (MTO DMM 1997) Chapter 8, Regional Frequency Analysis methods utilize regional watershed and climatic characteristics to calculate peak flows. They are easy to apply, require limited data, and are widely used for ungauged watersheds. They are some of the most accurate methods available for analysis of medium to large rural watersheds (drainage area of 2+ km²) with design flow return periods up to 100 years. The most common of these methods are:

- The Modified Index Flood Method (MTO DMM 1997)
- The Northern Ontario Hydrology Method (MTO DMM 1997)
- Ministry of Natural Resources and Forestry Index Flood Method (Ontario Flow Assessment Tool User Guide)

The MTO DMM 1997 identifies Statistical frequency analysis is one of the basic approaches available to determine the magnitude of a design flood. With this method, annual floods recorded at a stream gauging station are statistically correlated to provide a reasonably accurate means of estimating a design discharge.

The method involves interpretation of past stream flow data and derivation of a probability of occurrence by fitting a data series into a theoretical probability distribution. The discharge corresponding to the required design frequency may then be read from the distribution function curve. The most common of these methods are:

- Common Probability Distributions
- Transposition of Flood Discharges

Care should be taken when selecting a Regional or Single Station Frequency Analysis method since there are many limitations to each method. It is recommended to calculate flows using a variety of different applicable methods and select the appropriate flow based on calibration where possible.

C1.04 Key Hydrologic Parameters

The following provides guidance with respect to selecting various computational and modeling parameters. ¹

Time of Concentration/Inlet Time

The time of concentration (tc) is the time it takes for a drop of water from the hydraulicly farthest point in a drainage area to reach the downstream location where the flow is being calculated. The time of concentration of overland flow component (sheet flow) and for channel flow component is additive. As noted in the MTO DMM 1997 Chapter 8, if the design storm duration is less than tc, the runoff will be less than maximum since not all of the watershed area will be contributing.

There are several methods available to determine tc. Two recommended approaches are:

- the Airport formula (runoff coefficient < 0.4)
- the Bransby Williams formula (runoff coefficient > 0.4)

Details regarding these methods can be found in the MTO DMM 1997 Chapter 8. Other to methods will be acceptable if a description confirming the appropriate application of the method is provided by a qualified engineer.

In storm sewer design, the overland component is referred to as the inlet time. The inlet time is defined as the time it takes for flow to reach the first inlet (CB at the upper end of the system) from the furthest point in the inlet's sub-area. The time of concentration is then computed as the sum of the inlet time and the travel time within the conduit. The inlet time is a critical parameter that can have significant impact on the amount of flow being generated.

A minimum inlet time of 10 minutes is to be used for all land uses and lot grading configurations. For the sizing of catch basin leads connecting back yard drainage structures to the street sewer, the inlet time is to be 15 minutes.

Hydrologic Soils Group

Four Hydrological Soil Groups are defined by the SCS method:

<u>Group A (low runoff potential):</u> Soils having a high infiltration rate even when thoroughly wetted and consisting mainly of deep, well to excessively drained sands or gravel. These soils have a high rate of vertical water transmission.

<u>Group B:</u> Soils having a moderate infiltration rate when thoroughly wetted and consisting mainly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse texture. These soils have a moderate rate of water transmission.

<u>Group C:</u> Soils having a slow infiltration rate when thoroughly wetted and consisting mainly of soils with a layer that impedes downward movement of water or soils with moderately fine to fine texture. These soils have a slow rate of water transmission.

<u>Group D (high runoff potential):</u> Soils having a very slow infiltration rate when thoroughly wetted and consisting mainly of clay soils with a high swelling potential, soils with a permanent high-water table, soils with a clay pan or clay layer at or near the surface and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

A breakdown of the soils type, description and associated soils group is located in Table 2.

Table 2 - Hydrologic Soils Group General Soil Type

Soil Type and Soil Description	HSG
Sandy, Sandy Loams and Gravels: Overlying Sand, Gravel or Limestone Bedrock: Very Well Drained	А
Sandy, Sandy Loams and Gravels: Overlying Sand, Gravel or Limestone Bedrock: Imperfectly Drained	AB
Sandy, Sandy Loams and Gravels: Shallow, Overlying Percambrian bedrock or Clay Subsoil	В
Medium to Coarse Loams: Overlying Sand, Gravel or Limestone Bedrock: Well Drained	AB
Medium to Coarse Loams: Shallow, Overlying Percambrian bedrock or Clay Subsoil	В
Medium Textured Loams: Shallow, Overlying Limestone bedrock	В
Medium Textured Loams: Overlying Medium Textured Subsoil	ВС
Silt Loams, Some Loams: With Good Internal Drainage	ВС
Silt Loams, Some Loams: With Slow Internal Drainage and Good External Drainage	С
Clay, Lay Loams, Silty Clay Loams: With Good Internal Drainage	С
Clay, Lay Loams, Silty Clay Loams: With imperfect or poor external drainage	С
Clay, Lay Loams, Silty Clay Loams: With Slow Internal Drainage and Good External Drainage	D

Runoff Coefficients

The runoff coefficient (C), as applied in the Rational Method, accounts for the process of hydrologic abstractions and runoff diffusion. The hydrologic abstractions include interception, infiltration, surface storage, evaporation, and evapotranspiration. Runoff diffusion is a measure of the catchment's ability to attenuate the flood peaks. It is also important to note that the appropriate value of C depends on the magnitude of the storm; higher values may be required for extreme storm events to account for reduced abstraction and diffusion effects.

Runoff coefficients shall be selected based on land use and soil type as noted in Table 3.

Table 3 – Runoff Coefficients

Vegetetien, Tenegraphy	Hydrologic Soils Group								
Vegetation: Topography	Α	AB	В	ВС	С	CD	D		
Woodland: Flat (0-5% Slope)	0.10	0.17	0.23	0.30	0.33	0.37	0.40		
Woodland: Rolling (5-10% Slope)	0.25	0.28	0.32	0.35	0.40	0.45	0.50		
Woodland: Hilly (10-30% Slope)	0.30	0.37	0.43	0.50	0.53	0.57	0.60		
Pasture: Flat (0-5% Slope)	0.10	0.17	0.23	0.30	0.33	0.37	0.40		
Pasture: Rolling (5-10% Slope)	0.16	0.23	0.29	0.36	0.42	0.49	0.55		
Pasture: Hilly (10-30% Slope)	0.22	0.29	0.35	0.42	0.48	0.54	0.60		
Cultivated: Flat (0-5% Slope)	0.30	0.37	0.43	0.50	0.53	0.57	0.60		
Cultivated: Rolling (5-10% Slope)	0.40	0.47	0.53	0.60	0.63	0.67	0.70		
Cultivated: Hilly (10-30% Slope)	0.53	0.59	0.66	0.72	0.75	0.79	0.82		

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Paved or Roofs	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Gravel	0.25	0.33	0.40	0.48	0.55	0.63	0.70
Road Shoulders	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Lakes and Wetlands	0.05	0.05	0.05	0.05	0.05	0.05	0.05

Composite runoff coefficients are to be calculated as a function of both total imperviousness and storm return period. Where development is existing or proposed, the runoff coefficient should be increased as follows:

For the 1:25-year storm: Add 10% to C value
For the 1:50-year storm: Add 20% to C value
For the 1:100-year storm: Add 25% to C value

Where available, serviceability studies will often provide the runoff coefficients for the various types of properties within the study area. Some serviceability studies even provide maximum allowable release rates to storm sewers on a per/ha basis. Where available, the runoff coefficient, imperviousness ratios, or release rates defined in a serviceability study should be used in the design of storm sewers within the specific drainage area. If no such information is available, the designer should derive the coefficients per the methodology outlined in this section.

Imperviousness

There are two types of imperviousness ratios used in hydrologic models:

- 1. Total imperviousness ratio: which is the total paved/impervious area within a sub-catchment divided by the total sub-catchment area.
- Directly connected imperviousness ratio: which is the directly connected area within a sub-catchment divided by the total sub-catchment area. The directly connected area is defined as the part of the total impervious area that drains directly to the storm sewer system, i.e. does not flow over pervious/grassed areas before entering the sewer system.

Some hydrologic models require both types of imperviousness ratios as inputs while others require only the directly connected imperviousness ratio. For residential areas with split lot grading, for the sub areas, the total part of the roof area (typically half of the roof area) within the sub area must be included as part of the directly connected imperviousness area.

Antecedent Moisture Condition

Due to the lack of records on soil moisture, the MTO DMM 1997 defines the antecedent moisture condition to be measured based on the premise that soil moisture is depleted at a rate proportional to the amount of storage in the soils.

The CN for a given soil varies with the initial antecedent moisture conditions (AMC). The three initial soil moisture conditions are:

- AMCI dry
- AMC II average moisture
- AMC III saturated

In the Eastern Ontario area, the soil saturation shall be AMC II. For critical infrastructure, the curve numbers shall be converted to AMC III when evaluating flows for design storms greater than the 1:100-year event.

Curve Numbers

Curve Numbers (CN) are used in the SCS method. The Curve Number is a function of soil type, ground cover, percentage of impervious area, and antecedent moisture conditions. The CN's can be found in the Table 4.

Table 4 – Land Use and Associated Curve Numbers

Land Use and Treatment: Condition		Hydrologic Soils Group							
		AB	В	ВС	С	CD	D		
Fallow Straight Row	77	82	86	89	91	93	94		
Row Crops Straight Row: Poor	72	77	81	85	88	90	91		
Row Crops Straight Row: Good	67	73	78	82	85	87	89		
Row Crops Contoured: Poor	70	75	79	82	84	86	88		
Row Crops Contoured: Good	65	70	75	79	82	84	86		
Row Crops Contoured and Terraced: Poor	66	70	74	77	80	81	82		
Row Crops Contoured and Terraced: Good	62	67	71	75	78	80	81		
Small Grain Straight Row: Poor	65	71	76	80	84	86	88		
Small Grain Straight Row: Good	63	69	75	79	83	85	87		
Small Grain Contoured: Poor	63	69	74	78	82	84	85		
Small Grain Contoured: Good	61	67	73	77	81	83	84		
Small Grain Contoured and Terraced: Poor	61	67	72	76	79	81	82		
Small Grain Contoured and Terraced: Good	59	65	70	74	78	80	81		
Close-seeded Legumes or Rotation Meadow Straight Row: Poor	66	72	77	81	85	87	89		
Close-seeded Legumes or Rotation Meadow Straight Row: Good	58	65	72	77	81	83	85		
Close-seeded Legumes or Rotation Meadow Contoured: Poor	64	70	75	79	83	84	85		
Close-seeded Legumes or Rotation Meadow Contoured: Good	55	62	69	74	78	81	83		
Close-seeded Legumes or Rotation Meadow Contoured and Terraced: Poor	63	68	73	77	80	82	83		

Close-seeded Legumes or Rotation Meadow	1		T				
Contoured and Terraced: Good	51	59	67	72	76	78	80
Pasture or Range Flat: Poor	68	74	79	83	86	88	89
Pasture or Range Flat: Fair	49	59	69	74	79	82	84
Pasture or Range Flat: Good	39	50	61	68	74	77	80
Pasture or Range Contoured: Poor	47	57	67	74	81	85	88
Pasture or Range Contoured: Fair	25	42	59	67	75	79	83
Pasture or Range Contoured: Good	6	21	35	53	70	75	79
Meadow Straight Row: Good	30	44	58	65	71	75	78
Woods: Poor	45	56	66	72	77	80	83
Woods: Fair	36	48	60	67	73	76	79
Woods: Good	25	40	55	63	70	74	77
Farmsteads: Small	59	67	74	78	82	84	86
Farmsteads: Medium	72	77	82	85	87	88	89
Farmsteads: Large	74	79	84	87	90	91	92
Fallow	77	82	86	89	91	93	94
Crop and Other Improved Land	66	70	74	78	82	84	86
Pasture or other unimproved lands	58	62	65	71	76	79	81
Woodlots and Forest	50	54	58	65	71	74	77
Impervious Areas	98	98	98	98	98	98	98
Bare Bedrock Surface Flow	98	98	98	98	98	98	98
Bare Bedrock Groundwater Flow	70	70	70	70	70	70	70
Lakes and Wetlands	50	50	50	50	50	50	50
Open Space (Lawns, Golf Courses, Cemeteries, etc.):							
Poor (grass cover <50%)	68	74	79	83	86	88	89
Open Space (Lawns, Golf Courses, Cemeteries, etc.): Fair (grass cover 50% to 75%)	49	59	69	74	79	82	84
Open Space (Lawns, Golf Courses, Cemeteries, etc.): Good (grass cover >75%)	39	50	61	68	74	77	80
Paved parking lots, roofs, driveways etc.	98	98	98	98	98	98	98
Paved: Curbs and storm sewers (excluding ROW)	98	98	98	98	98	98	98
Paved: Open ditches (including ROW)	83	86	89	91	92	93	93
Gravel (including ROW)	76	81	85	87	89	90	91
Dirt (including ROW)	72	77	82	85	87	88	89
Commercial and Business	89	91	92	93	94	95	95
Industrial	81	85	88	90	91	92	93
Residential average lot size: 1/8 acre [0.05 ha] or less (townhouses)	77	81	85	88	90	91	92
Residential average lot size: 1/4 acre [0.10 ha]	61	68	75	79	83	85	87
Residential average lot size: 1/3 acre [0.13 ha]	57	65	72	77	81	84	86
Residential average lot size: 1/2 acre [0.20 ha]	54	62	70	75	80	83	85

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Residential average lot size: 1 acre [0.40 ha]	51	60	68	74	79	82	84
Residential average lot size: 2 acres [0.81]		57	65	71	77	80	82
Developing urban areas: Newly graded areas (pervious area only, no vegetation)	77	82	86	89	91	93	94

In cases where more than one land use is within a single drainage area, a weighted curve number is calculated. This weighted value is called the composite curve number (CNc). A commonly applied methodology to calculate a modified CN value (CN*) is based on measured and calibrated values of Ia. This methodology is recommended for application of the SCS Method in the Eastern Ontario area.

Depression Storage/Initial Abstraction

If the intensity of the rainfall reaching the ground exceeds the ground's infiltration capacity, the excess will begin to fill the small depressions on the ground surface. For impervious surfaces, this will occur almost immediately. Once these tiny depressions have been filled, overland flow will start and will contribute to runoff. Depression storage, also referred to as Initial Abstraction, parameters are most often applied when using computer methods. The Initial Abstraction (Ia) can be calculated within a computer model or using the SCS Method.

Infiltration

Rainfall that reaches pervious ground surfaces will initially infiltrate into the upper layer of the soil. With extended periods of dry weather, the infiltration capacity of the soil will approach its maximum capacity; however, this capacity will diminish as the storm progresses and the soil becomes saturated. The Horton Method provides a hydrologic based approach to calculating infiltration rates and is commonly applied in urban drainage models. The Horton infiltration equation defines the infiltration capacity of the soil in time based on a decay function ranging from a initial maximum infiltration rate that changes to a lower limiting rate as the storm progresses and is stated as $f = fc + (f_0 - f_c)e^{-k(t)}$

Where: f = infiltration rate at time t (mm/hr)

fc = final infiltration rate (mm/hr)

fo = initial infiltration rate (mm/hr)

 $k = decay coefficient (t^{-1})$

The infiltration parameters based on the infiltration medium is as follows:

Material Type Dry Soils Moist Soils

Sandy Soils	254.0	84.7
Loam Soils	152.4	76.2
Clay Soils	50.8	0.6

The time in days for a fully saturated soil to dry completely ranges from 2 to 14 days.

Typically, within the North Grenville area, the default values are:

fc = 13.2 mm/hr

fo = 76.2 mm/hr

 $k = 0.00115 \text{ s}^{-1}$

Hydrologic Reference Point

Hydrologic reference point(s) are location(s) of importance onsite and/or downstream of a site, in which the drainage area size and peak flow can be compared to ensure no adverse impacts as a result of development. Should negative impacts be demonstrated, changes to the design or mitigation measures are required until adverse impacts are neutralized.

C1.05 Levels of Service

The level of service to be provided by the storm drainage system is listed in Table 5 unless stipulated otherwise. The planning of access routes for emergency services (i.e., police, fire, ambulance) may result in higher levels of service as determined by the Municipality, including a regional storm analysis (e.g. historical storms such as Hurricane Hazel, Timmins Storm, etc.).

Table 5 - Levels of Service for Major and Minor Systems

Item	Levels of Service	Comments
Minor System	1:5-year storm	Catchbasin density such that sewers
(Urban) Storm		capacity largely used during 1:5-year
Sewers		storm
		 Flow spread onto roadways to meet
		maximum widths per MTO Highway
		Drainage Design Standards on collector,
		atrial, and highway roads
Minor System	1:5-year storm (local	The maximum flow depth shall be 1.0m
(Rural) Ditching	roadway) 1:10-year	The minimum freeboard to the top of
	storm (collector or	subgrade shall be 0.3 metres for ditches
	arterial roadway)	and cross-culverts

Hydraulic Gradeline	1:100-year storm	 Minimum ditch depth shall allow for the Granular 'B' subbase to fully drain. The ditch sizing/design shall consider additional shared horizontal requirements (e.g. utilities/streetlights, etc.) No closer than 0.3 m between 1:100-year
		 storm hydraulic gradeline and the underside of footing Where sump pumps are required, separation distances to be directed by the Municipality
Major System (Urban) Overland Flow	1:100-year storm	 Large drainage areas may require classification as a floodplain using regulatory storm criteria (Conservation Authority) overland flow cannot exceed width or flow capacity of right-of-way
Major System (Rural) Ditching	1:100-year storm	 No maximum depth Unless otherwise acceptable by Municipality, the design of the roadside ditch shall ensure that flow will not spread onto either the shoulder or the travel lane and water shall not extend beyond the right-of-way
Culverts	Per MTO Highway Drainage Design Standards	Refer to Table 3
SWM Treatment - Quantity Control	25mm, 2,5, 10, 25, 5, and 1:100-year storm	 Post-development restriction to predevelopment levels unless otherwise directed by Municipality At a minimum, projects under the site plan approval process shall show results for the 1:5 and 1:100-year storms At a minimum, projects under the subdivision approval process shall show results for all storm events listed in the LOS
SWM Treatment - Quality Control (first flush) event	4-hour, 25mm design storm or 1:2-year storm	 Unless otherwise directed by Municipality In addition to requirements per Regulatory guidelines
Critical Infrastructure	Regional Storm or Greater	 Very special cases to be specified at the discretion of the Municipality

1:10 year

100% of 100 year

Driveways

Storm sewers are to be initially sized for the 1:5-year storm as per Table 6. Subsequent hydraulic gradeline analyses and SWM may increase sewer sizes and/or require catchbasin inlet controls to be used.

Road Classification	Up to 6 m Span	Over 6 m Span	Check Flow for Scour
Urban Arterial Road	1:50 year	1:100 year	130% of 100 year
Rural Arterial Road	1:25 year	1:50 year	115% of 100 year
Urban Collector Road			
Local Road	1:10 year	1:25 year	100% of 100 year

1:5 year

Table 6 - Level of Service for Bridges and Culverts (per MTO HDDS)

The Municipality may require higher levels of service in areas deemed critical to emergency services, such as near hospitals, etc. The Municipality may accept a lower level of service on low volume roads provided there is sufficient reasoning, no foreseeable changes to the road classification in the 50+ year horizon and supporting evidence of no negative impact upstream and downstream of the crossing.

C2.00 Stormwater Management

The intent of an overall stormwater management design is to provide an independent drainage system capable of conveying, treating, and controlling the stormwater runoff. The treatment system should employ Best Management Practices (BMP's) and Low Impact Designs (LID's) wherever possible. The intent of implementing stormwater BMP's/LID's is to create a design that best addresses the water quality, erosion, and quantity concerns, while maintaining the intended use of the facility.

Stormwater management facilities shall be designed to meet provincial SWM prerequisites as set out by MNRF, MECP or the Conservation Authority. Should LIDs not be possible, the Design Engineer shall give an explanation within the SWM Report, to the satisfactory of the Municipality, addressing the methods reviewed and reason why the methods are not feasible.

SWM facility locations, functions and design criteria shall be confirmed through consultation with the Conservation Authority and the Director. Where Stormwater Master Plans have been completed, the design criteria shall follow the approved Master Plan. SWM facilities are acceptable to the Municipality when the designs are safe, maintainable, integrated with the surrounding landscape, and aesthetically pleasing.

The Municipality concedes the overall design requirements to the most recent provincial direction, as is acceptable to the Conservation Authority. Exceptions to this are in circumstances that involve:

- i. matters of public safety and aesthetics
- ii. maintenance requirements
- iii. protecting the riparian rights of private Landowners
- iv. protection of municipal infrastructure
- v. conflicts with land use
- vi. responses of the receiving water body

In these cases, the Municipality may invoke additional release rate stipulations and design requirements over and above those required by other agencies.

C2.01 SWM Facility Treatment Options

Stormwater BMP's and LID's can be implemented at three different locations in the stormwater system: At the Source, Conveyance, and End of Pipe locations.

The purpose of at-the-source SWM facilities is to capture and treat the water immediately after runoff is generated. A major benefit to including SWM treatment at-the-source is a reduction of size in the stormwater network downstream of the site. Typical examples of at-the-source SWM facilities include, but are not limited to:

- i. Rainwater harvesting
- ii. Green roofs
- iii. Blue roofs
- iv. Permeable pavements
- v. Soakaways, infiltration, trenches, and chambers
- vi. Contour plowing
- vii. Superpipe
- viii. Rain Gardens

The purpose of conveyance SWM facilities is to treat the runoff prior to the end-of-pipe. A major benefit to including SWM treatment conveyance is a reduction of size of the end-of-pipe facility. Typical examples of conveyance SWM facilities include, but are not limited to:

- i. enhance grass swale
- ii. dry swale
- iii. wet swale
- iv. infiltration trenches

End-of-pipe stormwater management facilities receive stormwater from a conveyance system (ditches, sewers) and discharge the treated water to the receiving waters. The purpose of end-of-pipe SWMPs is to control the impacts of development which remain after at-the-source and conveyance controls have been applied. In most cases, new urban developments (unless they are small or of very low density) will require some sort of end-of-pipe SWMP. Typical examples of end-of-pipe SWM facilities include, but are not limited to:

- i. wet ponds;
- ii. wetlands;
- iii. dry ponds;
- iv. bioretention
- v. filters; and
- vi. oil/grit separators

Additional treatment options as well as information regarding the application, limitations, and design calculations can be found in the *Low Impact Development Stormwater Management Planning and Design Guide, Version 1.0*, 2010, from the Credit Valley Conservation and the Toronto Region Conservation Authority and *MECP Stormwater Planning and Design Guideline 2003*.

C2.02 SWM Facility Design Features

The Municipality requires integration of SWM facilities (e.g. pond, rain garden, etc.) grading design with the surrounding landscape. The design is to consist of varied contour grading to ensure public safety, provide improved aesthetics, support of a variety of plantings and vegetation and provide passive recreational activities (i.e., walking trails, bike paths, vistas, etc.). Safety aspects must be given special consideration. This includes identifying the use of gentle slopes in areas where passive recreation takes place, an increasing density of appropriate plantings and vegetation on steeper slopes, handrails/guardrails at headwalls, and placing signs which inform of the function and potential hazards of SWM facilities.

C2.03 Safety Features

The Municipality prefers not to unnecessarily require fencing around SWM facilities, but instead to allow for casual public access. Accordingly, public safety must be kept paramount in the design of SWM facilities.

The Municipality may elect to require fencing at the rear of lots backing onto SWM facilities. However, fencing around the perimeter of SWM facility blocks will only be considered by the Municipality when reviewing submissions where there are extenuating circumstances which prevent the above requirements from being met. Specific approval will be required from the

Municipality for consideration of fenced facilities. Where approval for fencing is given by the Municipality, 1.8 m high black vinyl-coated fencing, posts and hardware shall be used.

Specifically, SWM ponds must be designed to meet the following minimum standards and the MECP Guidelines (whichever is more restrictive) unless otherwise stipulated by a governing authority:

- i. Maximum permissible side slopes shall be 4:1.
 - 3:1 side slopes will be considered above the 100-year water level only in situations with extenuating circumstances as determined by the Director.
- ii. Berms are to be designed as proper dams (clay core, toe drains, etc.).
- iii. Signage to educate and advise public of facility must be erected (refer to Standard Drawing C-01).
- iv. Suitable landscape plantings are required to discourage access, break accidental falls, and to provide for both aesthetics and environmental enhancement. Landscaping shall be in accordance with the requirements of the Municipality's Parks, Recreation and Culture Department.
- v. Bollards or gates to discourage vehicular access to maintenance road must be installed.
- vi. Safety grates shall be provided on all storm sewer inlet and outlet pipes and safety railings shall be provided along the top of all headwalls 600 mm in height or greater.

C2.04 Operational and Maintenance Features

The SWM facility designs are to incorporate features that allow the Municipality to complete the operation and maintenance of the facility. It is strongly recommended that the Developer's Representative arrange a pre-consultation meeting with the Director once a preliminary design has been prepared to discuss maintenance operations and features, specifically clean-out procedures and sediment management and removal.

For SWM ponds these features include:

- i. Maintenance road to access bottom of sediment forebay and to access main outlet(s) having a maximum gradient of 10%, minimum width of 3.0 m and minimum inside turning radius of 10.0 m to allow for maintenance vehicle access.
- ii. Either a bypass sewer between inlet and outlet or dewatering perforated pipe, equipped with a valve closing clockwise, leading to a dewatering sump (where gravity is not feasible) in the outlet structure. Valve to be easily accessible from the maintenance pathway.
- iii. All maintenance vehicle access roads shall be structurally designed to support municipal equipment.

- iv. Flow control structures shall be located for easy access, maintenance and cleaning. These must be protected from public access where safety is an issue and must blend readily into the landscape (avoid railings, etc.).
- v. Minimum orifice size of 75 mm diameter.
- vi. In industrial/commercial areas, a valve shall be provided as part of the normal pond outlet design to enable the normal pond outlet to be closed in case of chemical spills.

C2.05 Operations and Maintenance Manual

A SWM Facility Operations and Maintenance Manual is to be prepared for the Municipality by the Developer's Representative for new SWM facilities. The manual is to describe how each facility operates and the maintenance requirements of the facilities. The manual shall also include estimated yearly maintenance costs for the facilities along with supporting calculations. Any collection system SWM components, such as oil and grit separators are to be included in the manual. The design of the system should minimize operating and maintenance costs.

A list of typical items that should be included in the manual is as follows:

- i. Location
- ii. Design Drawings
- iii. Type of SWM Facilities
- iv. Facility Specifics, such as, but not limited to:
 - How the facility works (describe methodology of typical events)
 - Design Values for Facility (volumes, elevations, discharges, design event, over topping, etc.)
 - Detention Time/Draw Down Time
 - Reduced Scale Plan of Facility
 - Access (cleaning ports, valves, etc.)
 - Inspection (what to check, frequency)
 - Sediment (anticipated volume, frequency of removal, disposal, testing)
 - Maintenance (grass cutting, weed control, vegetation replanting, garbage removal, sediment removal, etc.)
 - Annual Cost Estimate for all Maintenance Activities
 - Inspection schedule for the proposed pond

Additional items as per the MECP latest Stormwater Management Planning and Design Manual should also be included as deemed appropriate for the particular facility

C3.00 Stormwater Conveyance

C3.01 General

An evaluation of stormwater conveyance shall be completed to minimize risk to the public safety and confirm the integrity of the conveyance system. Acceptable stormwater conveyance systems vary depending on the zoning, neighbouring conveyance systems and available stormwater outlet. Therefore, it is recommended that the Developer's Representative consult with staff prior to conducting analysis or design. Stormwater conveyance generally falls into three separate categories as described below:

Urban stormwater networks typically include roadway conveyance along the curb, catchbasins and maintenance holes, and sewer pipes. Additional features that may be part of an urban sewer network may include rear-yard drainage swales.

Rural stormwater networks typically include roadside ditches and culverts. Additional features may include side yard drainage swales.

Semi-urban stormwater networks typically include a combination of the rural and urban networks with shallow ditching and small diameter sewers. Urban and rural design parameters apply to all of this design category.

Stormwater networks shall be designed to intercept runoff from external areas naturally draining through development sites.

C3.02 Hydraulic Modeling

The purpose of the hydraulic analysis is to determine whether the stormwater conveyance networks have sufficient capacity to convey the design flow without causing adverse impacts to infrastructure, surrounding lands, and public safety. The hydraulic analysis can be done using the computer model simulation. Generally accepted computer analyses software for urban drainage systems include: StormCAD, PCSWMM, EPASWMM, and AutoDesk Storm and Sanitary Analysis. Generally accepted computer analyses software for watercourse analysis and culverts include HEC-RAS, HY-8, PCSWMM, EPASWMM, CulvertMaster, FlowMaster, and AutoDesk Storm and Sanitary Analysis. Other programs may be considered as acceptable, but it is recommended to consult with director ahead of modelling to confirm if there is an acceptable level of understanding (for review purposes).

C3.03 Urban Stormwater Network Design Parameters

The design of storm sewer network conveyance systems shall follow "dual drainage" principles, which consist of:

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- i. The minor system shall convey runoff up to and including the 1:5-year design storm (as noted in Section C1.05) under gravity conditions.
- ii. The major system shall convey runoff from storms greater than the minor storm up to and including the 1:100-year design storm (as noted in Section C1.05). The design of the major system shall be such that runoff is conveyed within the boundaries of municipal road allowances, blocks or easements.

Storm sewers should be sized to convey the peak minor system design flow in accordance with Manning's equation, whereby the friction slope is assumed the same as the bed slope of the pipe. The sizing of sewers at slopes greater than the critical slope is limited by inlet capacity and not friction slope. At a minimum, the sewer shall be designed with the slopes to meet the minimum velocity shown in Section C4.05. However, the Municipality may consider flatter grades for sewers greater than 1500mm diameter, in special circumstances, provided a minimum velocity of 1 m/s can be attained.

The storm sewer system shall be designed to include capacity for connection of foundation drains or weeping tiles. The storm sewers shall be at an appropriate depth to provide connection to foundation drains, where possible. A hydraulic gradeline analysis shall be completed and submitted for review. Sufficient inlet control devices at appropriate locations shall be determined by the Designer to ensure that the minor system captures not more than its nominal capacity so that gravity flow conditions are maintained in the minor system. Inlet control devices shall be noted on design drawings including flow rate and maximum control elevation and connection details sufficient for construction.

During the major storm event it must be demonstrated that the Hydraulic Grade Line (HGL) for the 100-year storm (as noted in Section C1.05) will be no closer than 0.3m to the finished basement floor elevations of the dwellings, unless otherwise directed by the Municipality. Consult with the Municipality where physical outlet constraints and geotechnical constraints do not allow for the HGL to be below the foundation.

Flow spread onto traveled lanes to meet maximum widths per MTO Highway Drainage Design Standards SD-3 for local, collector, and arterial, roads.

C3.04 Rural Stormwater Network Design Parameters

Roadside ditches capturing stormwater runoff are designed to convey the minor and major system flows in accordance with the MTO HDDS SD-9 and shall consist of:

- i. The minor system shall convey runoff from storms up to and including 1:5/1:10-year storm event (as noted in Section C1.05) at a maximum depth of 1.0 m and have a minimum freeboard of 0.3 m to the top of subgrade.
- ii. The major system shall convey runoff from storms greater than the minor storm up to and including the 1:100-year design storm (as noted in Section C1.05). There is no requirement for depth and freeboard for the 100-year storm event. The design of the major system shall be such that runoff is conveyed within the boundaries of municipal road allowances, blocks or easements.

The roadside ditch system shall be designed to include capacity for connection of foundation drains or weeping tiles. The ditches shall be at an appropriate depth to provide an outlet for the foundation drains.

In no case shall the velocity in a grass-lined channel exceed 1.5 m/s for the major system flow, unless appropriate channel lining has been designed to resist the erosion.

Roadside ditch physical parameters are listed in Table 7.

Table 7 – Roadside Ditch Physical Parameters

Roadside Ditch Design Parameters		
Maximum Foreslope*	3H:1V	
Maximum Back Slope*	2H:1V	
Minimum Longitudinal Slope	0.3 %	
Base Width - Desirable Standard	1.0 m	
- Minimum Standard	0 m (V-ditch)	
Minimum Ditch Depth for Minor System Design Flow:		
- Normal Ditch (road at grade or in cut)	0.85 m	
- Ditch at toe of fill slope	0.25 m	
Distance that roadside ditch invert shall be below the road subgrade elevation		
- Desirable Standard	0.5 m	
- Minimum Standard	0.3 m	
*Steeper slopes in rock cut may be acceptable with geotechnical recommendations		

C3.05 Key Hydraulic Parameters

Swales and Open Channels

Swales and open channels can play an important role in both the major overland flow systems and the minor systems. They are to be designed to be aesthetically pleasing, safe, resistant to erosion and easy to maintain. Critical depths and energy to determine channel capacity in the supercritical range are to be considered. Design velocities are to be calculated using Manning's equation. Generally, grassed surfaces are adequate for velocities up to 1.0 m/s to 1.5 m/s and more robust erosion protection is required for velocities beyond this range.

Fences, garden sheds and other flow impediments significantly reduce the flow carrying capacity of swales on private property. Overland flow from public property onto swales on private property is not permitted. Overland flow must be limited to road rights-of-way, walkways and easements, free of fences and other impediments to flow.

Manning's n

The value of the roughness coefficient 'n' used in the Manning's Formula for ditches, swales, and open channels shall be per Table 8.

Table 8 - Acceptable Values for Manning's "n"

Grass Channel (>0.5 m deep)	0.030
Grass Swale (<0.5 m deep)	0.035
Rip-Rap Channel (>1 m deep)	0.045
Rip-Rap Channel (<1 m deep)	0.050

Overland Flow Route

A continuous overland flow drainage route is to be identified on the engineering drawings and grading plans. The extent of any overland ponding at low points is also to be shown on the grading plans. Storm inlets in sag conditions designed to capture and convey the major drainage system is to include a 50% blockage factor in its stormwater runoff capture rate.

Existing Channels/Watercourses

Channel realignment or channel restoration upstream or downstream of a water crossing that will alter the storage or discharge characteristics upstream of the crossing, shall be designed to meet the design standards of the crossing. As a minimum the combined capacity of the watercourse and floodplain shall convey the 25-year Design Flow. The main channel is to be designed to a lower Design Flow such that a stable channel is maintained.

C4.00 Storm Sewer Design

All storm drainage infrastructure, including sewers, maintenance holes, catchbasins, etc., are to conform to the design standards outlined herein and MECP criteria. Should any Provincial standards (i.e., MECP) exceed the Municipality's standards, those standards shall dictate.

C4.01 Peak Flows

The Rational Method is an acceptable method to calculate the peak flow, where it satisfies the criteria identified within Section C1.03. An acceptable alternative is single event computer modeling for peak flow evaluation; however the model results shall be provided in a standard sewer design sheet format.

C4.02 Runoff Coefficients

Composite runoff coefficients shall be calculated as noted in Section C1.04.

C4.03 Time of Concentration

Times of concentration to be used with the Rational Method are to be calculated per Section C1.04.

In situations where relatively large, undeveloped or parkland areas become tributary to a smaller urban drainage system, the lower time of concentration is to be used only where this results in higher flow rates. In these cases, only the lower portion of the undeveloped area would be contributing runoff, as a result of this shorter storm duration, proportional to the square root ratio of the two times of concentration. For example, an urban drainage system, having a time of concentration of 15 minutes, would also drain approximately 70% of a large undeveloped area, having a time of concentration of approximately 30 minutes, draining to that same point (i.e., $15/30 \, l/2 = 0.7$).

C4.04 Pipe Coefficients

Manning's Formula shall be used in determining the capacity of all storm sewers, as outlined above.

The value of the roughness coefficient 'n' used in the Manning's Formula shall be as follows:

i.	Concrete pipe all sizes	0.013
ii.	Concrete Box Culverts	0.013
iii.	Corrugated Steel < 150mm corrugation	0.024
iv.	Corrugated Steel > 150mm corrugation	0.033
٧.	Polyvinyl Chloride Pipe (PVC)	0.013
vi.	High Density Polyethylene (smooth inside wall)	0.013

C4.05 Flow Velocities

- i. Minimum flow velocity = 0.8 m/sec
- ii. Maximum full flow velocity = 4.0 m/sec

C4.06 Minimum Sizes

The minimum size for a storm sewer main shall be 250 mm in diameter.

C4.07 Minimum and Maximum Grades

The minimum and maximum grades for all storm sewers shall be designed to accordance with the flow velocities outlined in Section C4.05 and C3.03. The minimum grade for the first upstream leg shall not be less than 1.0%.

C4.08 Pipe Cover

Typically, a minimum cover of 2.1 m (from future road grade) is required to the top outside edge of the pipe barrel for the storm sewer. However, where specifically approved by the Municipality, minimum cover less than 2.1 m may be provided on storm sewers where servicing limitations exist, subject to the approval of the Director. Installation details are to be provided for consideration.

Where sewer depths exceed 4.5 m, risers are to be utilized and brought to within 2.1 m depth. The maximum allowable depth of sewer with direct lateral connections is 6.0 m measured from centerline of road to the obvert of the sewer Any sewer deeper than 6.0 m will be considered a trunk sewer and a separate shallower local sewer will be required for service connections. The local sewer shall be constructed directly above the truck sewer and common maintenance holes with drop structures shall be utilized.

C4.09 Location

All storm sewers shall be located as shown on the Standard Road Cross-Section. The standard location shall be 1.0 m offset from the centerline of the road allowance.

C4 10 Limits

All sewers shall be terminated at the subdivision limits when external drainage areas are considered in the design with suitable provision in the design of the terminal maintenance holes to allow for the future extension of the sewer.

C4.11 Sewer Alignment

All storm sewers shall be laid in a straight line between maintenance holes unless radial pipe has been designed. The storm sewer vertical alignment shall be designed obvert to obvert.

C4.12 Pipe Crossings

A minimum clearance of 0.30 m shall be provided between the outside of the pipe barrel at the point of crossing for storm and sanitary sewers. A minimum outside clearance of 0.5 m shall be provided for all sewer and watermain crossings in accordance with MECP policies.

In the event the minimum clearances cannot be obtained, the designs must adhere to MECP policies. In addition, the pipes shall be concrete encased to ensure that the pipes are properly bedded.

C4.13 Changes in Pipe Size

No decrease of pipe size from a larger upstream pipe to a smaller downstream size will be allowed regardless of the increase in grade.

C4.14 Sewer Pipe Material

All sewer pipe material shall conform to the List of Acceptable Materials included in Appendix 4 of this document.

C4.15 Pipe Bedding and Backfill

The class of pipe and the type of bedding shall be selected to suit loading and proposed construction conditions. Details and types of bedding and backfill are illustrated in OPSD 802.01 and 802.03. The width of the trench at the top of the pipe must be carefully controlled to ensure that the maximum trench width is not exceeded unless a higher class of bedding or higher pipe strength pipe is used. The recommendations of a Geotechnical Engineer will be required in determining strength of pipe required and construction methods to be used.

C4.16 Service Connections

Individual storm service connections are to be provided to all lots for the purpose of connecting foundation drains.

Service pipe material shall conform to the List of Acceptable Materials included in Appendix 4 of this document.

The use of sump pumps is discouraged but will be considered by the Director if they are deemed to be the only viable option available. (Roof leaders shall be directed overland.) The storm sewer system shall be designed such that the 1:100-year storm does not surcharge the sewers or create backwater effects that could surcharge the weeper tiles within 0.3 m of the underside of footing.

C5.00 Maintenance Holes

C5.01 Location

Maintenance holes shall be located at each change in alignment, grade or pipe material, intersections, at all pipe junctions, and at intervals along the pipe to permit entry for maintenance of the sewer.

C5.02 Maximum Spacing of Maintenance holes

Maximum Spacing for Maintenance holes is 120m.

Greater spacing may be permitted for large sewers. Cleanouts may be used only for special conditions and should not be substituted for maintenance holes nor installed at the end of laterals greater than 45m in length.

C5.03 Maintenance Hole Types

Maintenance holes shall be constructed of precast concrete. The standard maintenance hole details as shown on the OPS Drawings shall be used for maintenance holes. In cases where the standard drawings are not applicable, the maintenance holes shall be individually designed and detailed.

Maintenance hole covers shall be the "open" type per OPSD 401.010.

A reference shall be made on all Profile Drawings to the OPSD type and size of all storm maintenance holes.

Precast maintenance holes shall conform to ASTM Specification C478 latest revision.

C5.04 Maintenance Hole Design

- i. All maintenance hole chamber openings shall be located on the side of the maintenance hole parallel to the flow for straight run maintenance holes, or on the upstream side of the maintenance hole at all junctions.
- ii. The maintenance hole shall be centred on the sewer main.
- iii. The maximum change in the direction of flow in any sewer maintenance hole shall be no more than 90°. A change of flow direction at acute interior angles will not be permitted.
- iv. Safety gratings shall be required in all maintenance holes greater than 5.0 m in depth. Safety gratings shall not be more than 5.0 m apart and shall be constructed in accordance with OPSD 404.020. Where practical, a safety grating shall be located 0.5 m below the drop structure inlet pipe.
- v. Maintenance holes should be used at all changes in horizontal alignment and at all changes in vertical grade.
- vi. Maintenance holes should be used at all changes in pipe sizes.

C5.05 Grades for Maintenance Hole Frames and Covers

All maintenance holes located within the travelled potion of a roadway shall have the rim elevation set flush to the base course of asphalt. Prior to the placement of the surface course asphalt the maintenance hole frame shall be adjusted to the finished grade of asphalt. Steel

adjusting rings will not be permitted. Temporary asphalt curbs shall be constructed behind all catchbasins at base course asphalt stage.

C5.06 Head Losses through Maintenance Holes

Suitable drops shall be provided across all maintenance holes to compensate for the loss of energy due to the change in flow velocity and for the difference in the depth of flow in the sewers. Hydraulic calculations are required where the change in velocity through a maintenance hole is 0.6 m/s or greater. Refer to Table 9 for minimum drops across maintenance holes.

Table 9 - Minimum Drops Across Maintenance Holes

Maintenance Hole Type	Loss Incurred
Straight Run	Grade of Sewer
45°	0.03m
90°	0.06m

C6.00 Catchbasins

C6.01 Location and Spacing

Catchbasins should be provided at adequate intervals in the sewer system to ensure that the road drainage is able to be intercepted up to the capacity of the storm sewer. The spacing will vary with the road width, grade, crossfall and with the design storm frequency. The spacing will also be affected by the location of pedestrian crossing points, intersections, low points and driveway depressions.

Stormwater management systems using inlet control catchbasins may be designed with less frequent spacing than those below. In such cases, the designer should justify whatever spacing is used.

Table 10 – Maximum Spacing per Pavement Width

Road Gradient (%)	Maximum Spacing
0 to 3	110 m
3.1 to 4.5	80 m
4.5 to 5%	65 m
Over 5%	45 m

A double catchbasin is required where drainage is received from more than one direction, as at a low point, unless overland relief is provided no more than 0.05 m above the catchbasin frame. The Municipality will accept catchbasin sizing based on modeling, provided a 50% blockage factor is applied on catchbasins in sag locations with flow from multiple directions.

All catchbasins at street intersections shall be located on the tangent section of the curb at a minimum of 0.6 m distant from the beginning or the end of the radial portion of the curb.

Catchbasins shall not be located in driveway curb depressions, where possible.

Leads for catchbasins located close to maintenance holes should be connected directly to the maintenance holes.

Catchbasin leads shall be 200 mm diameter for single catchbasins and 250 mm diameter for double catchbasins.

Catchbasin leads shall have a minimum grade of 1%. The desirable gradient is 2%.

Catchbasin inlet control devices are to be approved by the Director.

C6.02 Catchbasin Capture

Calculations to estimate the catchbasin capture to the sewer system are to consider the type of grate, whether the catchbasin is in a "sag", the catchbasin lead diameter and any inlet control device. Capture rates are to consider the depth of flow over the grate based on the depth of flow over the downstream point of relief.

C6.03 Catchbasin Types

Catchbasins must be of the precast type as shown on the OPSD 705.01 or 705.02. Special catchbasins are to be designed and detailed to the satisfaction of the Director.

C6.04 Catchbasin Connections

Table 11 - Catchbasin Connection Type per Minimum Size & Minimum Grade

Туре	Minimum Size of Connection	Minimum Grade of
		Connection
Single Catchbasin	200mm	1%
Double Catchbasin	250mm	1%
Rear Lot Catchbasin	200mm	1%

C6.05 Catchbasin Frame and Covers

All catchbasin frame and covers located in roadways shall be "bike proof". as per OPSD 400.010, 400.020, 400.021, 400.030, 400.050, and 400.100 depending on the intended application.

Rear lot catchbasin frame and covers shall be as per Municipality of North Grenville Standard Drawing C-02, C-03, and C-04.

C6.06 Sumps

All storm structures are required to have sumps. For storm maintenance holes, a sump of 300 mm and for catchbasins (both road and rear yard) a sump of 600 mm is required.

Refer also to Section C4.16 - Service Connections.

C7.00 Culverts and Bridges

C7.01 General

At a minimum, hydraulic calculations for culverts and bridges shall be evaluated using a steady-state modeling program that builds on the flow, tailwater, culvert size, constriction, and Manning's values available to provide the inlet/outlet headwater elevations, as well as the outlet velocity.

Culverts shall be designed in accordance with the criteria in the MTO HDDS 2008 and MTO DMM 1997. Structural culverts and multi-span culverts with a total diameter equal to or greater than 3.0 m, as well as bridges shall be designed in accordance with e MTO HDDS 2008, MTO DMM 1997, and the most recent version of the Canadian Highway Bridge Design Code (CHBDC).

C7.02 Cross-Culverts

The term cross-culvert refers to drainage pipes which provide roadway and upland stormwater runoff conveyance, not on a watercourse, with both ends of the pipe at ground surface.

The minimum inside culvert diameter for a cross-culvert is 600 mm, while the minimum for private entrances is 450 mm. All cross-culverts, including private entrances, conveying only the roadway drainage shall be designed to drain the minor system flow in accordance with Section C1.05 for Minor System (Rural) Ditching. All cross-culverts shall have a minimum freeboard to the top of subgrade of 0.30 m for the minor system.

Riprap aprons per OPSD 810.010 shall be provided on all cross-culverts and where required based on flow characteristics at private entrances.

C7.03 Watercourse Crossings

Watercourse crossings include culverts and bridges which shall be designed to withstand the design flood without endangering the integrity of the structures and without roadway overtopping or embankment failure. A hydraulic assessment will be required to provide an opportunity to verify the minimum size and soffit elevation of the proposed structure, to adequately provide protection against potential scour, and to provide erosion mitigation measures.

The following criteria, summarizes the main hydraulic performance elements for required for culvert and bridge design.

Design Storm

Based on the span of the proposed crossing and the roadway classification the storm event per Section C1.05 shall be selected to complete the hydraulic analysis.

Freeboard

The minimum freeboard is measured vertically from the high-water level for the design flow to the edge of the travelled lane. As stated in Sub-section 3.2.1, HDDS WC-2 and Sub-section 3.2, HDDS WC-7, the minimum freeboard for arterial and collector roadways shall be greater than or equal to 1.0 m. The minimum freeboard for local roadways and private entrances shall be greater than or equal to 0.3 m.

Flood Depth

The flood depth criterion is required for culverts, which is expressed as the ratio of the water depth at the upstream face to the culvert diameter or rise (HW/D). According HDDS WC-7, Subsection 3.5: for culverts with a diameter or rise less than 3.0 m, the HW/D ratio should be less than or equal to a value of 1.5; for culverts with a diameter or rise 3.0 m to 4.5 m, the HW should be less than or equal to a value of 4.5 m; for culverts with a diameter or rise greater than 4.5 m, the HW/D ratio should be less than or equal to a value of 1.0.

Vertical Clearance

According to subsections 3.1 and 3.2.2 (HDDS WC-2), the clearance is measured vertically from the high-water level for the design flow to the lowest point on the soffit. There is no Clearance requirement for Closed-Footing Culverts and Open-Footing Culverts with a non-erodible bottom. For culverts with an erodible bottom, the vertical clearance for structures under an arterial and collector road shall be greater than or equal to 1.0 m, and for a local road shall be greater than or equal to 0.3 m.

Fish Passage

The design storm for calculating fish passage requirements is the 1:2-year storm event.

Velocity

The permissible velocity through culverts/bridges shall not exceed the erosion limit of the native material found both upstream and downstream of the crossing.

Scouring and Armouring

According to HDDS WC-3, Sub-section 3.2.1, scouring and armouring for standard road classifications, erosion protection shall be provided if the outlet velocity is above the permissible value. Riprap stones for protective aprons are designed for a velocity of 1.5 times the average velocity of the Design Flow. The thickness of the apron shall be not less than 1.5 times the median stone size.

Erosion protective aprons shall be provided if the outlet velocity is above the permissible velocity. The maximum permissive flow velocities shall conform to the MTO Design Chart 2.17. A maximum permissive flow velocity of 1.10 m/s has been assumed for design purposes, which conforms to a sand and silt or silty clay for flows carrying fine silt based on the geotechnical reports.

Relief Flow

According to HDDS WC-13, Sub-section 3.2.1, the maximum depth of flow on the roadway shall not exceed 0.3m at the cross section of the road for the Regulatory Flood. In addition, Sub-section 3.2.2 states that the product of the velocity and depth on the roadway shall not exceed 0.8m²/s.

Ice Flow

According to HDDS WC-11, Sub-section 3.1, the culvert soffit clearance shall be 0.3m above the maximum observed ice/debris build-up plus Winter Flow.

C7.04 Pipe Material

The minimum design service life for culverts shall be as follows: 75 years for watercourse crossings, 50 years for cross-culverts, and 25-year for private entrances. A durability review shall be completed on all crossings where steel pipes may be used to determine whether the estimated material service life (EMSL) of the crossing is greater than the required design service life. The (EMSL) shall be calculated using Section 7.0 of the MTO Gravity Pipe Design Guidelines 2014.

C7.05 Safety End Treatment

Cross-drainage structures that present a traffic hazard shall have safety slope end treatment that matches the foreslope unless already shielded by a roadside barrier. Extending inlets/outlets beyond the enhanced clear zone in order to eliminate a safety end treatment is permitted provided the roadside ditch can remain within the municipal right-of-way. Safety runner bars are required on pipes larger than 750 mm diameter.

Parallel drainage structures located in a roadside ditch adjacent to the travelled way or within the enhanced clear zone shall have a 3:1 or flatter safety slope end treatment. Cross members are required on pipes 300 mm in diameter or larger.

C8.00 Inlets, Outfalls and Special Structures

C8.01 Inlets

Inlet structures must be fully designed and detailed on the engineering drawings. Inlet grates shall generally consist of inclined parallel bars or rods set in a plane at approximately 18° with the top away from the flow.

Gabions or rip rap shall be provided at all inlets to protect against erosion and to channel flow to the inlet structure.

Precaution must be taken in the design of grating for structures to minimize the risk of entanglement or entrapment of a person.

C8.02 Outlets

The OPSD 804.03 standard headwall shall be used for all storm sewers less than 900 mm in diameter. For sewers 900 mm in diameter and larger the headwall shall be per OPSD 804.040 or individually designed. All headwalls shall be equipped with a grating over the outlet per OPSD 804.05.

Gabions, rip rap, or other erosion protection shall be provided at all outlets to prevent erosion of the watercourse and the area adjacent to the headwall.

C8.03 Safety Railings

Safety railings shall be provided along the top of all headwalls 0.9 m in height or greater. Railings may also be required along shorter headwalls where a risk to pedestrian safety has been identified. The site-specific conditions must be reviewed in determining the requirement for safety railings and must have due regard to public health and safety.

C9.00 Testing

Infiltration or exfiltration testing shall be completed on all sewers at the discretion of the Director. The Director shall be the sole judge of which test/tests are to be undertaken. All testing shall be witnessed by the Developer's Representative with the Director being notified a minimum of 48 hours prior to the test being carried out. The Developer's Representative will be required to certify the results of any tests carried out.

C9.01 Deflection Testing

Deflection tests only need to be completed when a deficiency is noted through CCTV, there is reason for concern, or as required by the Director. Deflection testing is to be completed per OPSS 410.

All sections of pipe that fail the deflection test shall be repaired and retested.

C9.02 Closed-Circuit Television Inspection

All newly constructed storm sewers and rear lot catchbasin leads shall be CCTV inspected upon satisfactory completion of all other testing. The sewers and leads must be CCTV inspected prior to the final placement of top course asphalt, the sewers being considered to be placed on

maintenance and again prior to being considered for Final Acceptance. CCTV inspections are to be carried out no more than 90 days prior to the request for Final Acceptance.

The Municipality will require written confirmation from the Developer's Representative that they have reviewed the videos and have found the sewers to be acceptable and free of all defects. Any deficiencies should be clearly identified in the Engineer's letter and verification that all deficiencies have been rectified must be included in the letter.

A permanent record in electronic format shall be supplied, illustrating a continuous record of the sewer installations, service connection, maintenance holes, etc. A report identifying any unusual or substandard conditions shall also be submitted.

The CCTV inspection shall be carried out by an Operator certified by NAAPI and shall be carried out in accordance with OPSS 409.

All videos, reports and data provided from these inspections shall become the property of the Municipality.

At the discretion of the Director, additional inspections and records may be required prior to "Final Acceptance".

C9.03 In Line Sumps

In line sumps are not acceptable.

C9.04 Infiltration/Exfiltration

Field testing for infiltration/exfiltration for sewer pipe installations in an open cut shall be carried out in accordance with OPSS 410.

C10.00 Private On-Site Stormwater Management Facilities

The Municipality endorses the practice of SWM on private property but cannot accept any assurance that these practices will be properly operated and maintained by the private Landowners. This is particularly applicable to on-site stormwater detention for the purposes of peak flow reduction or water quality improvement. Under specific conditions, on-site SWM can be recognized when sizing downstream works.

For private, on-site stormwater detention, the following conditions apply:

- a) "Peak Shaving" detention on parking lots or within landscaped ponds:
 - i. unacceptable on residential lots
 - ii. cannot reduce downstream detention requirements

- iii. can reduce municipal sewer sizes, but only where restricted by small diameter pipe between mainline sewer and a control maintenance hole at property line
- b) "Roof Top Detention" in non-residential areas:
 - i. can reduce downstream detention requirements
 - ii. for hydrologic calculation purposes at master planning stage, assumed flat roof area limited to maximum 15% of gross area of subdivision

The smallest acceptable restriction sewer is 100 mm diameter. Designers should account for the hydraulic losses of the small diameter outlet sewer when sizing any other on-site control devices, such as orifices controlling parking lot detention.

C10.01 On-Site Stormwater Management Guidelines

Except for low/medium density residential sites, drainage from private property is to be self-contained (minor system) and provide the same levels of service as with municipal infrastructure.

Parking lot detention should regard frequency, depth and duration of ponding. Generally, ponding depths should not exceed 0.15 m at the deepest point for the 1:5-year storm event and 0.30 m for the 1:100-year storm. Maximum parking lot drain-down time should be 60 minutes after a 1:100-year storm. Where depths, frequency, or drain-down times do not meet the above guidelines, consideration should be given to using grassed/landscaped areas for deeper, more frequent ponding and parking lots for only the upper registers of ponding.

Underground storage facilities should allow for proper ventilation and maintenance access. As with any buried infrastructure on private property, these facilities must meet the Building Code for the required cover, bedding, etc.

Site Plan Applications should include information on number and type of roof drain restrictions in support of the Stormwater Management Report.

For plans of non-residential subdivisions, the Storm Drainage Area Drawings are to show a table having the following peak design flow rates, labeled accordingly, for each block of land:

- i. 1:5-year storm flow (m3/s)
- ii. 1:100-year storm flow (m3/s)
- iii. permitted discharge to storm sewer (m3/s)
- iv. maximum allowable discharge from Block (m3/s)

C11.00 Construction

Storm drainage and stormwater management works are to be constructed in accordance with OPSS 407, OPSS 410, and these engineering standards. For work not covered under these standards, consult with the municipality to confirm requirements.

C12.00 Alternative Design and Construction Techniques

For no-dig and non-standard considerations consult with the municipality to confirm requirements.

Last Update: August 2022 C-35

SECTION D – WATERMAINS AND APPURTENANCES



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

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D1.00 Compliance

D1.01 General

Notwithstanding the guidelines and requirements identified herein, the MOECC Watermain Disinfection Procedure is to be met.

D2.00 Hydraulic Design

D2.01 General

All watermains shall be sized to meet the greater of the maximum day plus fire flow or the maximum hour demand. Watermains in subdivisions shall have a minimum of two connections to the existing water network. The Municipality will require a hydraulic analysis for all or any phased portion of the proposed watermain systems. Boundary conditions for modeling purposes shall be obtained from the Municipality or by carrying out on-site hydrant flow tests in consultation with the Municipality.

Separate fire protection and domestic services for private sites will be considered on a case-bycase basis.

D2.02 Fire Flow

Calculations using Fire Underwriters Survey and Ontario Building Code requirements are to be provided.

D2.03 System Pressures

The maximum sustained operating pressure shall not exceed 550 kPa (80 psi). If pressure in a localized area is above this level, a pressure reducing valve shall be installed on each service in that area.

Under normal conditions of maximum hour demand, the pressure shall not drop below 350 kPa (50 psi) at any point in the water system.

Under conditions of simultaneous maximum day and fire flow demands, the pressure shall not drop below 140 kPa (20 psi) at any point in the water system.

D2.04 Flow Design

The Hazen-Williams Formula in accordance with the current MECP (MOECC) design criteria shall be used for the design of water distribution systems.

D2.05 Domestic Demand

Domestic water demand shall be calculated on the basis of an average day consumption rate of 300 L/capita/day, or as directed by the Municipality.

Maximum Day and Peak Hour factors shall be 2.0 and 3.0 respectively, or as recommended by the MECP (MOECC) Guidelines for Drinking Water Systems.

Densities to use in determining expected populations in residential developments.

Table 1 – Density per Type of Dwelling (Persons Per Unit)

Dwelling Type	Density
Single Detached Dwellings	3.4 ppu
Semi-Detached Dwellings	2.7 ppu
Townhouses	2.7 ppu
Apartments	2 ppu

D2.06 Industrial, Commercial and Institutional (ICI) Water Demands

For ICI applications, consult with the municipality regarding demand parameters.

D2.07 Locations

Watermain to be located generally in the opposite lane of the sanitary main with a minimum 2.5 metres of separation. Valves are to be located outside of wheel paths.

D2.08 Depth of Cover

The minimum depth of cover shall be 2.4 m.

D2.09 Horizontal Separation between Sewers and Watermains

Watermains shall be designed to have a minimum clear distance of 2.5 m from any sewer or maintenance hole per MECP (MOECC) guidelines.

D2.10 Watermain Crossing Sewers and Other Utilities

Watermains shall normally cross above sewers with sufficient vertical separation to allow for proper bedding of the watermain (minimum 0.5 m).

When it is not possible for a watermain to pass over a sewer, the watermain passing under the sewer shall have a vertical separation of 0.50 m below the sewer and the top of the watermain. The sewer must be adequately supported to prevent settling and displacement of the joints. See Standard Details D-01 and D-02.

Watermains crossing over or under other utilities must be designed with a vertical separation of 150 mm between the outside edges of the watermain and the utility.

Separations to meet MECP F-6-1 guidelines.

D2.11 Dead-Ends

Watermain distribution system shall be designed in grid patterns and looped to avoid dead-end sections. Dead-end watermains are to be avoided.

In extreme situations, as determined by the Director, where it is determined that dead-end watermains are unavoidable, a fire hydrant shall be installed at the end of the watermain. Water service connections shall be grouped as much as possible at the end of the dead-end watermain or a 50 mm loop shall be constructed as per Standard Detail D-03. Calculations shall be provided to demonstrate that there is adequate water usage during low flow periods to maintain adequate chlorine residual levels at all times within the watermain.

Temporary dead-ends on watermains that are to be extended in the future shall be equipped with a 50 mm blow-off or temporary hydrant, at the end of the watermain per OPSD 1104.030. At the Director's discretion, metered automatic flushers may be required with the cost of all flushed water being borne by the Developer.

D2.12 Location Identification

A tracer wire shall be provided along the top of all watermains to permit field tracing of the watermain. The wire is to be secured to the top of the watermain at every fitting and valve and at intervals not to exceed 3.0 m. All tracing wires shall be 12-gauge, stranded copper wire complete with outer plastic coating.

Tracing wire shall be brought up the outside of each valve box so that continuity of the wire shall be maintained. The tracer wire is to be taped to the valve box every 0.6 m. The end of the tracer wire is to be placed into the inside of the valve box through a slot cut in the valve box no deeper than 0.3 m from the top.

Tracer wire is to be continuous with no joints. Where joints are needed (between rolls) they are to be soldered together plus wrapped in dielectric tape over wrapped with vinyl tape.

Confirmation of the continuity of the tracer wire installation is to be provided in writing by the Owner's Representative as part of the commissioning of the watermain system.

D2.13 Joint Restraint

Mechanical joint restraints are to be installed on bell and spigot joints for all watermains constructed in fill material and at all tees, horizontal and vertical bends, reducers, vertical

bends, hydrants, dead end caps/plugs and valves. All mechanical restraint systems shall be installed with cathodic protection.

Concrete thrust blocks are to be installed on all tees, horizontal and vertical bends, dead end caps/plugs, hydrants and other fittings that stop flow or change direction.

D2.14 Tracer Wire and Splices

Refer to Detail D-04 and D-005 for requirements related to PVC watermain.

D2.15 Flushing Station Requirements

Acceptable flushing station is Kupferle Eclipse No. 8 Post Hydrant.

D3.00 Valve Requirements

D3.01 Type

Unless specified or approved by the Municipality, all valves shall be Mueller resilient wedge gate valves or approved equivalent. Valves shall have a non-rising stem and a 50 mm square operating nut, opening counterclockwise. Refer to Appendix 4 for approved materials.

All valves 400 mm in diameter and larger shall be installed inside valve chambers per Ontario Provincial Standards, and as approved by the Director. These valves shall have flanged ends. A flanged to plain end spacer and a Victaulic coupler shall be installed inside the chamber to permit removal of the valve, if necessary.

D3.02 Size

In all cases, the size of the line valves shall be the same size as the watermain diameter.

D3.03 Number, Location and Spacing

Three valves are required on tee intersections and four valves are required on cross intersections with the valves being placed at a point where the projected street line intersects the watermain. Valves, valve boxes, and valve chambers are preferred in the asphalt when possible. Under no circumstances will valve boxes or chamber lids be permitted in driveways or sidewalks.

Valve spacing along a watermain shall not exceed 300 m, or for every 40 lots, whichever is less.

The Municipality may, at their discretion, require additional valves to be installed beyond the requirements noted above to ensure adequate isolation during construction, to allow for future development connections or to provide adequate isolation of watermains.

D3.04 Valve Boxes and Chambers

All valves on watermains less than 400 mm in diameter shall have three-piece, sliding-type valve boxes.

All valves 400 mm in diameter and larger shall be installed within concrete chambers with covers set flush with the finished grade. The cover and plug shall be aligned over top of the valve operating nut. Where the valve and cover are offset (under extenuating circumstances only), the chamber is to be cored with a valve box for operation.

Any valves deeper than 2.4 m require the operating nut to have a valve stem extension.

All chambers are to have the tracer wire extend up the backside of the steps to the top rung and be securely fastened with tape.

Wherever possible, valve chambers shall be provided with sumps. Otherwise, valve chambers shall be provided with a storm drain connection to the storm sewer. The diameter of the drainpipe shall be 150 mm. Where it is not possible to provide a direct connection to the storm sewer 300 mm x 300 mm x 300 mm sumps shall be provided in the base of the chamber. Valve chambers shall be as per Ontario Provincial Standards, and as approved by the Director.

The requirement for drain valves and air release valves will be determined during the design review process. Fire hydrants should be located at high points in the watermain wherever possible to minimize the requirements for air release valves.

D4.00 Fire Hydrant Requirements

D4.01 Type

Hydrants shall conform to the List of Acceptable Materials included in Appendix 4 of this document.

The hydrant shall have the following features:

- 2- 2½ hose connections and pumper connection with 6" mechanical joint inlet elbow. All hose connections to be CSA threaded. Operating components shall be made of durable corrosion proof materials that will not seize and prevent the dependable operation of the hydrant. Materials such as brass and stainless steel or approved equivalent will be accepted. Plated steel components will not be accepted.
- The bonnet shall incorporate a weather shield.
- The upper and lower barrels shall be joined with a breakable flange to allow removal of the upper barrel without excavation.
- Upper and lower operating stems shall be made of 304 stainless steel.

- A frangible stem coupling shall hold the stems together by means of holes drilled through the centre of the stem.

Hydrant marker flags are to be provided – 1 per hydrant.

D4.02 Spacing

Hydrants shall be installed on all watermains with a maximum allowable spacing of 120 m in residential areas and 100 m in industrial/commercial and multi-residential areas. Coverage areas with a radius of 75 m from each hydrant shall be considered when determining hydrant locations in residential subdivisions. Building code requirements are to be considered for private development projects.

D4.03 Branch Valves and Boxes

All hydrants installed on watermains up to and including 300 mm in diameter shall be controlled by a 150 mm diameter branch valve attached to the supply main minimum 1.5m from the hydrant and with an anchor tee. The valve is to be in the roadway.

D4.04 Location of Hydrants

Hydrants shall be located on the projection of a lot line and offset from the street line in accordance with the standard cross-section.

Hydrants shall be 1.50 m minimum distance from the edge of any driveway or house service location and 0.6m from a sidewalk or pathway. Other aboveground utilities such as light standards, transformers or street signs shall not be located any closer than 3.0 m to a hydrant.

The hydrant is to be set at such a height that the distance from the finished ground around the hydrant to the bottom of the flange is between 50 mm and 150 mm.

D4.05 Bedding Requirements

All hydrants shall be installed in accordance with OPSD 1105.010 (as amended), have open drainage holes and be installed with mechanically restrained joints (without thrust blocks). The hydrant base is to be installed in open-graded granular material enclosed with a geotextile fabric to ensure free draining of the boot. In areas of known high water, the hydrant drain holes shall be plugged and the Municipality shall be advised. This is to be reflected on the as-built Drawings.

D4.06 Hydrant Flow Testing

The Developer's Representative shall carry out a flow test in accordance with the Ontario Fire Code. Following the flow test the Developer's Representative is to provide a written report to

confirm that the minimum flows and residual pressures will be met when the subdivision is fully developed.

D4.07 Colour

Private hydrants are to be painted fire engine red. Public hydrants are to be painted yellow. All ports are CSA threaded connections.

All paint used on hydrants is to be specifically manufactured for this purpose.

All hydrants are to be painted appropriately at commencement of maintenance and again at assumption.

Reflective rings are not required. Hydrant Bonnet to be painted in accordance with the hydrant flow classification.

Table 2 -Hydrant Flow Classifications are as follows:

Class	Capacity	Colour
Class AA	Rated capacity 5680 L/min (1500 gpm) or greater	Light Blue
Class A	Rated capacity 3785 – 5675 L/min (1000 - 1499 gpm) or greater	Green
Class B	Rated capacity 1900 - 3780 L/min (500 – 999 gpm) or greater	Orange
Class C	Rated capacity less than 1900 L/min (500 gpm) or greater	Red

D5.00 Service Connections

D5.01 General

A single water line shall be installed to service each residential property. Services for other users are to be adequately sized, detailed and identified on the engineering drawings. Services shall be installed according to OPSD 1104.010 and 1104.020.

Service pipes are to be laid at right angles to the watermain and run a straight line from main to property line. There are to be no connections off the service between the main and the municipal property limit.

Services installed using trenchless techniques are to be sleeved.

D5.02 Material

All domestic water service connections shall be constructed of materials conforming to the List of Acceptable Materials included in Appendix 4 of this document.

D5.03 Minimum Size

Single water lines serving only one residence shall be a minimum size of 25 mm in diameter for PEX service and a minimum size of 19mm for copper.

D5.04 Location

Single services shall be provided for all single and semi-detached lots and on-street townhouse units. The location shall be shown on all Plan and Profile Drawings and the Composite Utility Plans.

A minimum clearance of 1.0 m shall be provided from all water services to any storm sewer or catchbasin. If this is not achievable the water service shall be insulated.

Services are to be installed a minimum of 0.5m horizontally from a driveway.

D5.05 Connections to Supply Main

Service connections are to be tapped where possible. Located as per OPSD.

Service saddles are to be used when tapping a watermain.

Where tapping is not possible, connections shall be made by installing a tee on the supply main.

D5.06 Curb Stops and Control Valves

The curb stops on all water services are to be placed at the property line. Curb stops to be brass (lead free) ball valves. Installation and location of curb stops is per OPSD 1104.010 and 1104.020.

The control valve on water services 100 mm in diameter or larger shall be located at the supply main with the valve being secured by means of anchor tees, flanged fittings or tie rods. A second valve of equal size is also to be placed at the property line.

All services require a backflow preventer in accordance with water use bylaws (as amended). Domestic supply lines shall be branched from the main supply lines immediately adjacent to the boulevard on the private side with separate valve stops.

The backflow preventive device is to be designed for the appropriate use by the licensed Professional Engineer for the private development.

D5.07 Water Softeners

The building design is to consider the hardness of the municipal water and provide for water softening within the building system.

D5.08 Existing Services and New Development

If an existing service is to be reused, the condition and size is to be confirmed by the developer before the municipality will allow its reuse. If the service is no longer required, it is to be removed and blanked at the watermain.

D6.00 Materials

D6.01 Watermain Material

Watermain pipe material shall conform to the List of Acceptable Materials included in Appendix 4 of this document.

D6.02 Water Meters

Each dwelling serviced by water shall have a water meter installed, being a Neptune T-10, Ecoder R900i complete with a remote readout device located adjacent to the outside hydro meter. All meter installations and locations are to be completed to the requirements of the Public Works Department.

Larger ICI (Institutional Commercial Industrial) installations will require a meter sized according to the intended use, but of the same make and type. The meter will be a minimum of one size less than the supply line. The purchase of meters is to be coordinated through the Municipality.

A lockable shut of valve is required upstream of the meter.

D7.00 Corrosion Protection

For any installation of water pipe systems, an investigation of the soils conditions shall be undertaken to determine the corrosivity of the native soils and to provide recommendations with regard to corrosion protection.

As a minimum, cathodic protection shall be provided in accordance with Ontario Provincial Standard Drawings.

D8.00 Connecting to Existing Watermains

All connections to existing watermains must be made under the supervision of the Contract Administrator and the Municipal forces.

The Contractor must give the Contract Administrator and the Owner 72-hour notice to make a connection to an existing watermain.

All Swabbing, Disinfection, Pressure Testing and Bacteriological testing must be completed prior to connection to the existing Drinking Water System.

D9.00 Temporary Water Supply

All temporary piping and service connections must be disinfected as per Ontario Watermain Disinfection Procedure and the latest AWWA C-651 by the Developer's Representative, under the supervision of the Municipality before the system is placed into service. Sample test stations must be provided for chlorine residual sampling during commissioning and the service life of the temporary water supply. The locations of the sample test stations are at the Municipality's discretion.

Refer to Standard Drawings D-06 and D-07 connection and commissioning details.

D10.00 Testing Requirements

All watermains shall be tested in accordance with the procedures set out in Appendix 2.

D10.01 Municipal Supervision Requirements

A certified Municipal water operator shall oversee all watermain commissioning requirements including but not necessarily limited to the following:

- Pressure testing
- Swabbing
- Super chlorination
- Flushing
- Sampling

D11.00 Construction

Water infrastructure works are to be constructed in accordance with OPSS 441 and these engineering standards.

SECTION E – SANITARY SEWERS AND APPURTENANCES



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

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E1.00 Hydraulic Design

E1.01 Confirmation of Capacity

Prior to commencement of any design for sanitary sewage works within the Municipality, the Developer's Representative shall contact the municipality to ensure that adequate external trunk sewer and treatment plant capacity is available for the proposed development.

E1.02 Sanitary Drainage Plan

The sanitary drainage plan shall be drawn to a scale suitable to show all the tributary areas that are being used to determine the design flows.

The design flow in each maintenance hole and length of sewer shall be computed on standard sanitary design sheets. For each area entered on the design sheet, the maintenance hole numbers, size, grade and material of the sewers and the numbers consistent with the detailed plan and profile for each section of the sanitary sewer shall be shown.

E1.03 Domestic Sewage Flows

Peak domestic sewage flows are to be calculated using the methodology outlined in the MECP Design Guidelines for Sewage Works.

The design population for residential developments shall be derived using the proposed Plan of Subdivision and the densities listed as follows:

Table 1 - Density per Type of Dwelling (Persons Per Unit)

Dwelling Type	Density
Single Detached Dwellings	3.4 ppu
Semi-Detached Dwellings	2.7 ppu
Townhouses	2.7 ppu
Apartments	2 ppu

In the absence of a proposed Plan of Subdivision, populations should be estimated based on drainage areas and the land uses identified in the Municipality's Official Plan or Master Servicing Studies.

An average daily per capita flow of 300 L/cap/day shall be used to determine the capacity used in sizing the sanitary sewer system.

An allowance of 0.23 L/s/ha should be used in the design for peak extraneous flows.

E1.04 Industrial/Commercial/Institutional Flows

For ICI applications, discuss proposed demand parameters and obtain concurrence from the municipality. The municipality will require supporting data that justifies selection of the proposed flow rates.

E2.00 Sanitary Sewer Design

E2.01 Location

All sanitary sewers shall be located as shown on the Standard Road Cross-Section. The standard location shall generally be 0.5m offset from the centerline of the road allowance.

E2.02 Pipe Capacities

Comply with MECP Sewer Design Guidelines for minimum pipe slopes and flushing velocities. In the case of partial pipe flow, the actual velocity is to be checked against the minimum allowable velocity at the design flow rate.

E2.03 Flow Velocities

- i. Minimum acceptable velocity = 0.6 m/s
- ii. Maximum acceptable velocity = 3.0 m/s

E2.04 Minimum Size

The minimum allowable size for a sanitary sewer shall be 250 mm in diameter. 200mm diameter sewers will be considered by the Director in circumstances where future expansion is not realistic.

E2.05 Minimum and Maximum Grades

The absolute minimum and maximum grades for sanitary sewers shall be subject to achieving minimum acceptable velocity at the design flow. The minimum grade for the first upstream leg shall not be less than 1.0%.

E2.06 Minimum and Maximum Depths

The depth of the sewer shall be measured from the final centreline finished road elevation to the top of the sanitary sewer. The minimum depths of sewers for residential areas shall be 2.5 m.

The maximum depth of sewers with direct lateral connections shall be 6.0 m measured from centerline of road to the obvert of the sewer. In cases where deeper sewers are required these

shall be considered trunk sewers and no direct lateral connections will be permitted. Separate local sewers constructed above the trunk sewers will be required for connection of laterals. Maintenance holes are to be common wherever possible with drop structures.

E2.07 Curved Sewers

The use of radius pipe or deflected pipe is not permitted.

E2.08 Limits

All sewers shall be terminated at the subdivision limits when external drainage areas are being considered in the design with suitable provision in the design of the terminal maintenance holes to allow for future extension of the sewer.

E2.09 Sewer and Watermain Crossings

A minimum clearance of 0.30 m shall be provided between the outside of the pipe barrel at the point of crossing for storm and sanitary sewers. A minimum clearance of 0.5 m shall be provided for all sewer and watermain crossings in accordance with MECP (MOECC) policies.

In the event the minimum clearances cannot be obtained, the designs must adhere to MECP (MOECC) policies. In addition, the pipes shall be concrete encased to ensure that the pipes are properly bedded.

F2 10 Head Losses

The minimum drop for inverts in any maintenance hole shall be 0.03 m for sewers turning 45° or less and 0.06 m for any sewer turning 90°. The maximum change in direction permitted for any sewer is 90°.

The obvert of the outlet pipe shall not be higher than the obvert of the inlet pipes at any maintenance hole location.

E2.11 Changes in Pipe Size

No decrease of pipe size from a larger upstream to a smaller downstream will be allowed regardless of the increase in grade.

E2.12 Pipe Bedding

The class of pipe and the type of bedding shall be selected to suit loading and proposed construction conditions. Details and types of bedding and backfill are illustrated in OPSD 802.01 and 802.03 (as amended). The width of the trench at the top of the pipe must be carefully controlled to ensure that the maximum trench width is not exceeded unless a higher class of

bedding or higher strength pipe is used. The recommendations of a Geotechnical Engineer will be required in determining strength of pipe required and construction methods to be used.

E3.00 Maintenance holes

E3.01 Location

Maintenance holes shall be located at each change in alignment, grade or pipe material, at all pipe junctions and at intervals along the pipe to permit entry for maintenance to the sewer. The outside wall of any maintenance hole structure shall not be located closer than 1.5 m to a curb. The maintenance holes shall be oriented in such a way that the access cover is offset towards the centerline of the road.

E3.02 Maximum Spacing

The maximum spacing between maintenance holes shall be 120m.

E3.03 Maintenance Hole Types

Maintenance holes shall be constructed of pre-cast concrete. The Ontario Provincial Standard maintenance hole details shall be used for maintenance hole design, where applicable. In all cases where the standard drawings are not applicable, the maintenance holes shall be individually designed and detailed.

A reference shall be made on all profile drawings to indicate the type and size of all sanitary maintenance holes.

Pre-cast maintenance holes shall conform to ASTM Specification C478 latest revision.

Maintenance hole covers shall be the "closed" type per OPSD 401.010.

E3.04 Maintenance hole Design

- i. All maintenance hole chamber openings shall be located on the side of the maintenance hole parallel to the flow for straight run maintenance holes, or on the upstream side of the maintenance hole at all junctions.
- ii. The maintenance hole shall be centred on the sewer main.

- iii. The maximum change in the direction of flow in any sewer maintenance hole shall be no more than 90°. A change of flow direction at acute interior angles will not be permitted.
- iv. Drop structures shall be used when invert levels of inlet and outlet sewers differ by 0.61m or more. Wherever feasible, sewer systems should be designed to avoid the use of drop structures. Internal drop structures are discouraged and will only be permitted in instances with extenuating circumstances provided approval is obtained by the Director of Public Works or Designate. Precast drop structures are permitted. All drop structures shall be constructed in accordance with OPSD 1003.010 and 1003.020.
- v. All sanitary maintenance holes shall be benched as per OPSD 701.021.
- vi. Safety gratings shall be required in all maintenance holes greater than 5.0 m in depth. Safety gratings shall not be more than 5.0 m apart and shall be constructed in accordance with OPSD 404.020. Where practical, a safety grating shall be located 0.5 m below the drop structure inlet pipe.
 - a) Maintenance holes should be used at all changes in horizontal alignment and at all changes in vertical grade.
- vii. Maintenance holes should be used at all changes in pipe sizes.

E3.05 Grades for Maintenance hole Frame and Covers

All maintenance holes located within the travelled portion of the roadway shall have the rim elevation initially set flush with the base course asphalt. A maximum of 300 mm height of modular rings shall be permitted on all maintenance holes in new subdivisions.

Prior to the placement of the final course asphalt, the maintenance hole frame shall be adjusted to suit the final surface asphalt elevation (the frame should be shimmed to final grade then sealed).

All maintenance holes constructed in the vicinity of low points or outside of the paved roadway shall have watertight lids.

E4.00 Sanitary Service Connection

E4.01 General

All sanitary sewer connections for single, semi-detached and townhouse lots shall be made with single service pipes. The test fitting shall be 125 mm x 125 mm PVC DR 35 with a threaded plug. The threaded plug shall come with a 40 mm square nut to assist in the operation. Cast iron test fittings are not permitted for sanitary services.

The service pipe shall be extended 1.5 m into the property beyond the property line and capped.

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Foundation drain, sump pump leads and roof leaders are not permitted to be connected to the sanitary service.

E4.02 Location

The proposed location of the sanitary sewer service shall be shown on the Plan and Profile Drawings and Composite Utility Plans.

E4.03 Size

Service connections for single family and semi-detached (or linked) units shall be 125 mm in diameter.

Service connections for multiple family blocks, commercial, institutional and industrial areas shall be sized according to the intended use.

E4.04 Connection to Main

The connection to the main sewer shall be made with an approved manufactured tee and are to be watertight. Approved saddles shall be used for connecting to existing sewer mains. Service connections to a maintenance hole are not permitted.

No service connection of a size greater than half the diameter of the main shall be cut into the main sewer. A maintenance hole shall be installed on the main sewer at the intersection of a service connection which has a size greater than half the diameter of the main sewer except as provided below.

A 125 mm or 150 mm service connection will be permitted to connect to a 200 mm and 250 mm main sewer provided an approved manufactured tee is installed and provided the invert of the service connection is above the spring-line of the main sewer.

E4.05 Depth

The depth of the service connections for single family units, semi-detached units and townhouses at the property line measured from the finished centreline road elevation shall be:

i. Minimum: 2.60 m

ii. Maximum: 3.00 m (unless proposed house types require deeper service depths)

Risers shall be used when the obvert depth of the sewer main exceeds 4.50 m. The riser section shall be brought to a depth of 3.0 m maximum.

If the above requirements cannot be met, provide a plan and justification for any deviations to the Director for consideration.

E4.06 Grades

Table 2 - Pipe Size per Minimum and Maximum Grades

Size of Pipe	Minimum Grade	Maximum Grade
125 mm	2%	8%
150 mm	1%	6%

E4.07 Connection to Multiple Family and Other Blocks

An inspection maintenance hole shall be required on the private property (1.5 m from property line to centre of the frame and cover) on all connections to multiple family and other blocks.

E4.08 Connection to Commercial/Industrial Institutional Blocks

An inspection maintenance hole shall be required on private property located 1.50 m from the property line to the centre of the frame and cover.

E5.00 Pipe Materials

E5.01 Sanitary Sewers

Sanitary sewer pipe material shall conform to the List of Acceptable Materials included in Appendix 4 of this document.

E5.02 Sanitary Service Connections

Service pipe material shall conform to the List of Acceptable Materials included in Appendix 4 of this document.

E5.03 Reuse of Existing Sanitary Service Connections

If an existing service is to be reused, the condition and size is to be confirmed by the developer before the municipality will allow its reuse. If the service is no longer required, it is to be removed and capped at the sewer main.

E5.04 Abandonment of Manholes

If an existing manhole is to be abandoned, remove to 1.0m below final grade and backfill with compacted granular material.

E6.00 Testing

E6.01 General

Sanitary mains are not to be connected to the existing system until testing has been completed and accepted.

Infiltration or exfiltration testing shall be completed on all sewers per OPSS 410, the method is at the discretion of the Developer's Representative. All testing shall be witnessed by a representative of the Developer's Representative with the Director being notified a minimum of 48 hours prior to the test being carried out. The Developer's Representative will be required to certify the results of any tests carried out.

E6.02 Deflection Test

Deflection tests only need to be completed when a deficiency is noted through CCTV, there is reason for concern, or as required by the Director. Deflection testing is to be completed per OPSS 410.

All sections of pipe that fail the deflection test shall be repaired and retested.

E6.03 Closed-Circuit Television (CCTV) Inspection

All newly constructed sanitary sewers shall be CCTV inspected upon satisfactory completion of all other testing. The sewers must be CCTV inspected prior to the sewers being considered to be placed on maintenance and again prior to being considered for Final Acceptance. CCTV inspections are to be carried out no more than 90 days prior to the request for Final Acceptance.

The Municipality will require Certification from the Developer's Representative that they have reviewed the videos and have found the sewers to be acceptable and free of all defects. Any deficiencies should be clearly identified in the Engineer's letter and confirmation that all deficiencies have been rectified must be included with the Certification.

A permanent record in electronic format shall be supplied, illustrating a continuous record of the sewer installations, service connection, maintenance holes, etc. A report identifying any unusual or substandard conditions shall also be submitted.

The CCTV inspection shall be carried out by an Operator certified by NAAPI and shall be carried out in accordance with OPSS 409 (as amended).

All files, reports and data provided from these inspections shall become the property of the Municipality.

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At the discretion of the Director of Public Works or Designate, additional inspections and records may be required prior to Final Acceptance.

E6.04 In Line Sumps

In line sumps are not acceptable.

E6.05 Infiltration / Exfiltration

Field testing for infiltration / exfiltration for sewer pipe installations in an open cut shall be carried out in accordance with OPSS 410.

E7.00 Construction

Sanitary works are to be constructed in accordance with OPSS 407, OPSS 410, and these engineering standards. For work not covered under these standards, consult with the municipality to confirm requirements.

E8.00 Alternative Design and Construction Techniques

For no-dig and non-standard considerations consult with the municipality to confirm requirements.

SECTION F - LOT GRADING



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F1.00 General

These guidelines are provided for guidance in the preparation of drainage plans. Since they are only guidelines, they cannot cover every situation that may be encountered in the field. Direct consultation should be made with the Director when the Drainage Plan Designer feels that deviation from these guidelines is warranted.

It is imperative that the overall initial Draft Plan of Subdivision be laid out with regard to the lot grading criteria outlined in this section. In particular, lots requiring rear yard drainage swales may require extra depth than the adjacent lots to the rear to allow adequate space to create a rear yard amenity area as outlined in this section.

The approval of a Drainage Plan is related to drainage only. It is the responsibility of the Developer's Representative's Engineering and Planning Team to ensure that the Drainage Plan compliments the land and suits the house to be constructed.

F1.01 Objectives

All areas shall be graded in such a way as to provide proper positive drainage, maximum use of land and ease of maintenance.

Grading shall be performed in such a way as to preserve existing trees wherever possible, with the understanding that tree preservation shall not be detrimental to providing for lot drainage.

Drainage flows must be directed away from houses.

Storm drainage is to be directed to approved outlets on public lands and shall not adversely affect adjacent lands.

The use of rear lot catchbasins and retaining walls should be minimized.

F2.00 Lot Grading Criteria

F2.01 Type of Drainage Pattern

- i. Back to front drainage is desirable in instances where drainage contributing to each side yard swale is restricted to the lots directly adjacent to the swale and no external flows or flow from the rear yards of neighboring lots is captured by the side yard swale.
- ii. Split lot drainage with rear lot catchbasins is required where difficulties in providing side yard swales are encountered.
- i. Walkout, back split and front split lots will be permitted where required due to topography constraints. In all cases the grade differential between the front and rear yard specified house grade shall be governed by the sloping required along the side of the building envelope. Grades shall vary from a minimum 2% to a maximum 4:1 urban and 3:1 rural slope and shall be confined to the building side yard area. Lots with a front to rear yard grade differential exceeding 2.5 m are considered extraordinary and will require specific approval from the Municipality.
- ii. In determining maximum permissible grade differential between front and rear property line elevations compatibility of house types and impact on adjacent homes will be considered by the Municipality. While these standards do not set out maximum allowable grade differentials the Municipality will limit the grade differential on a site-specific basis based on the particular circumstances unique to each subdivision.
- iii. Reduced Setback Lots and Atypical Lots— The specified house grade (SHG) for lots with reduced setbacks, varying terrain, access constraints, etc., should be reviewed by the Designer to ensure lot grading meets the intent of Municipality Standards and sound design practices. The methods identified above for determining SHG elevations may not apply to reduced setback lots and other non-conventional lot types. The Designer will be required to determine the most appropriate SHG for the lot type and may be required to supply more detailed grading plans for individual lots considered by the Municipality to be non-conventional.

F2.02 Details

Show the locations of the following:

- i. House
- ii. Well
- iii. Septic
- iv. Footings

- v. Top foundation
- vi. Development envelope
- vii. Pools, patios, decks, etc.
- viii. Floodlines
 - ix. Wetlands
 - x. Easements
- xi. Catchbasins on the lot
- xii. Swales
- xiii. Sump Pump outlets
- xiv. Eavestrough outlets
- xv. Directional flow arrows
- xvi. Culverts
- xvii. Retaining walls

F2.03 Slopes

- i. Rear lots shall be graded such that a minimum of 5.0 m of the rear lot depth is to be sufficiently level (2% to 5% slope). This shall be considered to be the rear lot "useable area." For rural lots, reasonable measures are to be taken to provide useable area based on terrain.
- ii. The grade difference in the rear lot shall be made up of the following types of slopes:
 - o Slopes with a gradient between 2% and 5% which is considered "usable area".
 - Beyond the "useable area" downward slopes shall have a gradient between 5% and 10%. No downward slopes greater than 10% will generally be permitted except in the following condition: For lots considered to have deep back yards or backing onto open space lands, the Director may permit slopes greater than 10% provided a 0.5 m flat area is provided at the rear limit of the lots.
 - The maximum gradient for upward slopes beyond the "useable area" shall be three parts horizontal to one part vertical (3:1). 3:1 slopes shall be permitted to a maximum height of 1.0 m. Slopes not greater than four parts horizontal to one part vertical (4:1) shall be used for heights greater than 1.0 m.
- iii. The maximum permissible grade along rear lot line between lot corners shall not exceed 6%.
- iv. The minimum slope on driveways shall be 2%. The maximum slope on driveways shall be 8%.

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- v. All lots shall have a minimum 1.0 m wide unobstructed path draining at a 2% slope away from the house along at least one side of the house. This stipulation is in addition to the 150 mm apron required around buildings and is needed to permit the construction of a walkway to the rear of the house.
- vi. A minimum separation of 150 mm shall be provided between brick line and the final ground elevation of all houses.
- vii. An undisturbed flat area having a preferred minimum width of 0.5 m shall be provided at the boundary limits adjacent to other properties, in order that the existing boundary elevations shall be maintained. No filling up to or upon private lands shall be tolerated unless written permission is obtained from the adjacent Owner. Where two developments are concurrently underway, the common boundary elevations are to be established to mutually beneficial elevations, agreed to by each party.

F2.04 Swales

- i. Swales shall have a minimum grade of 1.5% and maximum side slopes of 3:1. A minimum 0.5% grade can be used with subdrains.
- ii. Swales shall range in depth from a minimum of 150 mm to a maximum of 450 mm.
- iii. Swales parallel to the rear lot lines shall be located at a distance based on the depth of swale but under no circumstances will the invert of the swale be permitted to be located more than 1.0 m from the rear lot line. In cases where a swale depth greater than 300 mm is required a 2:1 slope will be permitted from the swale invert to the rear lot line.
- iv. Drainage flows which are carried around houses are to be confined in defined swales located as far from the house as possible. The depth of these swales should be kept as close as possible to the minimum of 150 mm.
- v. The maximum flow allowable in a side yard swale shall be that from three backyards.
- vi. Rear Yard Swales (Urban): maximum length of a rear yard swale shall not exceed 60 m.

F2.05 Rear Lot Catchbasins

- i. The Municipality has recently changed its policy regarding ownership and maintenance of rear lot catchbasins (RLCBs). Easements in favour of the Municipality will no longer be required for RLCBs and leads. The ownership and maintenance responsibilities for RLCBs and leads on the private side of the street line shall rest with the property owner.
- ii. All RLCB grates are to be as per Municipality of North Grenville Standard Drawing C-2 C-4. The centerline of the catchbasin top is to be 1.2 m from the rear lot line. The catchbasin frame to be set at the elevation of the invert of the lowest swale.

- iii. RLCB leads shall be a minimum diameter of 250 mm.
- iv. All catchbasin leads are to be located a minimum of 0.6 m from lot line; catchbasin leads to be constructed on one lot.
- v. RLCB leads shall be connected directly to maintenance holes whenever possible. The layout of the storm sewer shall have consideration to this requirement to maximize the number of RLCB leads which can connect directly to maintenance holes.
- vi. When RLCBs are required, the Designer must consider the impacts that a plugged catchbasin will have with respect to flooding depth and area which will be impacted. The grading design must incorporate allowance for relief outlets in the event that plugging occurs.

F2.06 Sodding and Ground Cover Requirements

Urban front yards are to be completely top soiled and sodded with 100 mm of topsoil and No. 1 Nursery Sod. Urban rear yards and rural lots can be topsoiled and seeded.

F3.00 Retaining Walls

Unless specifically approved by the municipality, retaining walls are to be located on private property and are the responsibility of the property owner. All retaining walls above 1m in height and where otherwise required by applicable codes must be designed by a Professional Engineer. Certification from a Professional Engineer will be required for each wall constructed clearly stating that the wall has been designed to suit the site conditions, that construction of the wall has been inspected by the Engineer and that it has been constructed in accordance with the design. .

F4.00 Lot Grading Certification

Prior to the maintenance period commencing for any aboveground works in the subdivision the Developer's Representative's Engineering Consultant will be required to submit a Lot Grading Certificate for every lot being placed on maintenance. If retaining walls have been constructed on any lot an additional Certificate will be required for each lot with retaining walls.

A certification letter is required from the Developer's Engineering Consultant.

F5.00 Timing for Sodding of Lots and Certification of Grading

Sodding shall be completed on each lot within three months of the date of the issuance of the Occupancy Permit for the lot. If the Occupancy Permit is issued later than October 15, in any year, and prior to March 31, in the subsequent year, the grading and sodding shall be completed by May 31, in the subsequent year.

Lot Grading Certification shall be completed within two months of the date of the issuance of the Occupancy Permit for the lot. If the Occupancy Permit is issued later than October 15, in any year, and prior to March 31, in the subsequent year, the lot grading certification shall be completed by June 30, in the subsequent year.

Prior to sodding any lots within a subdivision, the Developer's Representative is encouraged to arrange a pre-sod inspection with the Municipality's representative.

SECTION G – UTILITIES AND STREET LIGHTING



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G1.00 General

Utilities are to be buried unless otherwise agreed upon with the municipality. The Developer's Representative shall consult with the Director prior to proceeding with the design of the street lighting and utility design for any development for information related planned utility upgrades and other development work in the area that may impact the site utility requirements.

G1.01 Standard Requirements

All primary hydro, gas and communications (cable/fibre optic) lines shall be placed underground in locations as shown on the typical road sections and utility details G-01 and G-02. Design of these utilities shall conform to the regulations of the respective authority. A minimum of two spare utility ducts are to be installed at road crossings.

G2.00 Composite Utility Drawings

All utilities are to be shown on the Composite Utility Plan and to be submitted for the review and approval of the Municipality. This drawing shall be prepared at a scale of 1:500, unless otherwise approved and show all pertinent details of the utilities including street lighting poles, street signage, all above and underground services, Canada Post mailbox locations, driveways and locations of all trees. It is the Developer's Representative's responsibility to ensure there are no conflicts resulting from the design of the various utilities and the municipal roads and services.

All details of any entranceway features and structures within the proposed right-of-way are to be indicated on the Composite Utility Drawing, i.e. the composite utility plan is to clearly demonstrate that the proposed utilities, site features, and municipal infrastructure are not in conflict. The Composite Utility Plan is to be accepted by individual utility agencies presented on the drawing and Canada Post, prior to final acceptance by the Municipality.

G2.01 Separation between Driveway and Street Furniture

A minimum of 1.0 m separation is to be maintained between edge of driveway and all surface utility structures or per utility requirements (whichever is greater) and 1.5m to fire hydrants.

G2.02 Typical Cross-section

The typical cross-section shall be shown on the Utility Drawing.

G2.03 Public Utility Clearance Requirements

Hydro

1. Refer to Hydro One application and connection requirements.

Natural Gas

2. Refer to Enbridge Gas construction requirements.

Communications

1. Typically direct burial but may use concrete encased duct for three or more cables and under roadways at the discretion of the utility company. Consult with appropriate utility.

G3.00 Street Lighting Design

The street lighting system shall be designed by a qualified Consulting Engineer in accordance with the Illumination Engineering Society of North America (IESNA) latest edition recommendations. In addition, all street lighting systems for roadways in the Municipality shall meet the requirements of the Municipality and Hydro One.

The objective in designing street lighting is to provide a uniform distribution of lighting at a level that is adequate for the intended use of the roadway. Roadway lighting for urban streets shall be designed using the values found in ANSI/IES RP-8-21 Recommended Practice: Lighting Roadway and Parking Facilities: Part 1 (fundamentals) and Part 2 (Design).

Table 1 – Approximat	- Illuminance Value	es by Road Classification
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Road Classifications	Illuminance Values			
(IESNA R2 & R3)	Average Maintained	Foot Candles	Illuminance	
	Illuminance Values		Uniformity Ratio	
	(Lux)		(Average to	
			Minimum)	
Local Urban	5	0.5	6:1	
Residential				
Collector	8	0.8	4:1	
Arterial	12	1.2	3:1	

^{*}All other Road Classifications not identified above will be considered on an individual basis in accordance with Municipality Requirements.

A photometric layout will be required and must include the following information:

^{**} Intersections shall have an illumination equal to the sum of the current design levels of the intersecting roadways.

- 1. Lighting levels extending past the property line to the nearest building (light trespass on adjacent residential properties is to be kept to a minimum utilizing full cut-off flat lens luminaires and house-side shields if required).
- 2. A summary table of the illumination and uniformity values resulting from the design in accordance with parameters indicated in the above table (i.e., average, average to minimum, etc.) shall be provided. In addition to the above noted requirements, the table must show the photometric layout LLF (Light Loss Factor) used when calculating the proposed lighting levels. Lighting drawings and photometric information including statistical data shall be designed/reviewed/approved by a Professional Engineer.
- 3. In the longitudinal direction, the distance between grid lines should be one-tenth (1/10) of the spacing between luminaries, or 5.0 m, whichever is smaller. At intersections the grid spacing is 2.0 m throughout the calculation area.
- 4. When establishing the spacing of street lighting within a residential subdivision, consideration must be given for the placement of a streetlight adjacent to the location of community mailboxes.
- 5. In determining the position of a light standard, the designer shall take into consideration the location of driveways, living room windows and other aspects of a particular site. The objective is to provide a sense of security and to minimize spill and other disturbances to residential properties.
- 6. The street lighting design submission package is to be submitted to the Municipality.
- 7. The Developer's Representative shall be responsible for the review/approval of any required shop drawings submitted by the Contractor/supplier for verification or compliance to the lighting design and Municipality specifications.
- 8. The design shall specify type of pole, conduit, luminaire, lamp wattage and size of conductor being used. Details of pole installation and luminaire(s) wiring are to be provided.
- 9. Designer shall specify on the drawings the location of transformers, means of streetlight disconnects, power and control centers and other related infrastructure.
- 10. The engineer shall include specification sheets on luminaires, arms, and poles to be installed as part of submission.

G3.01 Street Light Poles

Poles are to maximum 5.49m (18ft) including light fixture.

Poles are to be Class A, reinforced concrete (cylindrical) direct bury, complete with cast zinc handhole and cover or spun aluminum poles on concrete bases.

Street Lighting Luminaires

Decorative street lighting luminaires are to be post top style per Lumec Serenade DSX LED Series or approved equivalent.

Standard street lighting is to be cobra head LUmec RoadFocus LED Cobra Head series or approved equivalent.

G3.02 Energization of Street Lighting System

The Developer's Representative or Contractor shall arrange with Hydro One for the connection of the lighting system. The develop is responsible for connection fees. The municipality will assume the on-going operating costs upon energization.

Last Update: August 2022 G-4

SECTION H - EASEMENT REQUIREMENTS



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

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H1.00 General

Where underground services or utilities are placed outside road allowances or blocks of land under the ownership of the Municipality, permanent easements are required.

Any easements proposed and easement agreement wording that will be included in the legal agreement for utilities, storm sewers, sanitary sewers and watermains shall be reviewed with the Municipality's Director of Public Works or Designate prior to the first submission.

H1.01 Storm, Sanitary Sewer and Watermain Easements

Ideally easements between adjacent lots shall be located on one side of the common lot line. Pipes shall generally be centered on the easement for easements containing one pipe. Easements straddling lots lines may be permitted if deemed appropriate by the Director. The minimum width of all easements shall be determined in consultation with the Director.

Easements are to be of sufficient width to permit excavation of the pipe(s) without the potential for impacting neighbouring structures and to allow for construction activities to be completed within the width of the easement. Geotechnical recommendations will be required from the Developer.

Fencing may be required at the discretion of the Director.

The bearing capacity of native soils must be preserved for all pipes being constructed between proposed buildings. This shall be achieved by:

- i. Extending the building foundations to the depth of the underside of pipe adjacent to the building.
- ii. Placing the pipe in a sleeve constructed by tunneling.
- iii. Installing the pipe by vertical trenching with steel sheeting left in place and cut off 0.3 m above the building foundation. The depth of the steel sheeting below the pipe invert is to be determined by a Geotechnical Engineer. Sufficient struts are to be left in place to ensure that the steel sheeting does not move during the backfilling operation.

The trench excavation and reinstatement or tunneling operation is to be monitored by a Geotechnical Engineer and certification will be required that the soils have the required bearing capacity to support the building being proposed adjacent to the pipe installation.

H1.02 Concrete Encasement

Concrete encasement where required due to special circumstances or as determined to be a requirement at the sole discretion of the Director, shall have a square cross-section with a

concrete thickness of not less than 0.150 m. The concrete shall be 15 MPa strength and vibrated in place.

H1.03 Pipes Constructed in Sleeves

In lieu of concrete encasement of pipes, the Municipality will consider allowing pipes to be constructed in steel sleeves. The specific instances where this will be permitted along with the detailed requirements must be determined in consultation with the Director.

Last Update: August 2022 H-2

Appendix 1 - Forms and Checklists



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

Preliminary Approval - Checklist Subdivision Name and Phase Date

Documentation	Received/ Confirmed	Approved	Comments	Date Received
Engineering report for road subgrade				
Sieve analysis of road sub base (GB)				
Elevations of road sub base (GB) prior to placement of road base (GA)				
Compaction report for road sub base (GB)				
Sieve analysis of road base (GA)				
Elevations of road base (GA) prior to placement of asphalt (HL8)				
Compaction report of road base (GA)				
Service compaction (Bedding, Spring, Cover)				
Water				
Storm				
Sanitary				
Asphalt mix design for base course asphalt (HL8)				
AC content for base course asphalt (HL8)				
Sieve analysis for base course asphalt (HL8)				
Elevations of base course asphalt (HL8)				
Compaction report for base course asphalt (HL8)				
Asphalt mix design for final course asphalt (HL3)				
AC content for final course asphalt (HL3)				
Sieve analysis for final course asphalt (HL3)				
Compaction report for final course asphalt (HL3)				
Elevations of final course asphalt (HL3)				
Curb compaction (GA)				
Curb concrete testing				
Curb concrete cylinder breaks (7 and 28 Day)				
Site Inspection Reports				
CCTV				
Storm				
Sanitary				
Sewer Testing				
Installation of street and traffic signs				
Installation and certification (OLS) of Permanent Grade Control Structure				
Confirmation that all utilities (ras plactic cable 9 communication) are installed				
Confirmation that all utilities (gas, electric, cable & communication) are installed				
and operational to the satisfaction of the applicable utility authority				
Engineering Letter of Conformance for completed subdivision works				
Record drawings of completed subdivision works				
Street Light ESA				
Certificate of Substantial Performance				
Statutory Declaration from Owner				

Final Acceptance - Checklist Subdivision and Phase Date

Documentation	Received/ Confirmed	Approved	Comments	Date Received
Engineering report for road subgrade				
Sieve analysis of road sub base (GB)				
Elevations of road sub base (GB) prior to placement of road base (GA)				
Compaction report for road sub base (GB)				
Sieve analysis of road base (GA)				
Elevations of road base (GA) prior to placement of asphalt (HL8)				
Compaction report of road base (GA)				
Service compaction (Bedding, Spring, Cover)				
Water				
Storm				
Sanitary				
Asphalt mix design for base course asphalt (HL8)				
AC content for base course asphalt (HL8)				
Sieve analysis for base course asphalt (HL8)				
Elevations of base course asphalt (HL8)				
Compaction report for base course asphalt (HL8)				
Asphalt mix design for final course asphalt (HL3)				
AC content for final course asphalt (HL3)				
Sieve analysis for final course asphalt (HL3)				
Compaction report for final course asphalt (HL3)				
Elevations of final course asphalt (HL3)				
Curb compaction (GA)				
Curb concrete testing				
Curb concrete cylinder breaks (7 and 28 Day)				
Site Inspection Reports				
CCTV				
Storm				
Sanitary				
Sewer Testing				
Installation of street and traffic signs				
Installation and certification (OLS) of Permanent Grade Control Structure				
Confirmation that all utilities (gas, electric, cable & communication) are installed				
and operational to the satisfaction of the applicable utility authority				
Engineering Letter of Conformance for completed subdivision works				
Record drawings of completed subdivision works				
Street Light ESA				
Certificate of Substantial Performance				
Statutory Declaration from Owner				

Appendix 2 – Watermain Testing Requirements



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022



Departme	nt of Public	vvorks:
Water and V	Wastewater	Division

Version #:1

Revised: 2021/12/07

WT-102

Commissioning Watermains

1.0 Purpose

This procedure describes the steps that should be taken by the Operator in Charge (OIC) when a watermain is being commissioned. This procedure complies with the Ministry of the Environment, Conservation and Parks (MECP or "the Ministry") Watermain Disinfection Procedure, dated August 1, 2020, as dictated by Drinking Water Works Permit 159-201. This document gives an overview of the steps the Operator in Charge (OIC) should follow when commissioning a new watermain. For details, consult the Ministry's Watermain Disinfection Procedure. In cases where this SOP differs from the Watermain Disinfection Procedure, follow the most stringent practice.

2.0 Definitions and Abbreviations

Appurtenance includes a valve, valve chamber, hydrant, hydrant lead, flow meter, curb stop, maintenance access point, personnel access opening or other minor accessory part of a watermain

AWWA – American Water Works Association

Connection – means all watermain and Appurtenances installed between an existing watermain and a new or future watermain/appurtenance.

COC – Chain of Custody

DWS – Drinking Water System

kPa – kilopascals

OIC - Operator in Charge

L = liters

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L/h = liters per hour

MECP – Ontario Ministry of the Environment, Conservation and Parks

Microbiological Sampling – means that, at a minimum, *Escherichia coli* and Total Coliforms are tested by Caduceon and the Operator tests immediately for free chorine and turbidity.

mg/L - milligrams per liter

Potable Water – means water that is fit for human consumption. In most cases this will be water produced by the Kemptville Drinking Water System.

PSI – pounds squire inch

SDS – Safety Data Sheets

SDWA – Ontario Safe Drinking Water Act

SOP – Standard Operating Procedure

3.0 Health and Safety

There are identified hazards to complete this task. Use caution when working around the following:

Pressurized watermains

Traffic, review Traffic Control Plan provided by Contractor

Sodium Hypochlorite, review SDS

Sodium Thiosulphate, review SDS

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Department of Public Works:	
Water and Wastewater Division	

Version #:1 Revised: 2021/12/07

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Commissioning Watermains

4.0 Background

The Ministry's Watermain Disinfection Procedure references AWWA Standard C651 and they should be followed in conjunction with this SOP. When there is a discrepancy between the different procedures, follow that instructions that are the most stringent.

5.0 Procedure

5.1 Operator in Charge

The OIC must be onsite throughout the commissioning.

5.2 Backflow Prevention

Follow Section 4.8.9 of AWWA Standard C651 and CSA Standard B64.10. The water and wastewater division has three CSA-certified high hazard reduced principle backflow preventers. The backflow preventers must be field tested by a certified backflow prevention tester the same day that they are used. If a backflow preventer is relocated within the same day, testing is only required for the first installation of the day provided that the backflow preventer is relocated by an Operator who will guard against damage during transit and re-installation.

Brooks and Cryderman is typically the Contractor that tests the backflow prevention devices. Contact the Contractor at least 24 hours before the backflow preventers are going to be used. Contact information can be found on the DWQMS Essential Services and Supplies list in the DWQMS Operational Plan, Appendix C.

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Department of Public Works:
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Commissioning Watermains

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5.3 Fill Watermain

Fill the watermain with potable water and open all associated hydrants and curbstops to bleed all the air out of the pipe.

5.4 Hydrostatic Testing

5.4.1 Hydrostatic Testing Responsibilities

The contractor performs the pressure test. The Operator in Charge inspects the pressure test.

5.4.2 AWWA C605-21

As per AWWA C605-21, Section 9.3, the following must be adhered to when pressure testing the watermain:

- The test must be at least two hours long
- The hydrostatic pressure must be at least 1.5 times the planned working pressure for the main. Industry standard is 1035 kPa (150 psi).
- Do not exceed the rated pressure for any joint, thrust restraint, valve, fitting, or other connected appurtenance to the test section. Refer to manufacture specifications for the pressure rating.
- Allowable leakage is measured using the makeup water: the volume of water required to maintain the pressure within 34 kPa (5 psi) of 1035 kPa (150 psi). The formula for the allowed quantity of makeup of water to maintain the required

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Commissioning Watermains

pressure is:
$$Q_{m=\frac{LD\sqrt{P}}{795,000}}$$

Where:

 Q_m = quantity of makeup water, in L/h

L = length of pipe section being tested, in m

D = nominal diameter of the pipe, in mm

P = average test pressure during the leakage test, in kPa.

Example 1: The make up water allowance for 305 meters of 150 mm pipe pressure tested at an average of 1030 kPa would be calculated as follows, where:

L= 305 meters

D = 150 mm

P = 1030 kPa

$$Q_m = \frac{(305 \times 150) \times \sqrt{1035}}{795,000}$$

 $Q_{m} = 1.85 L/h$

A Makeup Water Allowance Calculator is available in excel on the w drive at the following location: W:\Water Distribution System\Water Main Installations & Connections

The following is the makeup water allowance for common pipe sizes used in the Kemptville DWS distribution system, see tables 4a and 4b in AWWA C605-21 for more:

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Table 1: Makeup water allowance (L/h) per 305 meters (50 joints) of PVC pipe

Test Pressure		Nominal Pipe Diar	meter (mm/inches)	
(kPa/psi)	100/4	150/6	200/8	300/12
1035/150	1.2 L/h	1.8 L/h	2.4 L/h	3.6 L/h

5.4.3 Instructions for Measuring the Makeup Water

To measure the makeup water used during pressure testing, take the following steps:

- Use a positive displacement pump, calibrated water reservoir, and a calibrated pressure gauge. *Note that the pressure gauge should be installed on the line connecting the pump to the watermain section to be pressure tested not the pump itself.
- Pressure test at 150psi/1035kPa: run the pump to maintain the pressure within 5 psi of the test pressure.
- observe the pipe, fittings, and appurtenances for visible leaks and/or movement of the pipe.
- measure the amount of water (in liters per hour) that must be pumped out of the makeup water reservoir to maintain the 150psi/1035kPa test pressure. This is your makeup water.
- calculate the allowable makeup water using the formula above and compare against the amount measured during the actual test or compare the amount measured during the actual test against the allowable make up water rates in Table 1.

Example 2: Imagine you are pressure testing 305 meters of 150mm pipe to 1035 kPa over two hours. At the end of the test, you measure the quantity of make up water used from the reservoir. The quantity of water used was two liters (2 L). You divide the

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quantity of water used by the duration of the test (2 h) to determine that the make up water used was 1L/h (2L÷2h=1L/h). As per the AWWA standard (see Example 1 in this section or Table 1), the allowable make up water for that length and size of pipe is up to 1.8L/h so the watermain passes the pressure test.

5.5 Swab

5.5.1 Swabbing Responsibilities

The contractor will swab the watermain. The Operator in charge will inspect the swabbing.

5.5.2 Swabbing Requirements

Swab the watermain with a minimum of three swabs using potable water. Use swabs that are two inches larger than the pipe to be swabbed. Two swabs of each size are kept in stock. Continue to swab until clean. If more swabs are needed, Wolsley is the typical supplier.

5.6 Disinfect the Watermain/ Super Chlorinate

5.6.1 Responsibilites when Disinfecting the Watermain

The contractor supplies the equipment to disinfect the watermain. The Operator in Charge disinfects the watermain.

5.6.2 Disinfection Requirements

Using the continuous feed method, super chlorinate the watermain to a minimum of

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25mg/L to a maximum of 50mg/L. Each hydrant must be flushed until super chlorinated water has reach the ports on the hydrant. Let sit for at least 24 hours to provide adequate contact time.

5.7 Test Free Chlorine Residual

5.7.1 Responsibilities when Testing the Chlorine Residual

The Operator in Charge takes and analyzes the free chlorine residual.

5.7.2 Testing Requirements

After a minimum of 24 hours, test the free chlorine residual. Test the residual at the start, middle, and end of the main to monitor for droppage in all areas. The maximum allowable decease in chlorine concentration is 40% of the initial chlorine concentration to a maximum decrease of 50 mg/L.

Example: If the watermain is superchlorinated to 50 mg/L, the free chlorine residual after 24 hours must be at least 30 mg/L ($50 \times 0.4 = 20$, 50 - 20 = 30mg/L).

The disinfection procedure must be repeated until the free chlorine residual is within the allowable decrease limits.

5.8 Flush Watermain

5.8.1 Flushing Responisibilities

The Operator in Charge in responsible for flushing and dechlorination.

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5.8.2 Flushing Requirements

After the watermain has been appropriately disinfected, flush the watermain using a municipal hydrant ensuring that every hydrant has been flushed to clear all super chlorinated water. Dechlorinate the water to 0 mg/L using Sodium Thiosulphate before any of the flushed water enters the storm water system. Flush the watermain until the free chlorine residual is consistent with the average residual in the distribution system.

5.9 Microbiological Sampling

5.9.1 Sampling Responsibilities

The Operator in Charge takes the samples and submits them to Caduceon.

5.9.2 Sampling Requirements

Collect samples for microbiological testing (E. coli, Total Coliforms, and HPC) as per AWWA C651, 5.1.1.2: one sample from as close as reasonably possible to the beginning of the main, one sample for every 1200 ft (370 m) of the new water main, plus one set from the end of the line and at least one from each branch greater than one pipe length. Use a COC that specifies that that the sampling results are **not reportable** under the Safe Drinking Water Act, SDWA.

24 hours later, collect additional samples from same sites as initial sampling.

If results come back clear, final hookup can be completed. If results are unsatisfactory, flush again and resample. The resample must include two consecutive samples 24 hours apart. If samples are once again unsatisfactory, repeat the super chlorination (Section 5.6).

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5.10 Final Hookup/Connections

5.10.1 Final Hookup Responsibilities

The Contractor is responsible for performing the tie in. The Operator in Charge is onsite to assist as needed.

5.10.2 Connections Equal to or Less than One Pipe Length (Generally ≤ 6m)

Follow Section 4.10.1 of AWWA C651 while ensuring that the Connection remains isolated from the DWS except while being flushed or sampled, until satisfactory results are received from the Microbiological sampling.

5.10.3 Connections Great than One Pipe Length (Generally > 6m)

Follow Section 4.10.2 of AWWA C651 with the exception of a connection that is greater than one meter and up to 40 meters and:

- a. Crosses a transportation corridor and closing the corridor could result in significant community impacts, or
- b. Cannot be constructed to within one pipe length of the existing watermain due to the potential for destabilizing an existing thrust block.

If either condition a. or b. are present, follow the procedure under 1.1.4.2 of the Ministry's Watermain Disinfection Procedure.

After hookups are completed, pressure test joints from final connection.

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5.11 Flush Main and Final Microbiological Sampling

After the final hookup, the Operator in Charge flushes watermain until all the air is out and an adequate free chlorine residual is achieved. Collect a final microbiological sample from the hydrant that was used for flushing. This sample is considered to be **reportable** under the SDWA.

5.12 Documentation

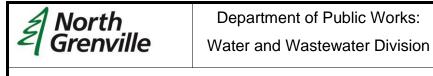
Fill out the Watermain Commissioning Report Form and send a copy along with copies of the COC's to the Water Wastewater Compliance Coordinator.

If the commissioning is being completed on a newly constructed watermain, inform the Water Wastewater Compliance Coordinator of the date the watermain was commissioned so they can add it to the required Form 1.

6.0 References

- Allowable Makeup Water Calculator
- AWWA Standard C651 Disinfecting Watermains
- AWWA Standard C605 Underground Installation of PVC and PVCO Pressure Pipe and Fittings
- Book 7: Ontario's Traffic Control Manual.
- Kemptville DWS Drinking Water Works Permit
- OHSA: Occupational Health and Safety Act the act that governs how work is to be done in Ontario.

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Commissioning Watermains

- AWWA Safety Talk for Working Under Pressure
- SDS for Sodium Hypochlorite
- SDS for Sodium Thiosulfate
- The Ontario Ministry of the Environment, Conservation and Parks, Watermain Disinfection Procedure, August 1, 2020.
- Watermain Commissioning Report Form
- WHMIS: Workplace Hazardous Material Information System Canada's Hazard
 Communication Standard for dealing with hazardous goods.

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Z Grenville	Water and Wastewater Division	Revised: 2021/12/07
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7.0 Revision History

Revisions to this procedure are documented in Table 2, Revision History.

Table 2: Revision History

Document Section	Ver- sion #	Details of Amendments	Date	Author (Initials)
All	1	Original Release	2021/12/07	A.E.S

Page **13** of **13**

Page **1** of **2 Watermain Commissioning Report** North Grenville WATER AND WASTEWATER DIVISION Title: Watermain Commissioning Report Original Release Date: 2021/09/16 (AS) Last Revision: 2021/09/16 (AS) Kemptville DWS *For detailed instructions follow SOP WD-308 Date: Time: Location: Inspector/Operator: Contractor Representative(s) ECA #: Watermain Information Size of Main: Pipe Material: Length Tested: Is there an air gap at both ends? ☐ Yes □ No Live Tap Performed? ☐ Yes □ No If checked **yes**, cleaned with a 1% Cl₂ solution □ Yes □ No Tested? ☐ Yes Backflow Preventer: High Hazard? ☐ Yes □ No □ No *Follow AWWA 605-21 and use the Makeup Water Allowance Calculator **Pressure Testing** Pressure Test performed by: Start Time: End Time: Makeup Water Used (L/h): Pressure during Test:

Swabbing	
Date of Swabbing:	
Swabbing performed by:	
Number of Swabs Used:	Number of Swabs Retrieved:

Makeup Water Allowance:

□ PASS

□FAIL

Super Chlorination	*Maximum allowable decrease in chlorine concentration is 40% of initial chlorine concentration	
Date of Super chlorination:		Super chlorination performed by:

Initial Chlorine Residual:		Time	:
Final Chlorine Residual:		Time:	
Chlorine Residual After 24 Hours:		Time	:
□ PASS □FAIL		I	
			_
Flushing *Flushed water n			chlorinated before it enters the stormwater
Date of Flushing:			completed by:
Chlorine Residual at Start:	Flus	shing T	ime:
Chlorine Residual at Finish:	Flus	shing D	Ouration:
Microbiological Sampling Results	S		
Initial Samples *one at the start on the new plus one set from the end of the line and at length.			one for every 1200 ft (370 m) of new main, om each branch greater than one pipe
Samples Taken by:			Date:
Chain of Custody attached?: ☐ Yes ☐ N	lo	<u>'</u>	
Certificate of Analysis attached? ☐ Yes	□ No	o Cer	tificate Number:
Secondary Samples *24 hours after initial sa	ampl	ling, up	ostream and downstream.
Samples Taken by:			Date:
Chain of Custody attached?: ☐ Yes ☐ N	lo	•	
Certificate of Analysis attached? ☐ Yes	□ No	o Cer	tificate Number:
Final Connection			
Final Connection Parts cleaned with 1% So	dium	Нуро	chlorite Solution? ☐ Yes ☐ No
Connected date/time:		Conne	ection performed by:
Valves Opened date/time:		Water	Turned on by:
Comments			

Appendix 3 – Standard Drawings



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

NMSD

Detail Number	Detail Name
A-01	Subdivision Notice Signage
A-02	3 Rail Post And Rail Fence
A-03	2 Rail Post And Rail Fence
A-04	Chainlink Fence
A-05	Single Chainlink Gateway
A-06	Double Chainlink Gateway
A-07	P Gate Detail
A-08	Horizonal Control Monument
B-01	18m Right Of Way
B-02	20m Right Of Way
B-03	26m Right Of Way
B-04	20m Right Of Way Rural
C-01	SWM Facility Warning Sign
C-02	Catchbasin - 'T' For Rear Yard, Ditched Pipe And Landscape Applications
C-03	Catchbasin - Elbow For Rear Yard, Ditched Pipe And Landscape Applications
D-01	Commissioning New Watermains Physically Isolated From System
D-02	Watermain Crossing Below Sewer
D-03	Watermain Crossing Above Sewer
D-04	Tracer Wire Installation PVC Watermain
D-05	Waterproofing Of Splices
D-06	Typical Temporary Water Connection Schematic
G-01	Utility Layout Plan Section

NOTICE

THE ROADS AND OTHER MUNICIPAL SERVICES WITHIN THIS SUBDIVISION HAVE NOT YET BEEN ACCEPTED OR ASSUMED BY THE MUNICIPALITY OF NORTH GRENVILLE. USE AT OWN RISK.

INQUIRIES AND COMPLAINTS SHOULD BE DIRECTED TO:

(IDENTIFY DEVELOPER OR DEVELOPER'S CONSULTING ENGINEER)

100mm TEXT

38mm BOLD TEXT

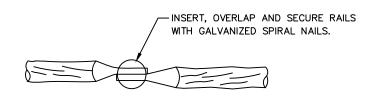
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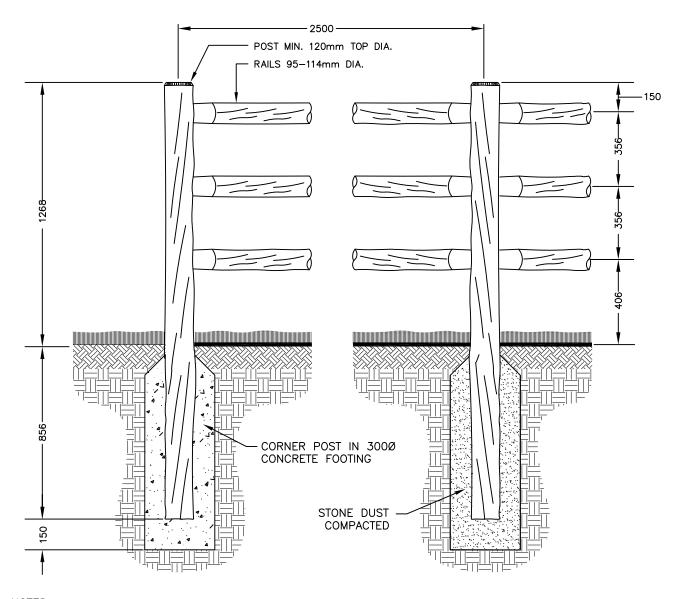
MUNICIPALITY OF NORTH GRENVILLE

75mm TEXT

SIGN DIMENSIONS 1.2m X 2.4m
ALL LETTERS TO BE BLACK ON WHITE BACKGROUND

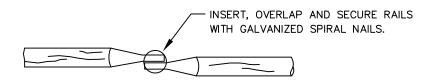
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A North	SUBDIVISION NOTICE	Date: 04/05/22
E Grenville	SIGNAGE	Date: None Rev.
	SIGNAGE	Dwg No. A-01

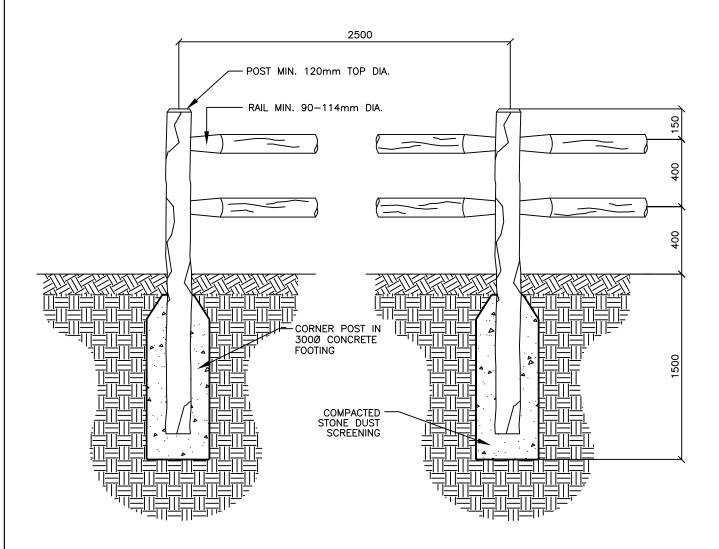




- 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED
- 2. POST AND RAILS TO BE WELL-PEELED CEDAR, WITH NO PEELER MARKS.
- 3. CORNER AND END POSTS TO HAVE MINIMUM 25 x 100mm OBLONG HOLES FOR RAILS. LINE POSTS TO HAVE MINIMUM 64 x 100 OBLONG HOLES FOR RAILS
- 4. SOURCE OF FENCING TO BE APPROVED BY THE MUNICIPALITY OF NORTH GRENVILLE.

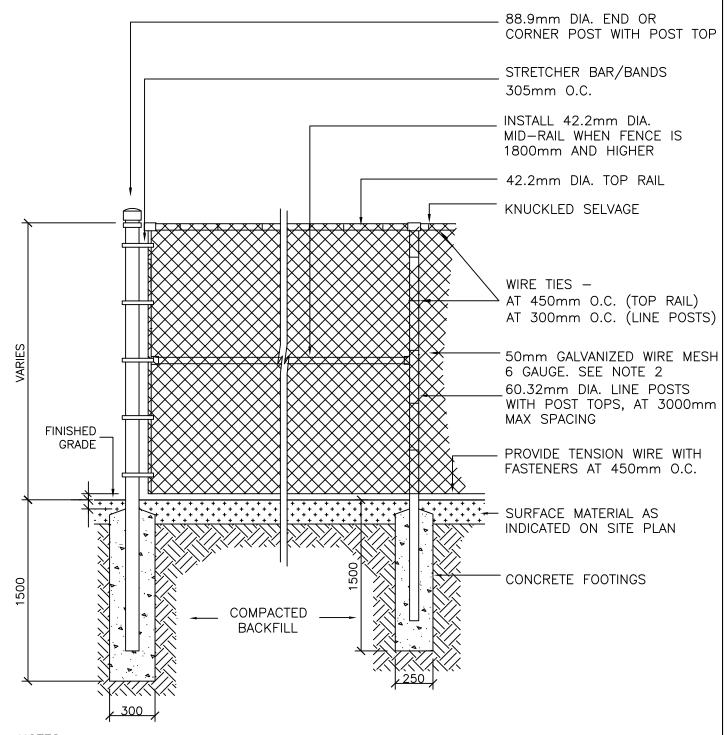
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Anaru	3 RAIL POST & RAIL	Date: 11/04/22
A North Grenville	FENCE DETAIL 374	Date: None
I di cilville		Dwg No. A-02





- 1. POST AND RAILS TO BE WELL PEELED CEDAR, WITH NO PEELER MARKS
- 2. CORNER AND END POSTS TO HAVE MINIMUM 25 x 100 OBLONG HOLES FOR RAILS LINE POSTS TO HAVE MINIMUM 64 x 100 OBLONG HOLES FOR RAILS
- 3. SOURCE OF WOOD FENCING TO BE APPROVED BY THE MUNICIPALITY OF NORTH GRENVILLE
- 4. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS OTHERWISE NOTED
- 5. CONCRETE FOOTING SHALL BE CSA 30MPa CLASS F-1

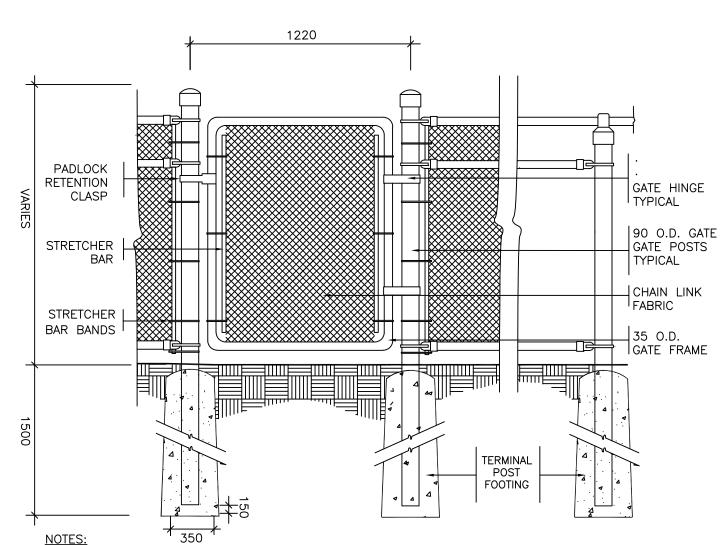
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Anada		Date: 11/04/22
A North Grenville	2 RAIL POST AND RAIL FENCE	Date: None
4 di ciiville	375	Dwg No. A-03



<u>NOTES:</u>

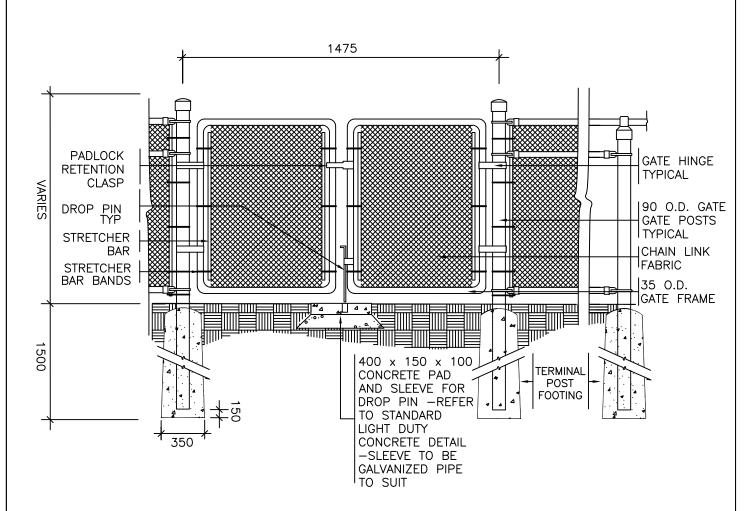
- 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- 2. IF FENCE IS TO BE BLACK VINYL, THE FENCE SHOULD BE 9 GAUGE GALVANIZED WIRE CORE WITH BLACK VINYL COATING TO PROVIDE A TOTAL OF 6 GAUGE THICKNESS.
- 3. POSTS, RAILS AND ALL OTHER HARDWARE SHOULD BE ELECTROSTATIC PAINTED.
- 4. CONCRETE FOOTING SHALL BE CSA 30MPa CLASS F-1.
- 5. HEIGHT TO BE CONFIRMED WITH MUNICIPALITY.

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anada		Date: 11/04/22
A North Grenville	CHAINLINK FENCE	Date: None Rev.
<i>f di cirville</i>	376	Dwg No. A-04



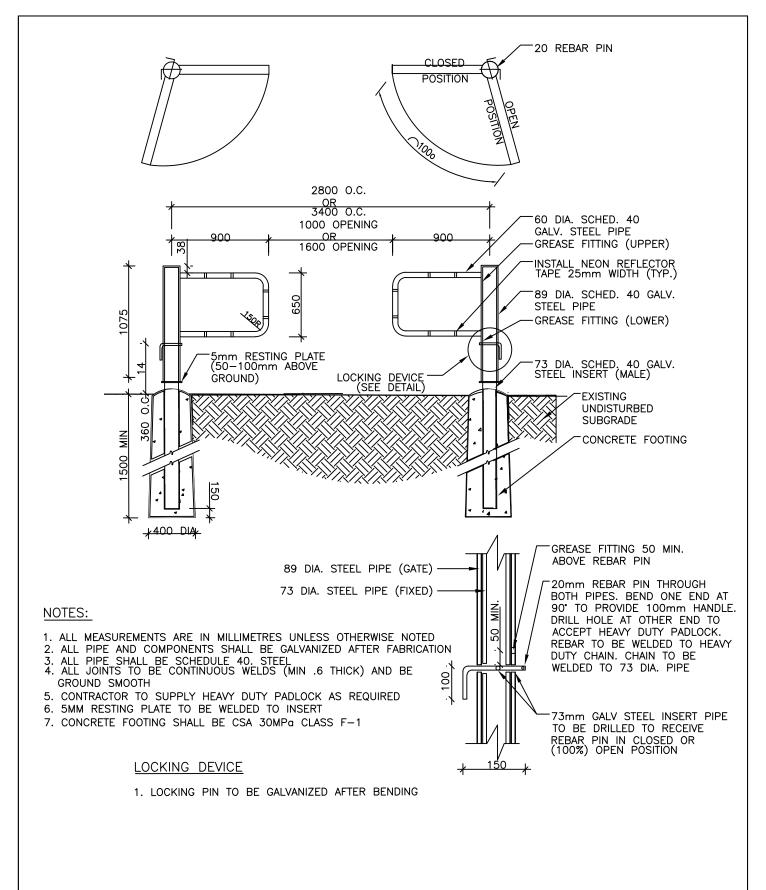
- 1. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- 2. GATE FRAMES SHALL BE CONSTRUCTED OF 33 O.D. GALVANIZED STEEL PIPE, SHOP BENT, WELDED. AND GROUND SMOOTH.
- 3. STRETCHER BARS TO BE 5 x 19 MINIMUM.
- 4. STRETCHER BAR BANDS 300 O.C., 6 x 19 MINIMUM.
- 5. CHAIN LINK FENCE TO BE BLACK VINYL COATED, 38 WOVEN MESH, 6 GAUGE O.D. OF 9 GAUGE GALVANIZED STEEL CORE FASTENED TO LINE POSTS, TOP RAIL, MID RAIL, INTERMEDIATE RAIL, AND BOTTOM RAIL, AND GATE FRAME WITH 3.5 (9 GAUGE) KNUCKLED FASTENERS.
- 6. PADLOCK RETENTION CLASPS TO BE INSTALLED.
- 7. FINISH OF FABRIC AND TIES TO MATCH ADJACENT FENCE.
- 8. ALL FENCE POSTS, GATE FRAMES, AND RAILS TO BE GALVANIZED SCHEDULE '40' PIPE.
- 9. NO PLASTIC FITTING OR COMPONENTS ARE TO BE USED.
- 10. WELD ALL JOINTS.
- 11. HEIGHT TO BE CONFIRMED WITH MUNICIPALITY.

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anada		Date: 11/04/22
A North Grenville	SINGLE CHAINLINK GATEWAY	Date: None Rev. None
I di ciiville	377	Dwg No.A-05

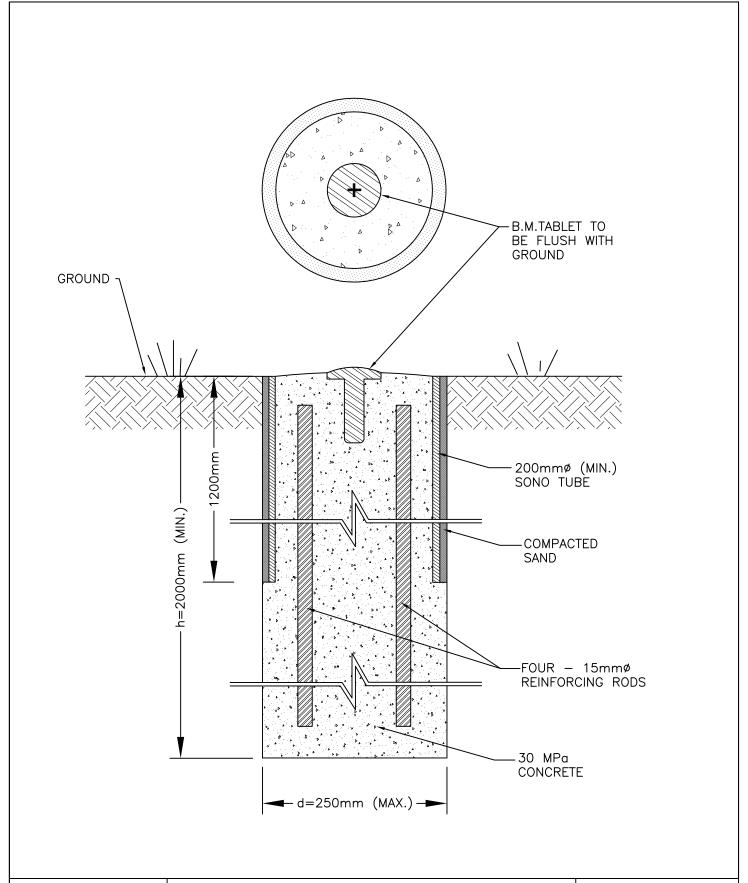


- ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
- GATE FRAMES SHALL BE CONSTRUCTED OF 33 O.D. GALVANIZED STEEL PIPE, SHOP BENT, WELDED AND GROUND SMOOTH.
- STRETCHER BARS TO BE 5 x 19 MINIMUM. 3.
- STRETCHER BAR BANDS 300 O.C., 6×19 MINIMUM. 4.
- CHAIN LINK FENCE TO BE BLACK VINYL COATED, 38 WOVEN MESH, 6 GAUGE O.D. OF 9 GAUGE GALVANIZED STEEL CORE FASTENED TO LINE POSTS, TOP RAIL, MID RAIL, INTERMEDIATE RAIL, AND BOTTOM RAIL, AND GATE FRAME WITH 3.5 (9 GAUGE) KNUCKLED FASTENERS.
- PADLOCK RETENTION CLASPS TO BE INSTALLED.
- FINISH OF FABRIC AND TIES TO MATCH ADJACENT FENCE.
- ALL FENCE POSTS, GATE FRAMES, AND RAILS TO BE GALVANIZED SCHEDULE '40' PIPE.
- NO PLASTIC FITTING OR COMPONENTS ARE TO BE USED.
- 10. WELD ALL JOINTS.
- 11. HEIGHT TO BE CONFIRMED WITH MUNICIPALITY.

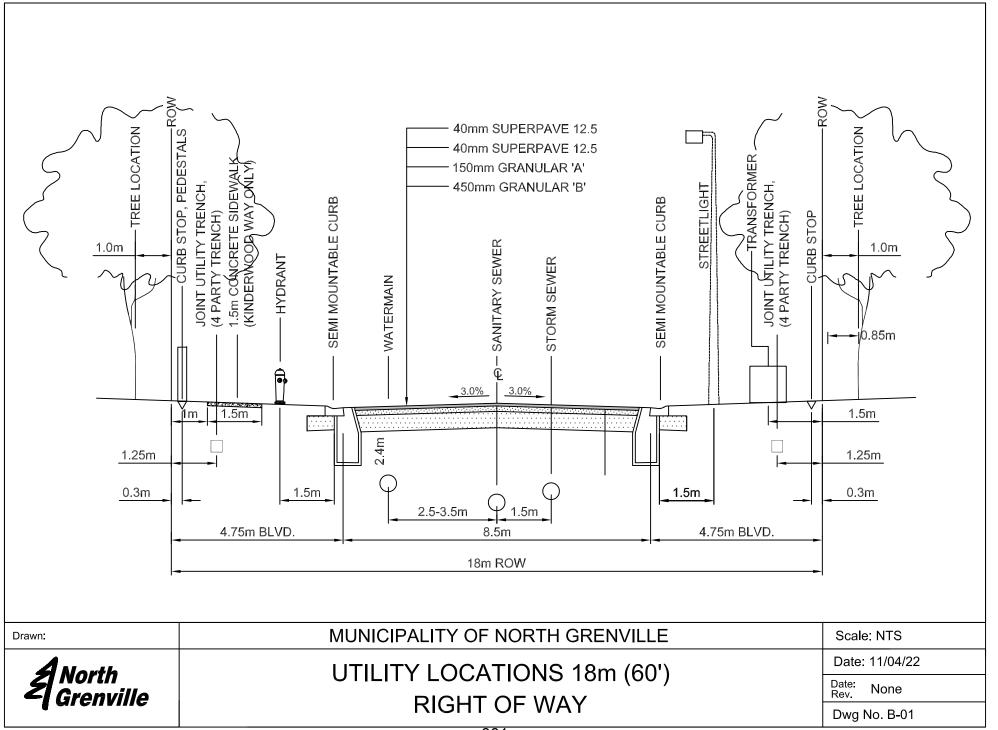
Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anadh		Date: 11/04/22
A North Grenville	DOUBLE CHAINLINK GATEWAY	Date: Rev. None
1 arenvine	378	Dwg No. A-06

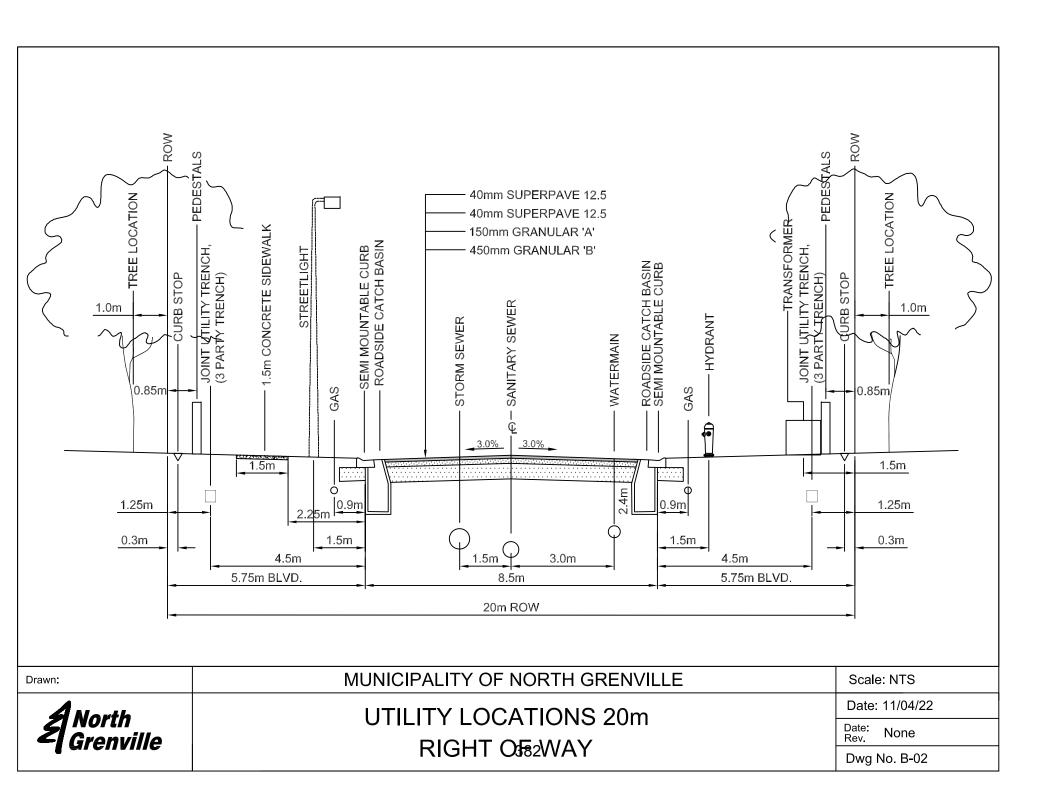


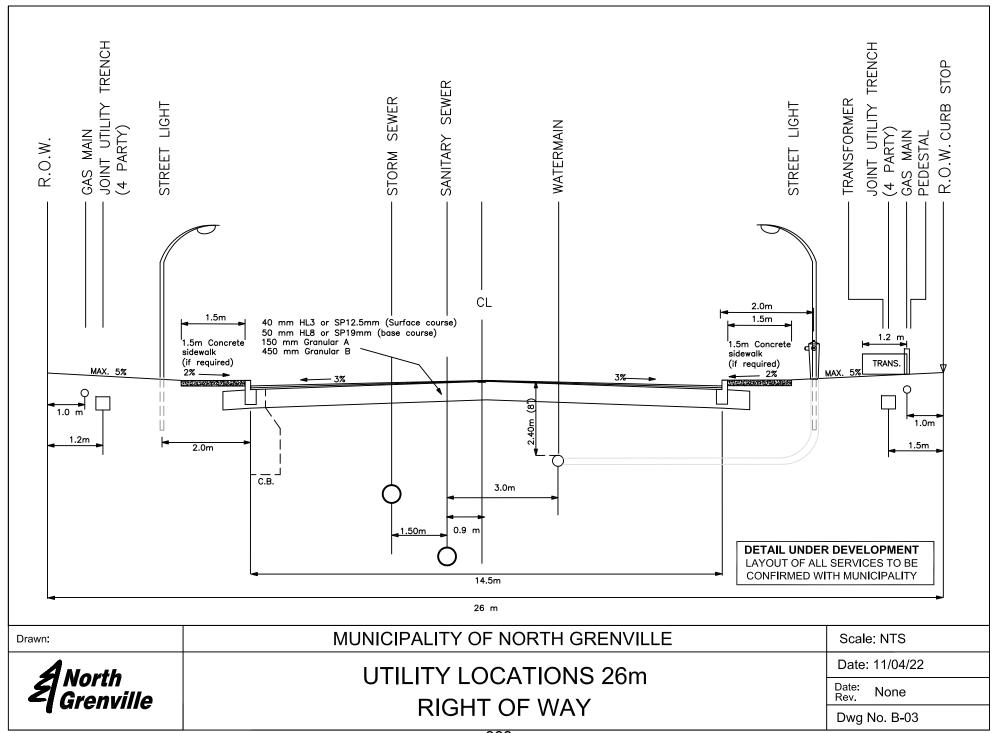
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Anadh		Date: 11/04/22
A North Grenville	P GATE DETAIL	Date: None
<i>arenvine</i>	379	Dwg No. A-07

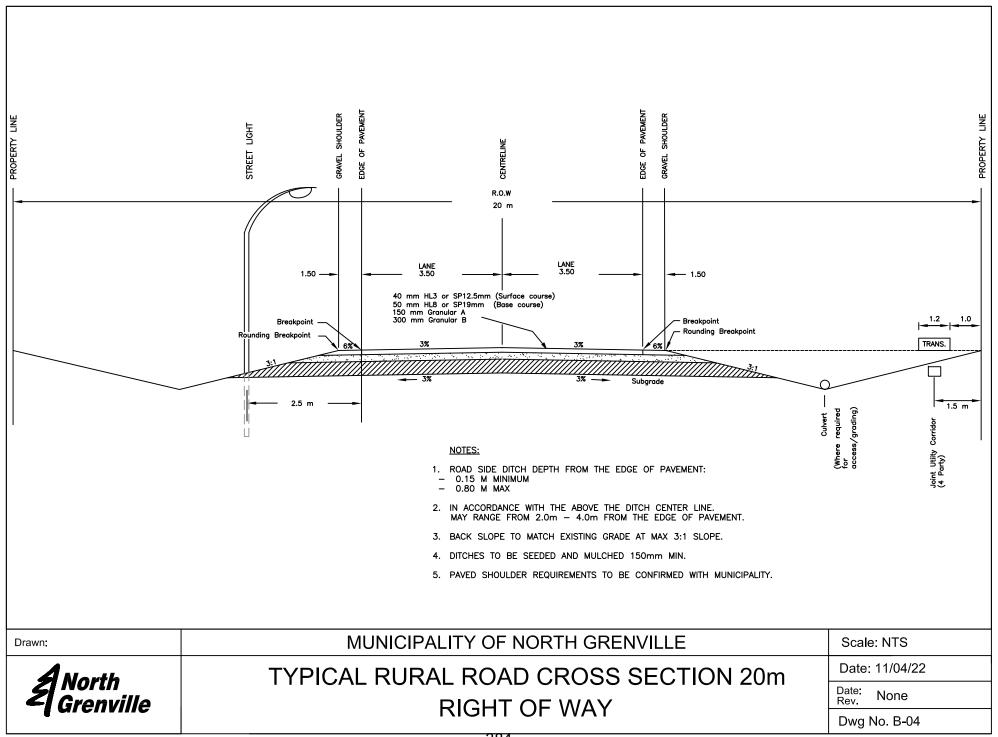


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	ANarth	HORIZONTAL AND VERTICAL	Date: 11/04/22	
A North Grenville	CONTROL MONUMENT	Date: None Rev.		
	1 dicimie	CONTROL MONOMENT	Dwg No. A-08	











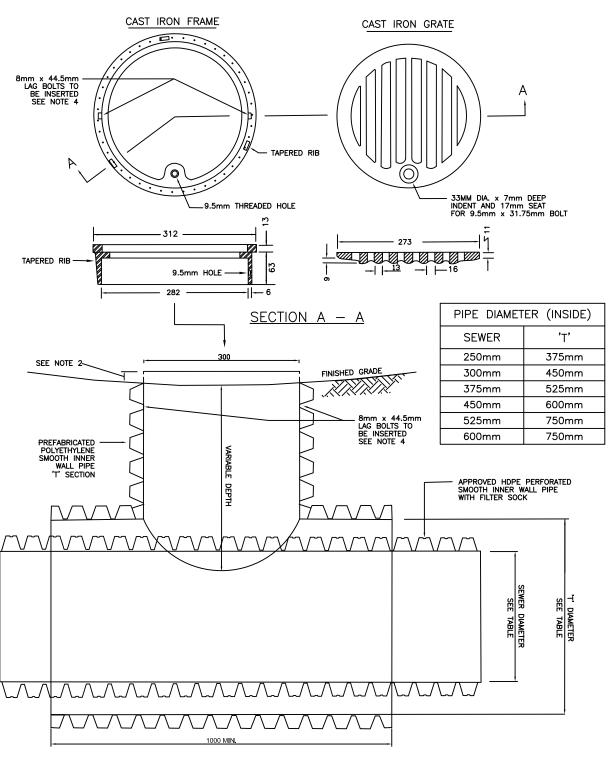


WARNING HAZARDOUS CONDITIONS NO TRESPASSING

THIS STORMWATER
MANAGEMENT FACILITY
POND CONTAINS FEATURES
WHICH MAY BECOME
HAZARDOUS UNDER
CERTAIN CONDITIONS.
HAZARDS CAN INCLUDE
FLUCTUATING WATER
LEVELS AND THIN ICE.

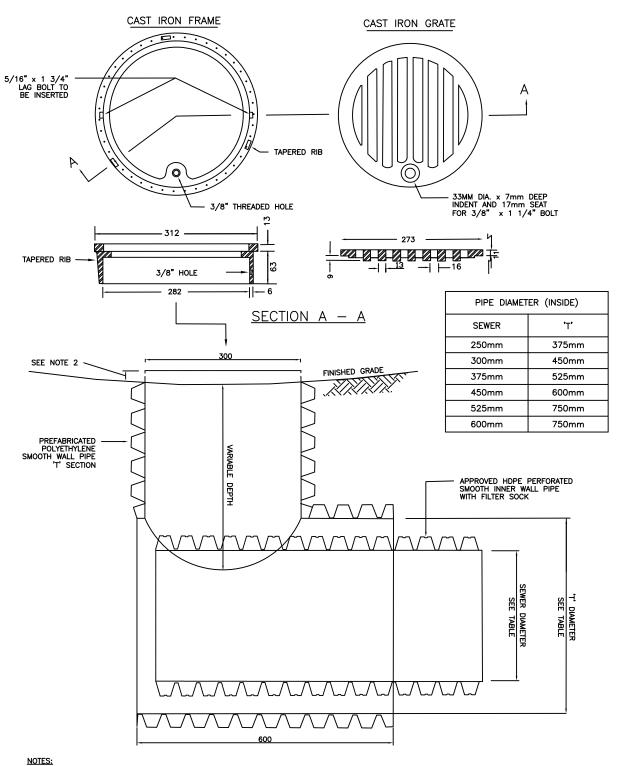
MUNICIPALITY OF NORTH GRENVILLE

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anada		Date: 04/05/22
A North Grenville	SWM FACILITY WARNING SIGN	Date: None Rev.
I di ciivilie	205	Dwg No. C-01



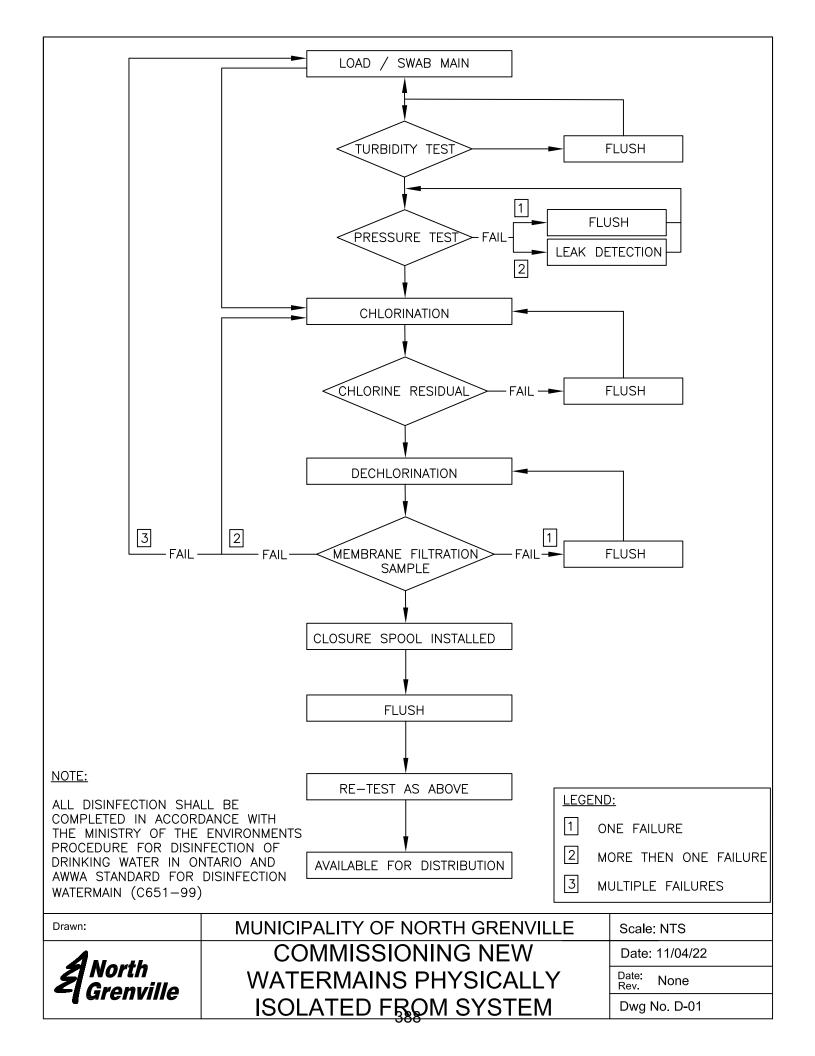
- 1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SHOWN.
- FOR DITCHED PIPE APPLICATIONS TOP OF CB SHALL BE MIN .5CM ABOVE BOTTOM OF THE DITCH/SWALE AND BE LOCATED MIN. 2M FROM EDGE OF PAVEMENT.
- WHEN NON PERFORATED PIPE IS USED, MATCH THE 'T'S HORIZONTAL OPENING DIAMETERS TO THE PIPE DIAMETER AND CONNECT WITH MANUFACTURER RECOMMENDED CONNECTION SLEEVE.
- 4. CAST IRON FRAME TO BE SECURED TO PIPE WITH 2 LAG BOLTS AS SHOWN

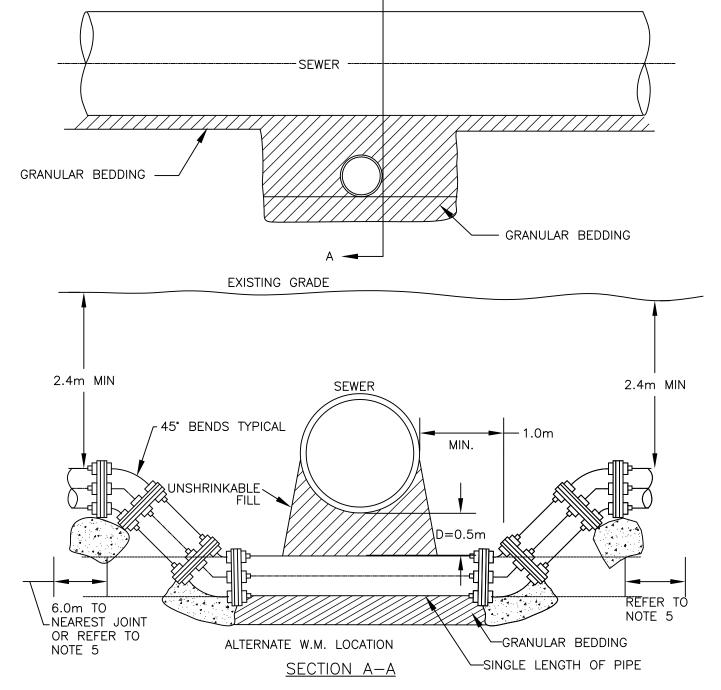
Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
ANOUL	CATCHBASIN — 'T' FOR REAR	Date: 11/04/22
A North Grenville	YARD, DITCHED PIPE AND	Date: None Rev. None
* arenvine	LANDSCAPE APPLICATIONS	Dwg No. C-02



- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SHOWN.
- FOR DITCHED PIPE APPLICATIONS TOP OF CB SHALL BE MIN .5CM ABOVE BOTTOM OF THE DITCH/SWALE AND BE LOCATED MIN. 2M FROM EDGE OF PAVEMENT.
- WHEN NON PERFORATED PIPE IS USED, MATCH THE 'T'S HORIZONTAL OPENING DIAMETERS TO THE PIPE DIAMETER AND CONNECT WITH MANUFACTURER RECOMMENDED CONNECTION SLEEVE.

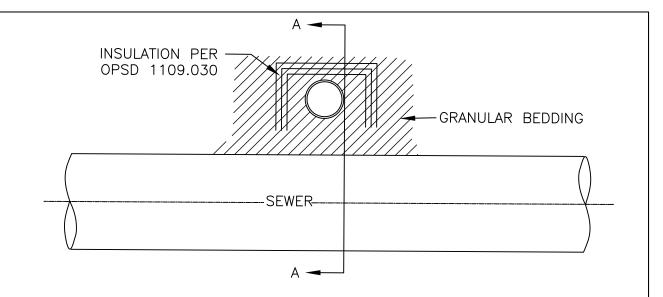
Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anada	CATCHBASIN — ELBOW FOR	Date: 11/04/22
A North Grenville	REAR YARD, DITCHED PIPE	Date: None Rev.
1 di cilville	AND LANDSCARE, APPLICATIONS	Dwg No. C-03



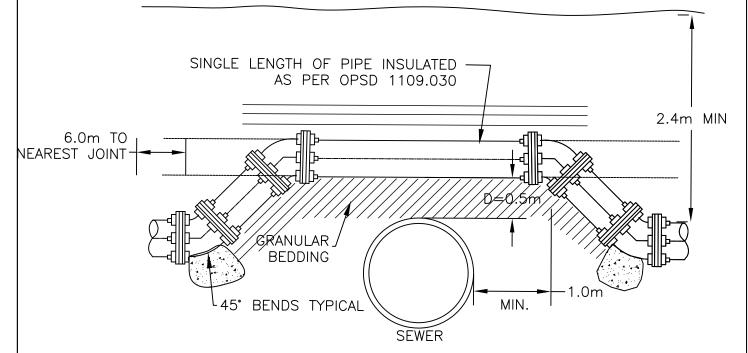


- 1. BARREL TO BARREL SEPARATION SHALL BE 500mm MIN.
- 2. THRUST BLOCKS FOR MAINS LARGER THAN 400mm SHALL BE AS PER DESIGN.
- 3. FOR 300mm & 400mmø MAINS, BENDS SHALL BE MAX. 221/2°.
- 4. CONCRETE SHALL BE 20Mpa.
- 5. RETAINING RINGS AND /OR THREADED RODS TO BE USED AT ALL JOINTS WHERE CONCRETE THRUST BLOCKS CAN NOT BE UTILIZED AND WHERE COUPLING CONNECTIONS ARE MADE LESS THAN 6.0m FROM THE JOINT.
- 6. THIS STANDARD APPLIES TO WATERMAINS 100mm TO 400mmø (NOMINAL)

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anada	WATERMAIN CROSSING	Date: 11/04/22
A North Grenville		
1 dictivitie	380	Dwg No. D-02



EXISTING GRADE

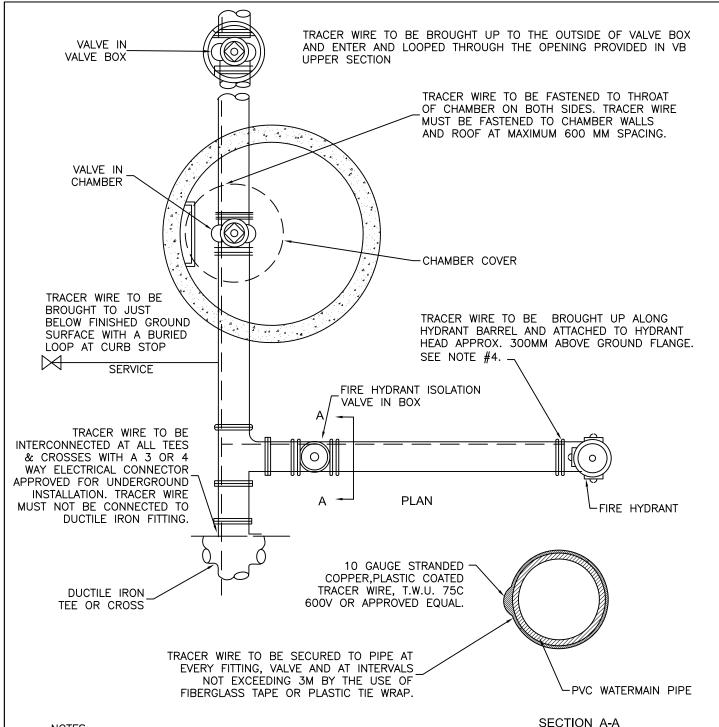


SECTION A-A

NOTES

- 1. BARREL TO BARREL SEPARATION SHALL BE 500mm MIN. 1°.
- 2. FOR 300mm & 400mmø MAINS, BENDS SHALL BE MAX. 22 2
- 3. RETAINING RINGS AND /OR THREADED RODS TO BE USED AT ALL JOINTS.
- 4. CONCRETE THRUST BLÓCKS WILL NOT BE USED FOR TOP OF LOOP.
- 5. THIS STANDARD APPLIES TO WATERMAINS 100mm TO 400mmø (NOMINAL)
- 6. INSULATION TO BE INSTALLED FULL LENGTH WHERE WATERMAIN HAS LESS THAN 2.4m COVER.

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anada	WATERMAIN CROSSING	Date: 11/04/22
A North Grenville	ABOVE SEWER Date: Rev. None	
<i>f di cirville</i>	ABOVE SEVVEIX	Dwg No. D-03



1. ALL CONNECTIONS MUST BE WATERPROOFED.

- 2. SPLICING OF TRACER WIRE IS NOT ALLOWED UNLESS SPECIFIED OR APPROVED.
- 3. TRACER WIRE CONTINUITY OF CURRENT MUST BE TESTED AND VERIFIED.
- 4. TRACER WIRE AT HYDRANT SHALL BE BROUGHT TO THE SURFACE AND TIED AROUND BARREL.
- 5. FOR PVC TO DUCTILE IRON CONNECTIONS THE TRACER WIRE MUST BE ATTACHED TO THE DUCTILE IRON PIPE BY CADWELD.
- 6. TRACER WIRE TO CONNECT TO ALL COPPER SERVICE CONNECTIONS AT OR NEAR MAIN STOP. INSTALL BRASS CONNECTOR TO COPPER PIPE AND FASTEN TRACER WIRE TO CONNECTOR.

MUNICIPALITY OF NORTH GRENVILLE

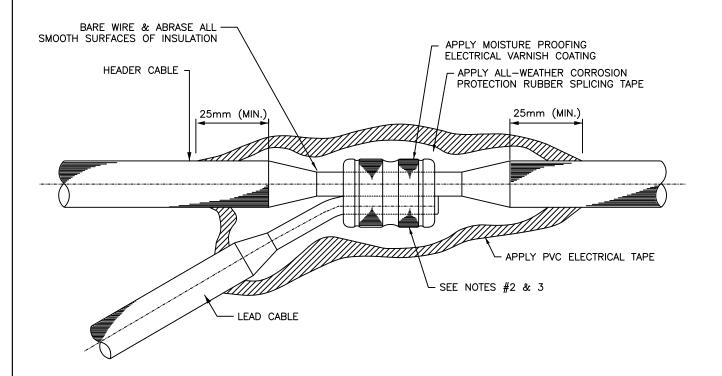
Scale: NTS

Date: 11/04/22

Date: None
PVC WATERMAIN

391

Dwg No. D-04



- SEE BELOW FOR WIRE SPECIFICATIONS.

 C-TAP, THERMITE WELD OR COPPER SPLIT BOLT.
 INSTALL C-TAP OR SPLIT BOLT USING APPROVED TOOL

TRACER WIRE SPECIFICATIONS

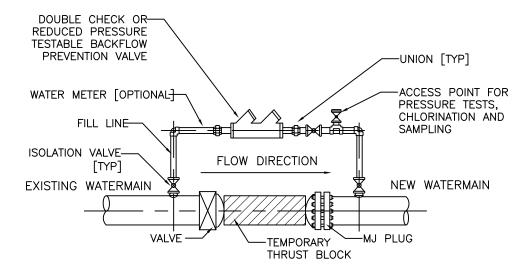
- 10 GAUGE STRANDED COPPER, PLASTIC COATED TRACER WIRE, T.W.U. 75C 600V OR APPROVED EQUAL.

ANODE WIRE SPECIFICATIONS

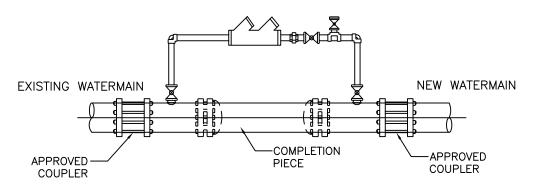
- AWG #10/7 STRAND COPPER CABLE HAVING RWU-90 INSULATION.

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
ANGUL		Date: 11/04/22
A North Grenville	WATERPROOFING OF SPLICES	Date: None Rev. None
f di eliville	392	Dwg No. D-05

BACKFLOW PREVENTION VALVE ASSEMBLY



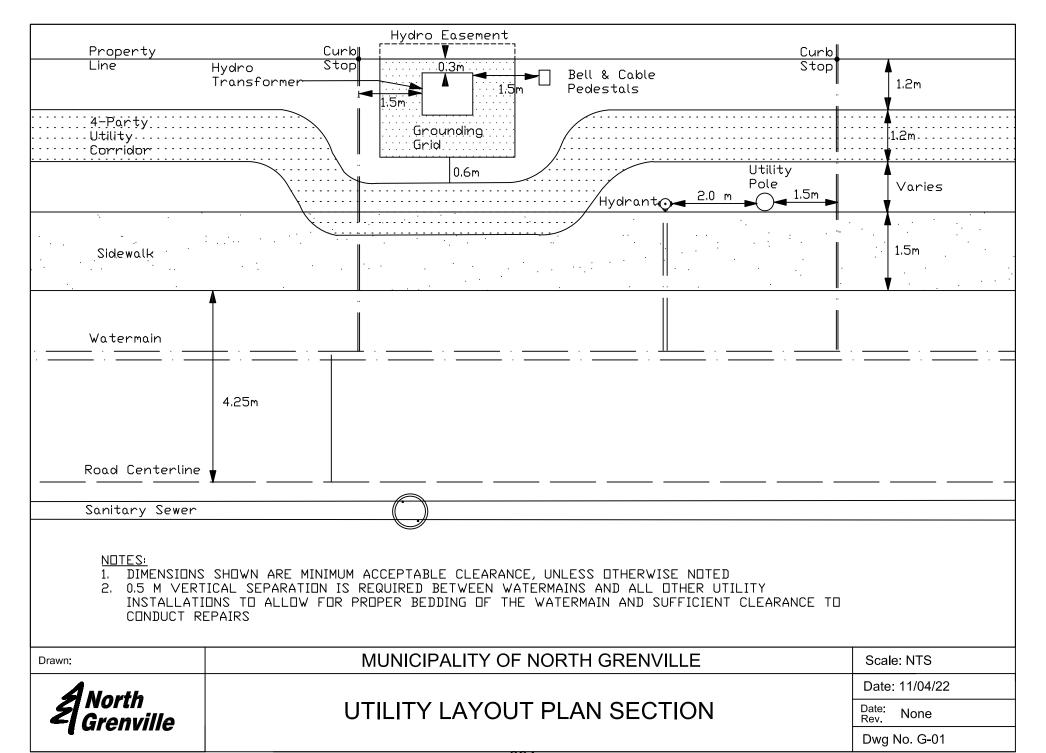
WATERMAIN COMPLETION ASSEMBLY



NOTES:

- THE BACKFLOW PREVENTION VALVE ASSEMBLY SHALL BE REMOVED DURING WATERMAIN PRESSURE
- THE FINAL CONNECTION OF THE WATERMAIN SHALL BE COMPLETED ONLY AFTER AUTHORIZATION BY THE MUNICIPALITY.
- THE WATERMAIN SHALL BE DRAINED BY CONTROLLED MEANS. SUFFICIENT TRENCH DEWATERING CAPACITY SHALL BE USED WHEN THE EXISTING AND NEW WATERMAINS ARE DRAINED PRIOR TO THE FINAL CONNECTION TO ENSURE NO BACKFLOW IN EITHER WATERMAIN. DECHLORINATION MUST COMPLY WITH AWWA 651-05 REGULATIONS.
- 4. THE WATERMAIN SHALL BE CUT BACK TO REMOVE THE TAPPING POINTS OF THE BACKFLOW PREVENTION VALVE ASSEMBLY.
- 5. ALL NEW PIPING AND APPURTENANCES PLACED IN THE CONNECTION SHALL BE THOROUGHLY DISINFECTED WITH 12% SOLUTION OF SODIUM HYPOCHLORITE OR EQUIVALENT.
- 6. ON NON-METALIC WATERMAINS, THE TRACING WIRE SHALL BE CONNECTED TO THE COUPLER ONLY IF THE COUPLER IS NOT IN CONTACT WITH A METALIC WATERMAIN OTHERWISE TERMINATE TRACER WIRE WITH AN ANODE.
- 7. A PHYSICAL SEPARATION MUST BE MAINTAINED AT ALL CONNECTION POINTS OF NEW WATERMAINS TO THE EXISTING SYSTEMS UNTIL BACTERIOLOGICAL TEST HAVE PASSES. A SAMPLING TAP MUST BE PROVIDED AT THE END OF EACH BRANCH OR STUB.
- 8. ONLY MUNICIPAL STAFF SHALL OPERATE MUNICIPALITY OWNED VALVES.
- 9. THIS DETAIL IS FOR SCHEMATIC INFORMATION ONLY. THE ACTUAL CONFIGURATION USED MUST SATISFY THE INTENT OF THIS DRAWING.

Drawn:	MUNICIPALITY OF NORTH GRENVILLE	Scale: NTS
Anadh	TYPICAL TEMPORARY WATER	Date: 11/04/22
A North Grenville	CONNECTION SCHEMATIC	Date: None Rev.
	303	Dwg No. D-06



Appendix 4 – Approved Materials



Municipality of North Grenville Engineering Standards for Design, Approval, and Construction

August 2022

- Maintenance Holes and Catch Basins
- Miscellaneous Metals
- Frames and Covers
- Sewer Pipe and Fittings
- Culverts / Miscellaneous

APPROVED WATER DISTRIBUTION PRODUCTS LISTING

- Valve Boxes and Chamber
- Pipe Materials
- Fire Hydrants
- Valves
- Water Meters
- Tapping Sleeves and Repair Clamps
- Service Tubing and Components
- Cathodic Protection
- Pavement Insulation for Watermains and Sewers

PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Grab Bars and Safety Tees	Aluminum		MSU Mississauga –	
Seals and Wall Sleeves for Wall	Waterproof, flexible, S/S		APS –	Innerlynx
Penetrations	nuts and bolts		PSI –	Link Seal with Century-Line sleeves
Push-in Gaskets (Flexible Pipe to MH	Flexible,		Blackthorn –	Push-in Dura-Seal Tylox
Connections)	no metallic straps		Hamilton Kent –	HKT-CS Kwik Seal
,	·		Press-Seal –	
Cast-in-Place Gaskets (Flexible Pipe to	Flexible,		Blackthorn –	Dura-Seal III, III-NV
MH	no metallic straps		Hamilton Kent –	Tylox, FT, XT, Dual Seal II
Connections)	·		Press-Seal –	Econo Seal
Cast-in-Place Gaskets (Concrete Pipe to	Flexible,		Hamilton Kent –	Tylox WT+
MH connections)	no metallic straps			
Connectors (Concrete and Flexible pipe	Flexible,	Up to 825 mm	NPC/Trelleborg –	Kor-N-Seal II (316 S/S special order
to MH connections)	316 S/S straps where	diameter	Press-Seal –	required, wedge style)
,	applicable			PSX Direct Drive (316 S/S special order)
Waterproof Seal	Flexible, hydrophilic		SIKA –	Hydrotite SS, Hydrotite DSS, Leakmaster
for Rigid Pipe Penetrations				sealant
Non-Shrink Grout for Around MH	Non-metallic, non-		SIKA –	212 HP
Openings	corrosive			
Gaskets for MH Joints	Isoprene, for round		Hamilton Kent –	Tylox Superseal (white or green stripe)
	precast concrete MH		Press-Seal –	RFS
Gaskets for MH Joints	Nitrile, for round precast		Hamilton Kent –	Tylox Superseal (orange or yellow stripe)
	concrete MH joints		Press-Seal –	RFS Nitrile
				For applications with hydrocarbon
				contaminated soils.
Sealant for Non- Circular Precast	controlled expansion,	W14.1	Conseal –	CS-231 Waterstop
Concrete Structure Joints	butyl rubber based with		SIKA –	Hydrotite CJ
	hydrophilic compounds			
Waterproofing Membrane	Rolls for large surfaces	W14.1	Sealtight –	Mel-Rol
			SIKA –	Sikadur Combiflex SG

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PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Round MH Structures	Reinforced	1200 mm	Forterra –	With or without drop pipe.
	concrete,OPSS 1351,	diameter	M-Con Products –	
	OPSD		Pre-qualified CPCQA	
	701.010,		members	
Round MH Structures	Reinforced concrete,	1500 mm	Forterra –	With or without drop pipe.
	OPSS 1351, OPSD	diameter	M-Con Products – Pre-	
	701.011, monolithic base		qualified CPCQA members	
Round MH Structures	Reinforced concrete,	1800 mm	Forterra –	With or without drop pipe.
	OPSS 1351, OPSD	diameter	M-Con Products – Pre-	
	701.012, monolithic or		qualified CPCQA members	
	slab base		i i	
Round MH Structures	Reinforced concrete,	2400 mm	Forterra –	With or without drop pipe.
	OPSS 1351, 701.013,	diameter	M-Con Products – Pre-	
	slab		qualified CPCQA members	
Round MH Structures	Reinforced concrete,	3000 mm	Forterra –	With or without drop pipe.
	OPSS 1351, 701.014,	diameter	M-Con Products – Pre-	
	slab		qualified CPCQA members	
Round MH Structures	Reinforced concrete,	3600 mm	Forterra –	
	OPSS 1351, 701.015,	diameter	Pre-qualified CPCQA	
	slab		members	With or without drop pipe.
Box MH Structures	Reinforced concrete,	All sizes	M-Con Products – Pre-	
	OPSS		qualified CPCQA members	
	1351, monolithic or		·	
	slab base			With or without drop pipe.
Catch Basin Structures	Reinforced concrete,	All sizes	Forterra –	
	OPSS 1351, OPSD		M-Con Products – Pre-	
	705.010, 705.020		qualified CPCQA members	
	Alternate B, for mainline		[
	applications			

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MAINTENANCE HOLES AND CATCH BASINS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Catch Basins Structures and Tees	OPSS	All sizes	Forterra –		
(Ditches and Rear Yard Applications)	1351; reinforced concrete, PVC, or HDPE		M-Con Products – Prequalified CPCQA members ADS – Armtec – Hancor – Ideal – Nyloplast – Soleno –	Boss series Ditch and rear yard drainage use only. Not to be used on sewer	
Vortex Inducing	For drop pipe insert	All sizes	IPEX –	Vortex Flow Inserts	
Drop Structure Inserts	applications over 6				
Internal Drop Pipe Tees	With flapper	All sizes	IPEX –		

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MISCELLANEOUS METAL	.S			
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Wall Anchors for Landings	Heavy duty adhesive anchors		Hilti —	HVA
Landing Gratings and Ladders	Aluminum, FRP, or S/S		Borden – Fibergrate – MSU Mississauga –	B#8 FRP Ladders and Platforms
Sewer Plugs	For plugging abandoned sewer services		Deblo –	Deblo Sewer Plug

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FRAMES AND COVERS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Square Surface Inlet Catch Basin Covers	OPSS 1850		Bibby Ste. Croix – East Jordan – Sigma –	For replacement on existing square frames only.
Rectangular CB Frames and Covers	OPSS 1850		Bibby Ste. Croix – Cedar Infrastructure – East Jordan – Sigma –	For replacement on existing round CB structures only.
Surface Inlet CB Frame and Round Cover	OPSS 1850, fish style		Bibby Ste. Croix – Cedar Infrastructure – Domcast – East Jordan – Sigma –	
Self Leveling Surface Inlet CB Frame and Cover	For OPSD 705.010 or 600 mm round CB's, OPSS 1850, fish style		Suatac –	S24C-F, S24CB, S24D-SQ (adapter for OPSD 705.010 boxes)
Self Leveling Surface Inlet CB Frame and ADS Compliant Cover			Suatac –	S24C-A, S24CB, S24D-SQ (adapter for OPSD 705.010 boxes)
Curb Inlet CB Frame and Cover	For OPSD 705.010 boxes, OPSS 1850		Bibby Ste. Croix – Domcast – East Jordan –	
Curb Inlet CB Maintenance Hole Frame and	For maintenance hole structures, OPSS 1850		Bibby Ste. Croix – East Jordan –	

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FRAMES AND COVERS	I	T		I
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Sanitary Maintenance Hole Covers	OPSS 1850, 14-		Bibby Ste. Croix –	
	20 mm		Cedar Infrastructure –	
	covers		Domcast –	
			East Jordan –	
			Govind Steel – Sigma	
			-	
			PCHG –	201314
			Star Pipe Products –	MH8006OT
			Suatac –	S30C-SA
Storm Maintenance Hole Covers	OPSS 1850, 14-		Bibby Ste. Croix –	
	20 mm		Cedar Infrastructure –	
	covers		Domcast –	
			East Jordan –	
			Govind Steel – Sigma	
			_	
			PCHG –	201313
			Star Pipe Products –	MH8006OT-1
			Suatac –	S30MC-ST
Maintenance Hole Lid Plugs	Rubber, 25 mm diameter,		Cretex –	Style 1
	watertight		Or plug supplied by lid	
			manufacturer	
Regular Maintenance Hole Frames	OPSS 1850		Bibby Ste. Croix –	
			Cedar Infrastructure –	
			Domcast –	
			East Jordan –	
			Govind Steel –	
			Sigma –	
Watertight Sanitary MH	Watertight, secured	Per	East Jordan –	Campression 41420049W01
Frame and Covers	gasket	manufacturer's		
		drawings		

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FRAMES AND COVERS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Watertight Storm MH Frame and Covers	Watertight, secured gasket	Per manufacturer's drawings	East Jordan –	Campression 41420050W01
Self Leveling Maintenance Hole Frame and Guide Frame Units	MS-14.2, OPSS 1850	Per manufacturer's drawings	Bibby Ste. Croix – East Jordan – PCHG – Star Pipe Products – Suatac –	Autostable C-54M 3028, AJ745 201311 MH8006R, MH8006G S30MC Frames and covers are not interchangeable between manufacturers.
Frame and Covers for Raised Maintenance				Not to be in vehicle, cyclist, or pedestrian path of travel.
Retrofit Trench Drains (For Storm Drainage Channels)	HDPE or polymer concrete, for storm drainage channels	All sizes	ABT – ADS – Zurn Industries –	Polydrain Duraslot (150 mm slot height) Z886 Perma-Trench Retrofit applications by City only, not for use in roadway.
Retrofit Trench Drain Grates (For Storm Drainage Channels in Roadway)	Removable and fixed ductile iron slotted grates, long opening perpendicular to traffic, H-20 loading, end grate removable for flushing and all others		ABT – ADS – Zurn Industries –	Polydrain 500 series Duraslot (150 mm slot height) Z886 HDD, HR Retrofit applications by City only.

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PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Reinforced	OPSS	All diameters	Manufacturers pre-	
Concrete Sewer Pipe	1820, round		qualified by CPCQA	
Reinforced Concrete Sewer Pipe with	OPSS	All diameters	Forterra –	
Cored Tees	1820, gravity systems, round, maximum branch size 375 mm		M-Con Products –	
Prestressed Concrete Cylinder Pipe	AWWA C301	All diameters	Decast –	
, ,			Forterra –	
Reinforced Concrete Non-	AWWA C302,	All diameters	Decast –	
Cylinder Pipe	joints rated at 55 PSI minimum		Forterra –	
Pretensioned Concrete Cylinder Pipe	AWWA C303	All diameters	Forterra –	
PVC Sewer Pipe	CSA B182.2, CSA	All diameters	Diamond –	Diamond PVC Sewer
	B182.7, OPSS 1841,		IPEX –	Ring-Tite, Enviro-Tite
	SDR 28 or SDR 35,		NAPCO Pipe –	Gasketed Sewer Pipe
	regular and nitrile gaskets		National Pipe/Plastics –	DURALOC
			Next Polymers – Northern	For applications where minimum separation
			Pipe –	requirements are met.
PVC Sewer Fittings	PSM PVC, CSA B182.2,	All diameters	Diamond –	Diamond PVC Sewer Fittings
	OPSS 1841,		Galaxy Plastics –	PVC Gasketed Sewer Fittings
	SDR 28 or SDR 35,		Harco –	<u>.</u>
	regular and nitrile gaskets		IPEX –	Ring-Tite
			NAPCO Pipe –	Gasketed Sewer Fittings
			Next Polymers – Northern	DURALOC
			Pro-Line –	PVC Gasketed Sewer Fittings
				Non-pressurized applications on sewer

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SEWER PIPE AND FITTINGS	SEWER PIPE AND FITTINGS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Sewer Pipe (Applications with Inadequate	OPSS 1841, with joints	All diameters	Decast – Forterra –	AWWA C302	
Separation)	capable of 345 kPa		IPEX –	AWWA C302	
	minimum, regular and		NAPCO Pipe –	Ring-Tite, Series Pipe, Enviro-Tite Gasketed	
	nitrile gaskets; PSM			Sewer Pipe, IPS Series Pressure Pipe	
	PVC, CSA B182.2/CSA			AQUALOCK PVC Series Pipe, DURALOC	
	182.7, or CSA B137.3 or		Next Polymers – .	PVC 1120 Series 160, 200	
	AWWA C302			For parallel common trench applications	
			Northern –	with inadequate	
				horizontal or vertical separation. Blue	
				watermain pipe is not acceptable.	
Sewer Pipe (River crossings and HDD	PVC or HDPE	All diameters	Infra Pipe Solutions – IPEX	1	
Applications)			_	Fusible, Terrabrute CR (300 mm maximum	
				dia.)	
			NAPCO Pipe –	Cobra Lock (300 mm maximum dia.)	
			Performance Pipe –	Driscoplex 4000	
				PVC shall be green or white. HDPE shall	
DVC Faragrapia Dina	CCA D427.2 CDD 24	All diamantana	IDEV	have green stripes.	
PVC Forcemain Pipe	1 ' '	All diameters	IPEX –	Series Pipe	
	26, 32.5, or 41,		NAPCO Pipe –	IPS Series Pressure Pipe	
	regular and nitrile gaskets		Next Polymers – Northern	AQUALOCK PVC Series Pipe	
			-	PVC 1120 Series 160, 200	
PVC Forcemain Fittings	PVC, CSA B137.3, SDR	All diameters	IPEX –	Blue watermain pipe is not acceptable. Cycle Tough 4000	
F v C i orcemani i ittings	21, 26, 32.5,	All diameters	NAPCO Pipe –	IPS Series Pressure Pipe	
	41, regular and nitrile		Next Polymers –	AQUALOCK PVC Series Pipe	
	gaskets		Next Folymers =	Blue watermain fittings are not acceptable.	
HDPE	OPSS 1842		CPChem –	Driscoplex 4000, Performance Pipe	
Forcemain Pipe			Imperial –	Thermolene	
			Infra Pipe Solutions –	Schlairpipe	
			in a ripo dolationo	Blue striped pipe is not acceptable.	

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PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
HDPE	Electrofusion, butt,		GF Piping Systems –	
Forcemain Fittings	socket, sidewall, and		Approved HDPE Pipe	
-	MJ adapter		Manufacturers	
Concrete Forcemain Pipe	AWWA C301,		Decast –	(C301 and C302 only)
	AWWA C302, or AWWA		Forterra –	
	C303			
Sewer Service Pipe	PSM PVC, CSA B182.2,	100, 135, and	Diamond –	Diamond PVC Sewer
	OPSS 410, OPSS	150 mm	IPEX –	Ring-Tite, Enviro-tite
	1841, SDR 28,		NAPCO Pipe –	Royal Seal, Gasketed Sewer Pipe
	regular and nitrile gaskets		National –	
			Next Polymers – Northern	DURALOC
Sewer Service Pipe Fittings	22.5° radius bends,	100, 135, and	IPEX –	Ring-Tite
	controlled settlement	150 mm		
	joints; PSM PVC CSA			
	B182.2 OPSS 410 and			
	1841, SDR			
	28, regular and nitrile			
Couplings for Sewer Service Pipe	ASTM C 425, ASTM C		Fernco –	Flexible Couplings (316 S/S)
(Connections to Existing	1173, 316 S/S		Mission –	Flex-Seal (316 S/S)
Services)	clamping bands, EPDM,			Rehab projects only.
	SBR, and			
	nitrile rubber			
Corrugated HDPE Pipe	OPSS 1840, 170	150 mm	ADS –	Single-wall corrugated
	kPa minimum		Armtec –	Big "O" Tubing, Boss 1000
			ldeal –	Drainage Tubing, Challenger 1000 Drainage
			Soleno –	Pipe, Solflo
				For road subdrainage use. Not for sewer
				main use.

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SEWER PIPE AND FITTINGS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Interior Smooth Walled HDPE Pipe and	Polyethylene	100-900 mm	ADS –	N-12
Fittings	CSA B182.8 or CSA		Armtec –	Boss 2000, Boss Poly-Tite
_	182.6, OPSS 1840,		Ideal –	Challenger 2000, 3000
	320 kPa minimum		Soleno –	Solflo Max
				For ditch pipe, rear yard, and landscape
				drainage applications. Not
				for sewer main use.
Rubber Gasketed Inserts	Flexible service	All sizes	Galaxy –	Core-Bell Concrete Adapter
	connections for		IPEX –	PVC CSA B182.1 saddle
	reinforced concrete pipe		Uroplast –	Universal, old style curved gasket only
Sealant (for bell insert type service	Watertight, thermoplastic,		Tapecoat -	TC Moldable Sealant
connections)	elastomeric, and			
	synthetic resins, for seal			
	between service pipe			
	bells and host concrete			
	pipe			

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CULVERTS AND MISCELLAN		CIZE	MANUEACTURER	MODEL NUMBER/NOTES
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Round Precast Culvert	Reinforced concrete,		Manufacturers prequalified	
	OPSS		by CPCQA	
D D 101	1820		D. 6. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
Box Precast Culvert	Reinforced concrete		Manufacturers prequalified	
LIBBE O. L. A. B. LIM II B'	OPSS	500.000	by CPCQA	N. 40 M/T ID. N. 40 OT ID // . // C. 004 000
HDPE Culverts Dual Wall Pipe	OPSS 1840,	500-900 mm	ADS –	N-12 WT IB, N-12 ST IB (both for CSA 320
	OPSD 806.02, CSA			kPa)
	B182.8,		Armtec –	Boss 1000, 2000
	320 kPa or greater, soil-		Ideal –	Challenger 2000, 3000
	tight or water-		Soleno –	Solflo, Solflo Max
	tight joints			
Closed Profile Wall HDPE Culvert Pipe or	•	500 to 760mm	Infra-Pipe Solutions –	Weholite
Liner	ASTM 894-98,	(RSC160),		
	OPSD 806.021,	840 to 2130mm		
	welded joints	(RSC 250),		
		2290 to		
		3050mm (RSC		
		400)		
Corrugated Steel Round Culvert	Aluminized type 2, CSA	2.0 mm thick for	Armtec –	Hel-Cor
	G401, OPSS 1801,	under 600mm	Atlantic Industries –	Corrugated Steel Pipe
	OPSD	dia.,	Canada Culvert –	Steelcor Pipe
	805.010	2.8 mm for 600 to		·
		1000 mm. dia.,		
		3.5 mm for over		
Corrugated Steel Round Culvert	Polymer laminated, CSA		Atlantic Industries –	Corrugated Steel Pipe
	G401, OPSS 1801 ASTM		Canada Culvert –	Steelcor Pipe
	A929, ASTM A742,	dia., 2.8 mm for		i i
	OPSD 805.010	600 to 1000mm		
		dia.,		
		3.5 mm for		
		over 1000 mm		

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CULVERTS AND MISCELLA		_		
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Corrugated Steel Pipe Arch Culvert	Aluminized type 2 CSA	2.0 mm thick for	Armtec –	Hel-Cor
	G401, OPSS 1801,	under 600 mm	Atlantic Industries –	Corrugated Steel Pipe
	OPSD	dia., 2.8 mm for	Canada Culvert –	Steelcor Pipe
	805.020	600 to 1000 mm		
		dia.,		
		3.5 mm for		
		over 1000 mm		
Corrugated Steel Pipe Arch Culverts	Polymer laminated, CSA	2.0 mm thick for	Atlantic Industries –	Corrugated Steel Pipe
	G401, OPSS 1801,	under 600 mm	Canada Culvert –	Steelcor Pipe
	ASTM A929, ASTM	dia., 2.8 mm for		
	A742,	600- 1000 mm		
	OPSD 805.020	dia.,		
		3.5 mm for		
		over 1000 mm		
Spiral Rib Round Pipe	Aluminized type 2,	2.8 mm thick	Armtec –	Ultra Flo
	CSA G401, OPSS 1801		Atlantic Industries –	Hi-Flo (temporary pending certification)
Spiral Rib Round Pipe	Polymer laminated, CSA	2.8 mm thick	Armtec –	Ultra Flo
	G401, OPSS 1801,		Atlantic Industries –	Hi-Flo (temporary pending certification)
	ASTM A929,			
	ASTM A742			
Spiral Rib Arch Pipe	Aluminized type 2, CSA	2.8 mm thick	Armtec –	Ultra Flo
	G401, OPSS 1801,		Atlantic Industries –	Hi-Flo (temporary pending certification)
	OPSD			<u> </u>
Spiral Rib Arch Pipe	Polymer laminated CSA	2.8 mm thick	Armtec –	Ultra Flo
	G401, OPSS 1801,		Atlantic Industries –	Hi-Flo (temporary pending certification)
	ASTM A929, ASTM			
	A742, OPSD			
Precast Concrete Headwalls	Alternate to OPSD	Pipe or culvert	M-Con Products – Forterra	E-1
	804.030	diameter 300-	_	G-4
		900 mm		

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CULVERTS AND MISCELLANEOUS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Precast Concrete Headwalls	Alternate to OPSD 804.020	Pipe or culvert diameter 975- 1500 mm	M-Con Products –	E-2	
Precast Concrete Headwalls	Alternate to OPSD 804.040		M-Con Products – Forterra	E-3 G1, G2, G3	
1 Inlet Control Devices with Orifice and Trap	Slide type for OPSD 705.010 square CBs	83 mm minimum orifice dia.	Canadian Control Devices - CANUS Plastics – IPEX – Pedro Plastics –	. CCD-1FP, CCD-2FA; with trap SW Tech Odor Trap Square CB Tempest HF SWR-1 Applications in the ROW only.	
2 Inlet Control Devices with Orifice and Trap	Slide type for 600 mm diameter round CBs	83 mm minimum orifice dia.	Canadian Control Devices - CANUS Plastics – IPEX –	CCD-1FP, CCD-2FA; with adaptor and trap SW Tech Odor Trap Round CB Tempest HF with round adapter plate	
3 Inlet Control Devices with Vortex and Trap	Slide type for OPSD 705.010 square CBs	Vortex type, minimum flowrate 6 l/s	ACG/Hydro Intl. – CANUS	Reg-U-Flo Vortex Valve: SMXH SW Tech Vortex Square CB Tempest LMF FV-VHV-1-O CEV	
4 Inlet Control Devices with Vortex and Trap	Slide type for 600mm round CBs	Vortex type, minimum flowrate 6 l/s	ACG/Hydro Intl. –	Reg-U-Flo Vortex Valve: SMXH with adaptor SW Tech Vortex Round CB Tempest LMF with round adapter plate FV-VHV-1-O with Adaptor CEV with adapter	
5 Plug Type Inlet Control Devices with Orifice and without Trap	Plug or slide type for round or square CB's, diamond with slot sizes A to F, round 83, 94, 102, 108, 127, 152 and, 178 mm orifices	83 mm minimum dia.	Canadian Control Devices CANUS Plastics – . IPEX – . Pedro Plastics –	CCD-1FP, CCD-2FA; with adaptor for round CBs SW Tech Round and Diamond with Slot Orifices, Sliding Plate and plug types, for square and round catch basins MHF, MHF with round adapter plate mounting (Round Orifice)	

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CULVERTS AND MISCELLANEOUS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
6 Inlet Control Devices without	Vortex plug type for	Minimum flowrate	ACG/Hydro Intl. –	Reg-U-Flo: SH, SXH
Trap	OPSD 705.010	6 l/s	Hydrovex –	VHV, SVHV
	square CBs			Replacement in ROW only.
7 Inlet Control Devices with	Slide type for 600mm	83 mm minimum	CANUS Plastics –	SW Tech Shallow Sump (SFC) Round CB
Orifice and Trap	round CBs without sump	dia.	IPEX –	
8 Inlet Control Devices with	Slide type for OPSD	83 mm minimum	CANUS Plastics –	SW Tech Shallow Sump (SFC) Square CB
Orifice and Trap	705.010 square CBs	dia.	IPEX –	
	without sump			
9 Inlet Control Devices with	Slide type for 600mm	Minimum flowrate	CANUS Plastics –	SW Tech Shallow Sump Vortex (SSV)
Vortex and Trap	round CBs without sump	6 l/s		Round CB
10 Inlet Control Devices with	Slide type for OPSD	Minimum flowrate	CANUS Plastics –	SW Tech Shallow Sump Vortex (SSV)
Vortex and Trap	705.010 square CBs	6 l/s		Square CB
	without sump			
Concrete Adjustment Units	Reinforced Concrete,	All sizes	Manufacturers prequalified	Curb inlet catchbasin applications only
	OPSS 1351; for curb inlet		by CPCQA	
	CB's			
Sealant for HDPE Units	Waterproof, butyl rubber,	Caulk or rope	Conseal –	CS-102
	ASTM C- 990,		Hamilton Kent –	Kent Seal Butyl Sealant
	AASHTO M-198		Press-Seal –	Pro-Stik, EZ-Stik
Adhesive for EPP and EPS	Polyether, ASTM C920,	Caulk or rope	Chem Link –	M-1 Structural Adhesive
Units	type S, grade	-	UGT –	Secure N Seal
	NS, class 35			

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CULVERTS AND MISCELLA	CULVERTS AND MISCELLANEOUS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES		
Non-Woven Geotextile (Separation or	Non-woven class I, grab		Armtec –	160		
Drainage Asphalt Overlay)	tensile 445N minimum,		Carthage –	FX40HS		
	A.O.S.		Contech –	C40NW		
	0.19 to 0.212 mm, OPSS		Layfield Geo –	LP 4		
	1860		Maccaferri –	Mactex MX140		
			Mirafi –	140NC		
			Propex/SI –	Geotex 401		
			SRW –	NW4		
			Terrafix –	270R		
			Thrace-Ling –	130EX		
			Hanes Geo –	N04.5		
			Nilex –	4546		
			Soleno –	TX-70		
Non-Woven Geotextile (Separation or	Non-woven class II, grab		Armtec –	200		
Drainage)	tensile 660N minimum,		Carthage –	FX 50HS		
	A.O.S.		Hanes Geo –	N06		
	0.15 to 0.212 mm, OPSS		Layfield Geo –	LP 6		
	1860		Maccaferri –	Mactex MX225		
			Mirafi –	160N		
			Nilex –	4551		
			Propex/SI –	Geotex 501		
			Soleno –	TX-170		
			SRW –	NW6		
			Terrafix –	360R		
			Thrace-Ling –	150FX		

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CULVERTS AND MISCELLA	CULVERTS AND MISCELLANEOUS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES		
Woven Geotextile (Separation or	Woven class I geotextile,		Armtec –	835		
Stabilization)	grab tensile 800N		Carthage –	FX-55		
	minimum, A.O.S.		Hanes Geo –	Terratex GS		
	0.300 to 0.425 mm,		Layfield Geo –	LP 200		
	OPSS 1860		Maccaferri-	Mactex MXW9		
			Mirafi –	500X		
			Nilex –	2002		
			Propex/SI –	Geotex 200ST		
			Soleno –	2002W		
			SRW –	SS5		
			Terrafix –	24-15		
			Thrace-I ing –	GTF 200S		
Woven Geotextile (Separation or	Woven class II, geotextile		Armtec –	845		
Stabilization)	grab tensile 1100		Carthage –	FX 65		
	minimum, A.O.S.		Hanes Geo –	Teratex HD		
	0.300 to 0.425 mm,		Layfield Geo –	LP 315		
	OPSS 1860		Maccaferri –	Mactex MXW13		
			Mirafi –	550X		
			Nilex –	2004		
			Propex/SI –	Geotex 250ST		
			Soleno –	2004W		
			SRW -	SS6		
			Terrafix –	200W		
T (') M	140.00.0	A 11	Thrace-Ling –	GTF 250		
Tactile Walking Surface Indicators	MS-23.2	All sizes and radii		Irondome		
			Advantage Cast Iron –	Cofety Data effort Courtema		
			Bibby Ste. Croix –	Safety Detection System		
			East Jordan –	Duralast		
			Ironped –			
			Neenah –			
			Star Pipe Products –			

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CULVERTS AND MISCELLANEOUS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Pothole Patching Products	Hardens using pressure from traffic, all season, all weather, 2-year shelf life minimum		Perma Patch –	Perma Patch
Bicycle Counter Handhole Boxes &	Polymer Concrete Open	300 x 300 x	Channell –	GLB121212
Covers	Bottom Custom Lid	300 mm	Old Castle/Synertech –	S1212B12FA, S1212HFAOA01
Flexible Bollards for Cycling Lanes	Light, flexible, reflective, UV protected; post style, colour, size, sheeting grade, base and anchors as specified	As specified	Develotech – IRS –	Cyclo-Zone Delineator Tuff Post
Traffic Loop Sealant			3M –	5000

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VALVE BOXES AND CHAMBERS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Valve Boxes 130 mm slide type, with floating / adjustable tops and 1568 mm bottoms resting on guide plates	Bibby Ste. Croix –	7353, 7347, 7374, 7375, 7339, 738B, 738C			
	floating / adjustable tops	· ·	Domcast –	DF8560, DF8530, DF8512, DF8518, DF8507, DF8514, DF8502D	
		mm assembly length	Sigma –	VB-5262, VB-5401, VB5512, VB-5518, VB4500, VB9191-D, VB6500-D	
			Star Pipe Products –	VB514-60B, VBDF514D, VBDF514EX12, VBDF514EX18, VBDFGP, VB514APT, VB514APTL	

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PIPE MATERIALS					
PRODUCT	ТҮРЕ	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Ductile Iron Pipe	AWWA C-150, special thickness class	100-400 mm	Canada Pipe – McWane Ductile –	To be supplied with end caps and tamper evident seals.	
PVC Pipe	AWWA C-900, CSA B137.3, DR 18	100-400 mm,	IPEX – NAPCO Pipe – National Pipe & Plastics- Next Polymer –	Blue Brute (100-300 mm), Centurion (400 mm) Aqualoc To be supplied with end caps and tamper	
PVCO Pipe	AWWA C-909, CSA B137.3, pressure class 235	100-400 mm	IPEX –	Bionax To be supplied with end caps and tamper evident seals.	
Joint Lubricant	NSF 61, for gasketed pipe		Dymar Chemicals- Whitlam Plumb Pro - Or product specified by pipe manufacturer meeting NSF 61	Dymalube 10 Blue Lube	
Restrained Coupling for High Deflection (Connections to Existing Watermains) (Municipal use only)	Two bolts, wide range for DI, CI, and PVC	100-300 mm	Krausz –	Hymax Grip	
Straight Couplings for High Deflection Connections to Existing Watermains (List for Municipal supply tenders)	Two bolts, AWWA C-219, for DI, CI, and PVC pipe	100-600 mm	Krausz – Romac –	Hymax Coupling, 2000 Macro HP Extended Range Coupling	
Gaskets	AWWA C-111, NSF 61; SBR, EPDM, NBR, or FKM; gasket material to be clearly identified, for mechanical joints and flanges		A.R. Thomson Group – Durlon – Garlock – Spec. Rubber Products Star Pipe Products – US Pipe – . Or products specified by fitting manufacturer meeting AWWA C-111 and	TORUSEAL SBR, EPDM, NBR, FKM 7910 NBR 3505, 3760-U, Stress Saver XP SBR, EPDM, NBR SBR Full Face Flange-Tyte, and Tyton SBR, Neoprene, EPDM, NBR, FKM	

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FIRE HYDRANTS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Hydrants	Three-way compression,	1980-2850	AVK –	2780 Nostalgic	
	AWWA C-502	mm buried length	Clow Canada –	Heritage Brigadier M-67B	
		_	Mueller –	Super Century	
Hydrant Markers	Polycarbonate, UV	1219 mm long	Flexstake –	C804	
	protected, nozzle mount,		Lakeshore Hydrant–		
	yellow body		1		

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VALVES					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Gate Valves	Resilient seat or wedge,	100-300 mm	AVK –	Series 45 Full Wall	
	AWWA C-509		Clow Canada –	F6100	
			M&H –	4067	
			Mueller –	A-2362	
			Watts –	NRS	
Tapping Valves	Resilient seat or wedge,	100-300 mm	AVK –	Series 45 Full Wall	
	AWWA C-509, MJ x		Clow Canada –	F6114	
	Flange		Mueller –	T-2362-19	

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WATER METERS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Water Meters	Positive Displacement,	20, 25, 40, 50	Neptune Technology –	T10
	AWWA C-700	mm		25 mm and smaller shall have non-ferrous
				frost bottoms.
Water Meters	Turbine, AWWA C-701	75, 100, 150	Neptune Technology –	Nep-Turb
		mm		
Water Meters	Compound, AWWA	75, 100, 150,	Neptune Technology –	Nep-Tru/Flo
	C702	200 mm		
Water Meters	Fire Service,	150, 200, 250	Neptune Technology –	HP Protectus III
	AWWA C703	mm		

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TAPPING SLEEVES & REPAIR CLAMPS				
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Tapping Sleeves	Epoxy coated or S/S	100-400 mm	Alex Ayoutte –	
	sleeve with all stainless		Clow Canada –	TS-100
	fasteners, for CI/DI and		Ford Meter Box –	FTS
	PVC		Smith-Blair –	No. 622
			Mueller –	H-620
			Robar –	6906
			Total Piping Solutions –	Triple Tap (100-300 mm)
Tapping Sleeves	Stainless steel; for CI, DI,	100-400 mm	Total Piping Solutions –	Triple Tap (100-300 mm)
	and			
	PVC pipe			
Repair Clamps	Stainless steel, single	150-300 mm	Clow Canada –	D76 R
	band		Ford Meter Box –	F1-xxx-16, FS1-xxx-16
			Robar –	5616
			Smith-Blair –	Type 261
				Minimum clamp length 400 mm.
Repair Clamps	Stainless steel, double	75-127mm	Mueller –	500, 510, 520, 530
	band		Robar –	5626
			Smith-Blair –	Type 262
				Minimum clamp length 400 mm.

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PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Service Saddles	For PVC pipe, stainless	50-300 mm	Cambridge Brass –	8407
	steel, single band, double		Ford Meter Box –	FS3138
	bolt, widths		Robar –	2616 DB
			Romac –	305, 306
			Smith-Blair –	376
Service Saddles with Integrated Main	For PVC pipe, stainless		Cambridge Brass –	8417
Stop	steel, single band,			
	double bolts			
Service Posts	Telescopic, MW-19.8	19-25 mm,	Clow Canada/Bibby Ste.	
		2350-2650	Croix/Trojan Industries –	D-1, D-1P, VSB 1
		mm length	Mueller –	A-726
			PCHG –	D1
			Star Pipe Products –	12D1 - OT
Service Posts	Telescopic, MW-19.8	38-50 mm,	Clow Canada /Bibby Ste.	
		2350-2650	Croix/Trojan Industries –	VSB 2
		mm length	Mueller –	A-728
			PCHG –	D2
			Star Pipe Products –	12D2 - OT
Main Stops	Standard AWWA inlet x	19 mm	Cambridge Brass –	301NL-A3HE3, 302NL-A3HE3 F1000-
	compression, plug or ball		Ford Meter Box –	3TW-Q-NL, FB1000-3TW- Q-NL
	valve		Mueller –	H-15008NPB, B-25008NPB; both
				c/w elec. connection
Main Stops	Standard AWWA inlet x	25 mm	Cambridge Brass –	301NL-A4HE4, 302NL-A4HE4
	compression, plug or ball	ball Ford Meter Box – F1000-4TW-Q-NL, FB		F1000-4TW-Q-NL, FB1000-4TW- Q-NL
	valve		Mueller –	H-15008NPB, B-25008NPB; both
				c/w elec. connection
Main Stops	Standard AWWA inlet x	38 mm	Cambridge Brass –	301NL-A6HE6, 302NL-A6HE6
	compression,		Ford Meter Box – Mueller –	FB1000-6TW-Q-NL
	plug or ball valve			H-15008NPB, B-25008NPB; both
	_			c/w elec. connection

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SERVICE TUBING & COMPONENTS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Main Stops	Standard AWWA inlet x	50 mm	Cambridge Brass –	301NL-A7HE7, 302NL-A7HE7 FB1000-	
·	compression,		Ford Meter Box - Mueller -	7TW-Q-NL	
	plug or ball valve			H-15008NPB, B-25008NPB; both	
				c/w elec. connection	
Curb Stops	Compression x	19mm	Cambridge Brass –	202NL-H3HE3 B44-	
	compression, ball valve		Ford Meter Box – Mueller –	333TW-Q-NL	
				B-25209NPB with elec. connection	
Curb Stops	Compression x	25mm	Cambridge Brass –	202NL-H4HE4 B44-	
	compression,		Ford Meter Box –	444TW-Q-NL	
	ball valve		Mueller –	B-25209NPB with elec. connection	
Curb Stops	Compression x	38mm	Cambridge Brass –	202NL-H6HE6	
	compression, ball valve		Ford Meter Box –	B44-666TW-Q-NL	
			Mueller –	B-25209NPB with elec. connection	
Curb Stops	Compression x	50 mm	Cambridge Brass –	202NL-H7HE7	
	compression,		Ford Meter Box –	B44-777TW-Q-NL	
	ball valve		Mueller –	B-25209NPB with elec. connection	
Couplings	Compression x	19 mm	Cambridge Brass –	118NL-H3H3	
	compression		Ford Meter Box –	C44-33-NL, C44-33-Q-NL	
			Mueller –	H-15403NPB	
Couplings	Compression x	25 mm	Cambridge Brass –	118NL-H4H4	
	compression		Ford Meter Box –	C44-33-NL, C44-33-Q-NL	
			Mueller –	H15403NPB	
Couplings	Compression x	38 mm	Cambridge Brass –	118NL-H6H6	
	compression		Ford Meter Box –	C44-66-NL, C44-66-Q-NL	
			Mueller –	H15403NPB	
Couplings	Compression x	50 mm	Cambridge Brass –	118NL-H7H7	
	compression		Ford Meter Box –	C44-77-NL, C44-77-Q-NL	
			Mueller –	H15403NPB	
Water Service Tubing (New Installations	Copper type K, AWWA C-	19-50 mm	Cerro –		
or	800,		Great Lakes Copper –		
Rehab)	certified ASTM B88, CTS				

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SERVICE TUBING & COMPONENTS					
PRODUCT TYPE SIZE MANUFACTURER MODEL NUMBER/NOTES					
Water Service Tubing (New	PEX,	19-50mm	IPEX –	Blue 904	
Installations Only)	AWWA C-904, SDR 9		Rehau –	Municipex	

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PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES
Magnesium Anodes	MW19.9, M-9- 14,	13 kg, 22 kg,	Anode Casting	
	M-17-20, M-32-22	50 kg	Corrpro (Canada) –	
			Dow –	
			Exothermal –	
			Galvotec –	
			US Magnesium –	
			Packaging	
			Bren Tech. –	7
			Corrosion Services –	
			ICCC –	
			Integrity Anode Corp –	
			Maple Agencies (Exothrml)	
Zinc Anodes	MW-19.9, Z-12- 24, Z-24-	13 kg, 25 kg	Anode Casting	
	48		Bren Tech –	
			Canada Metal (Western) –	
			Corrpro Canada –	
			Exothermal –	
			Integrity Anode Corp –	
			Packaging	
			Bren Tech –	
			Canada Metal (Western) –	
			DC Corrosion Corporation	
			– ICCĆ –	
			Integrity Anode Corp –	
			Maple Agencies (Exothrml)	
Ground Clamps and Header Wires	UL467 listed for direct	13-38 mm	Blackburn –	JD (13-25 mm)
	burial, solid bronze, for			
	connecting			
	anodes to copper			

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PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Ground Clamps and Header Wires	UL467 listed for direct burial, solid bronze, for connecting anodes to copper services	32-50 mm	Blackburn –	J2D	
Thermite Welders	Connections for CI and DI pipe	#10/7 stranded wire to 100 mm diameter and larger	Erico – Thermoweld –	CAHBA-IG M156	
Thermite Welders	Connections for steel pipe	#10/7 stranded wire to 100 mm diameter and larger	Erico – Thermoweld –	CAHAA-1G M100	
Thermite Powder Cartridges	For CI and DI		Erico – Thermoweld –	CA 25XF19 25PCI	
Thermite Powder Cartridges	For steel		Erico – Thermoweld –	CA 15 15P	
Thermite Weld Protective Barriers			Tapecoat/Royston – Thermoweld –	Handy Cap IP Thermocap	
Test Stations (Flush Mounted)			Cott Manufacturing – Handley Industries –	Street Fink 4" Test Stations	
Test Stations (Post Mounted)			Cott Manufacturing – Handley Industries –	Big Fink 4" Test Stations	
Petrolatum Primer	AWWA C-217		Denso – ICCC/Rustrol – Petro Coating Systems – SCAPA – Trenton –	Denso Paste Wrap Paste Primer Renwrap 327 Primer Wax-Tape Primer	Petro Petro

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CATHODIC PROTECTION					
PRODUCT	ТҮРЕ	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Petrolatum Tape	AWWA C-217		Denso – ICCC/Rustrol/Trenton –	Densyl Tape Petro Wrap LT Anti-Corrosion Tape, #1	
			Petro Coating Systems –	Wax Tape	
			SCAPA –	PetroTape, Petro Overwrap Tape	
				Renwrap 330, 330L Joint WrapTape, 355-	
				15 Outerwrap	
Petrolatum Molding Mastic			Denso –	Profiling Mastic	
			ICCC/Rustrol –	Petro Wrap Moulding Mastic PMULST	
			Petro Coating Systems –	Renwrap 331 Moulding Tape	
			SCAPA -		
Flange Isolation Kits	Full face gasket, full		APS –		
	length sleeve, isolation		Central Plastics –		
	washers		GPT (PSI) –		

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PAVEMENT INSULATION FOR WATERMAINS AND SEWERS					
PRODUCT	TYPE	SIZE	MANUFACTURER	MODEL NUMBER/NOTES	
Extruded Grade A Polystyrene Insulation	Grade A, 275 kPa	600 mm x	Dow Chemical –	HI 40	
Boards	compressive strength	2400 mm,	Owens Corning Canada –	Foamular 400	
	minimum, OPSS 1605,	minimum 50 mm			
	ASTM C578	thick			
	Type VI				
Extruded Grade B Polystyrene Insulation	Grade B, 400 kPa	600 mm x	Dow Chemical –	HI-60	
Boards	compressive strength	2400 mm,	Owens Corning Canada –	Foamular 600	
	minimum, OPSS 1605,	minimum 50 mm			
	ASTM C578	thick			
	Type VII				
Polystyrene Board Adhesive			Dow Chemical –	All-Weather Adhesive	
			Or products specified by		
			insulation board		
			manufacturers		
Factory Applied Polyurethane Foam	Per	Custom	Urecon –		
	manufacturer's	fabricated			
	specifications				

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Policy Title: Blue Community Policy

Policy Number: PRC-002-2024

Category: Bottled Water

Department: Parks, Recreation and

Culture Related Policies:

Approved By: Council

Effective Date: June 18, 2024

Revision Date:

Policy Statement:

The Municipality of North Grenville recognizes the importance of promoting sustainable water management practices and is committed to supporting The Blue Communities Project. This policy aims to encourage water conservation, protect water as a public resource, and promote public access to clean and safe water.

Purpose:

To provide a Blue Community Policy that supports the provision and promotion of local well or municipal tap water and ban the sale of bottled water from municipal facilities and properties where potable water is available.

- 1. To support the April 19, 2022, designation of the Municipality of North Grenville as a "Blue Community" by supporting the resolution to recognize water as a human right.
- 2. To commit to protecting water in the public interest by promoting publicly funded, owned, and operated water and wastewater services; and
- 3. To phase out and ban the sale of bottled water at municipal facilities and properties where potable water is available and to promote the use of municipal tap and well water in the Municipality of North Grenville.

Scope:

This policy is applicable to the Municipality of North Grenville Parks, Recreation and Culture facilities and properties. Exemptions to the policy are applicable in cases of emergencies, whether declared or non-declared, to the North Grenville Fire Service during emergencies and training evolutions and to individuals who do not have access to potable water.

Policy:

1. PHASE 1 (2024) - Promote Local Well and Municipal Water Use

- 1.1. Encourage the use of well and municipal tap water in municipal facilities and properties to its stakeholders by including messaging in the 'Conditions of Use' portion of facility rental contracts.
- 1.2. Promote the use of well and municipal tap water to its stakeholders and residents through the Municipality's website and social media platforms.
- 1.3. Provide an implementation date for the ban on the sale of bottled water at indoor municipal facilities.

2. PHASE 2 (2025/2026) – Implementing the Ban on the Sale of Bottled Water at Indoor Municipal Facilities

- 2.1. Purchase and install permanent water filling stations at the Municipal Centre in the main entrance lobby, upstairs at the Municipal Centre, at the Curling Club and at Private Blake Williamson Memorial Hall.
- 2.2. Implement the ban on the sale of bottled water at indoor municipal facilities including North Grenville Municipal Centre, Maplewood Hall, the Curling Club, Private Blake Williamson Memorial Hall, and the canteen at the North Grenville Municipal Centre and encourage the use of well and municipal tap water.
- 2.3. Promote the alternative methods that the Municipality put in place and the implementation date of the ban on the sale of bottled water at the indoor municipal facilities specified in 2.2 by adding facility signage and through the Municipality's website, social media platforms and media releases.

3. Phase 3 (2026/2027) – Implementing the Ban on the Sale of Bottled Water at Riverside Park and South Gower Park

- 3.1. Purchase and install of permanent water filling stations (wherever feasible) and purchase a portable water filling station for outdoor events.
- 3.2. Implementation of the ban on the sale of bottled water at Riverside Park and encourage the use of well and municipal tap water.
- 3.3. Promote the alternative methods that the Municipality put in place and the implementation date of the ban on the sale of bottled water at Riverside by adding facility signage and through the Municipality's website, social media platforms and media releases.

3.4. Upon receiving an update license for Maplewood Hall and South Gower Park for potable drinking water implement the ban on the sale of bottled water at both of these facilities and install a water filling station at South Gower Park.

Responsibilities:

PHASE 1

Event Coordinator/Sports Facilities and Advertising Clerk

 Provide and change the messaging in the 'Conditions of Use' portion of facility contracts.

Communications Team

• Design and create promotional content to include on the Municipality's website, social platforms, and media releases.

PHASE 2

Director of Parks, Recreation and Culture/Facilities Superintendent

- Purchase required equipment and oversee the installation of the permanent water filling stations to specified locations.
- Provide and install facility signage.
- Implement the ban on the sale of bottled water in municipal facilities.

Communications Team

 Design and create promotional content to include on the Municipality's website, social platforms, and media releases.

PHASE 3

Director of Parks, Recreation and Culture/Facilities Superintendent

- Purchase and install water filling stations at parks according to the feasibility research in phase one.
- Purchase portable water filling station for outdoor events.
- Implement the ban on the sale of bottled water at outdoor events held at Riverside Park and South Gower Park, whenever feasible.
- Provide and install facility signage.

Communications Team

 Design and create promotional content to include on the Municipality's website, social platforms, and media releases.

Policy Communication:

Promotion through the Municipality's website, social media platforms and media releases.

Related Documents/Legislation:

Resolution C-2022-168 – Blue Communities Project

Authorization:

This Policy was authorized by Resolution Number C-2024-184 adopted by Council at its meeting held on 2024-06-18.

Revision History

Document Owner	Revised Date	Reason for Changes

Contact:

Any questions or concerns regarding this Policy shall be directed to: Mark Guy, Director of Parks, Recreation and Culture



Committee Agenda Report

Committee Name: Equity, Diversity and Inclusion Advisory Committee (EDIAC)

Meeting Date: Thursday, February 13, 2025

Submitted By: Hillary Geneau, Director of Corporate Services

Topic: Equity, Diversity, and Inclusion (EDI) Policy Review and Matrix Creation

Goal:

To assess how other municipalities review policies for EDI compliance and determine best practices that can be incorporated into North Grenville's policy evaluation framework.

Staff suggest the following actions and timeline for the policy review and matrix creation process:

February 13 EDIAC Meeting	 Review matrixes used in other communities Review sample list of North Grenville policies Draft a Policy EDI Matrix Choose three (3) key policies to review at the March 13 meeting
February 19	 Staff to review Draft Policy EDI Matrix
March 13 EDIAC Meeting	 Apply Policy Draft EDI Matrix to three (3) key policies Solidify matrix for recommendation to Council
April 8 Council	 Matrix brought to Council for approval
Ongoing	Review policies as they arise

Background:

The following is a summary of how other municipalities integrate EDI principles into policy development, evaluation, and implementation and a review of key North Grenville policies.

EDI Policy Review Processes in Other Municipalities

1. City of Ottawa

Equity and Inclusion Lens Tool

- Who benefits from this policy? Who might be excluded?
- Does this policy support participation from diverse communities?
- Are resources distributed equitably?
- How does this policy address barriers related to race, ability, gender, or language?

Policy Evaluation Processes

- Uses an Equity Checklist to assess policies based on accessibility, affordability, and inclusion.
- Maintains an EDI Dashboard to track progress and ensure transparency in equity-related goals.
- Integrates EDI considerations into participatory budgeting, ensuring underrepresented groups influence funding priorities.

2. Niagara Region

EDI Policy Checklist

- Is the policy co-designed with equity-seeking groups?
- Does it promote employment equity and representation?
- How does it align with the Truth and Reconciliation Commission Calls to Action?

Policy Evaluation Processes

- Requires annual reporting by the DEI Committee, outlining progress, challenges, and areas for improvement.
- Engages with equity-seeking groups through consultations and town halls.
- Ensures that municipal development policies align accessibility and affordable housing goals.

3. City of St. Catharines

Inclusive Policy Review Checklist

- Does the policy use inclusive language, such as gender-neutral terms?
- Are systemic biases identified and addressed?
- Does the policy consider the needs of marginalized communities, including affordability and accessibility?

Policy Evaluation Processes

- Collaborates with the Planning Department to ensure zoning and development policies reflect inclusivity in housing and accessibility.
- Reviews municipal policies to remove systemic biases and promote inclusive language.
- Appoints members of equity-seeking groups to municipal boards and committees, ensuring diverse perspectives in decision-making.

4. City of Kingston

EDI Evaluation Criteria

Are periodic community surveys conducted to assess policy impact?

- Does the policy include mandatory cultural awareness training for municipal employees and council members?
- Are Indigenous cultural considerations integrated into the policy?

Policy Evaluation Processes

- Conducts Equity Impact Assessments (EIAs), particularly for affordable housing policies to prioritize vulnerable populations, including low-income residents and newcomers.
- Publishes annual reports tracking key EDI metrics, such as the number of accessible housing units developed.
- Implements mandatory equity training for municipal staff and council members.

5. Haldimand County

Policy Evaluation Processes

- The DEI Advisory Committee (DEIAC) organizes focus groups with Indigenous communities, newcomers, and other marginalized populations to gather input for policy development.
- Reviews municipal procedures to improve cultural competency and remove systemic barriers in community services.

Internal Review

Each department was asked to suggest policies for review to aid in creating a Policy EDI Matrix. It should be highlighted that the majority of the policies will be reviewed on an ongoing basis and may not be updated until their next review period. The following policies can be considered (most are included in the agenda package):

Department	Policy	Considerations
Chief Administrative Officer	Public Complaint and Conduct Policy (attached)	Draft attached – finalized at Council February 4.
	Naming of Corporate Assets Policy (attached)	 Names will not be chosen that are discriminatory or derogatory considering race, gender, creed, political affiliation or other similar factors;
Client Services	Communications Policy (attached)	 Draft We aim to ensure that all communications are clear, accessible, and respectful, while reflecting our values of accountability and inclusiveness. Communicating in plain language ensures information is more accessible and easily understood.

		 All internal and external communications will adhere to AODA. Provide alternative formats.
Corporate Services	NGtransit Hand- to-Hand Transfer Policy (attached)	This policy was created in partnership with Community Living to ensure their clients were not left unattended at bus stops.
	Transit Fares	 We do not have a specific policy related to Transit Fares, but they will be included in the forthcoming User Fees By-law Update. We provide riders information about programs for subsidies and work with Leeds and Grenville Development Services, Ontario Works, and Canadian National Institute for the Blind (CNIB) to provide reduced or free fares.
	IT Policies (Device Policy, Electronic Monitoring Policy, Acceptable Internet and E- mail Use Policy) (attached)	An example of internal policies.
Finance	Purchasing and Procurement Policy (attached)	 To be updated in the near future. Kingston incorporated Social Procurement practices and inclusion and diversity factors in their new Procurement Policy.
	Tax Collection and Transfer to Taxes	Includes items about transferring overdue payments (eg. water) to taxes, working with people for late payments
Parks, Recreation, and Culture	Waiving of Fees Policy (attached)	 Must provide evidence that regular rental fees may constitute a real barrier to the running of their event or program. Activity is open to the public, or membership in the requesting organization is open to the public
	Ice Allocation Policy (attached)	There are many key principles in the determination of ice time

		allocation such as age, gender, residency, universality, economic impact, revenue generation, number of hours requested, time of year, customer history, special events and extraordinary cases. • Identified user: N.G. Organized Group - Youth
	Theatre Allocation Policy (attached)	 Goal: Ensure fair community access to Municipal recreation and culture facilities reflecting a variety of interest areas, skill levels and program formats. Goal: Balance revenue targets identified in associated budgets with community accessibility.
	Inclusion Policy	 Not in place but has been considered. Would aim to provide access to recreation facilities/programs at a reduced cost.
Planning and Development	Developer's Guide (planning design guidelines) (attached)	 AODA standards Accessible pedestrian design features Accessible visual elements (ie. park visible from the street).
	Official Plan	 The Update to the Official Plan is currently underway. The consultants met with the EDIAC, IAC, and AAC and conducted community engagement.
Public Works	Engineering Standards (attached)	 AODA referenced for walkways and paths (tactile indicators, hard surface).
	Water Policy	Includes items about assistance for payments
	Blue Communities Policy (attached)	 Purpose: To commit to protecting water in the public interest by promoting publicly funded, owned, and operated water and wastewater services. Includes that water will not be shut off for non-payment

How Does This Relate To The Committee:

The EDI Strategy includes the following actions:

- Review of current policies, including human resources, procurement, and facility management by a subject matter expert on EDI. This should include community engagement.
- Provide a timeline for the completion of the review and table the recommendations to the EDI Advisory Committee.
- Create a matrix to apply when developing new policies (consider the needs of equity-deserving groups and key EDI issues).

How Does This Relate To The Community Strategic Plan:

Pillar 5: A Caring Community, particularly Strategic

Priority 5.3: Continue to Improve Equity, Diversity, Inclusion, and Reconciliation

Outcome:

Review municipal policies to ensure they align with EDI principles and create a Policy EDI Matrix.



Committee Agenda Report

Committee Name: Equity, Diversity, and Inclusion Advisory Committee (EDIAC)

Meeting Date: February 13, 2025

Submitted By: Hillary Geneau, Director of Corporate Services

Topic: Review Municipality of North Grenville Welcome Packages

Goal:

The North Grenville Welcome Package is designed to introduce new residents to municipal services, community programs, and local amenities. The package is being updated and currently includes the following materials:

- Visit North Grenville Booklet
- Message from the Mayor
- Map of Trails
- Trail Guide Booklet
- Map of Kemptville
- Kemptville Live Visitor's Map
- Solid Waste, Organics, and Recycling Collection Guide
- Farmers Market Pamphlet
- Kemptville Youth Centre (KYC) Electronic Waste Pamphlet
- Building Permit Pamphlet
- Learn Before You Burn Pamphlet
- The Giving Garden Pamphlet
- Waste Collection Calendar

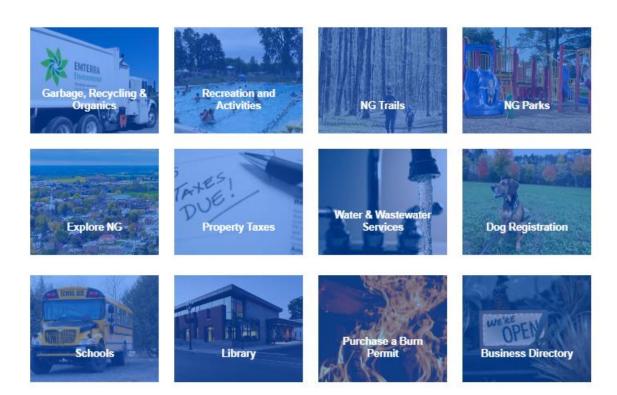
Not included in the package is a Resource List used on NGtransit (attached). This will be added to the package.

Additionally, the Municipality maintains a New Resident Resource Page on its website, which provides links to key community resources. This page can be accessed at: https://www.northgrenville.ca/community-and-culture/resources/new-residents. Below are the links included in the Welcome to North Grenville Page. Staff suggest NGtransit be added.

Welcome to North Grenville

➤ Message from the Mayor

Useful Links



How does this relate to the Committee:

Under Priority 1: Embedding EDI in Policy within the EDI Strategy, one of the Committee's outlined actions is to ensure diverse representation in marketing and communication materials. This includes:

- Reviewing and suggesting updates to the Welcome Package to ensure it provides equitable and accessible information for diverse newcomers.
- Assessing whether additional materials should be included to better serve various cultural, linguistic, or accessibility needs.
- Recommending updates or reorganizing the New Resident Resource Page to improve usability and inclusivity.

How does this relate to the community strategic plan:

This initiative supports:

- Strategic Pillar 5: A Caring Community
- Strategic Priority 5.3: Continue to Improve Equity, Diversity, Inclusion, and Reconciliation

By ensuring the Welcome Package is inclusive and representative of all residents, the Committee will help create a more welcoming and supportive environment for newcomers, fostering greater community engagement and belonging.

Outcome:

- Review and recommend updates to the North Grenville Welcome Package.
- Identify gaps in the current materials and suggest additions to reflect diverse community needs, including information for newcomers, Indigenous communities, persons with disabilities, and non-English speakers.
- Ensure digital accessibility and reorganize the New Resident Resource Page as needed for better navigation and inclusivity.
- Provide final recommendations to the Municipality for implementation, ensuring all new residents receive a comprehensive, welcoming, and inclusive introduction to North Grenville.

By refining the Welcome Package and enhancing accessibility and representation, the Committee will contribute to a more inclusive and equitable community experience for all new residents.



North Grenville Resource List

North Grenville Public Library

Providing resources such as books, movies, technology, and recreational equipment. Contact:

613-258-4711

info@ngpl.ca • www.ngpl.ca

Persons with Disabilities

Brighter Horizons

Individualized day programs to increase independence in functional life skills.

Contact:

819-639-8616

www.thebrighterhorizonsprogram.com Thebrighterhorizonsprogram@gmail.com

Community Living

Offering supports, programming, and independent and group living options. Contact:

613-258-7177

www.communitylivingnorthgrenville.ca info@clnorthgrenville.ca

Pathways to Independence

Providing assisted community living services and supports .

Contact:

613-233-3322

www.pathwaysind.com

New Canadians/Refugees

St. Lawrence-Rideau Immigration Partnership

Connecting immigrants to supports and services.

Contact:

613-498-2111

diversity.matters@eecentre.com www.leedsgrenvilleimmigration.ca

TR Leger Immigration Services

Helps with language training, settlement in Ontario, and forms and applications.
Contact:

1-877-412-2472

www.trleger.ucdsb.on.ca

trleger@ucdsb.on.ca



Older Adults

Seniors Community Services

Supporting seniors and adults with physical disabilities to live independently in their own homes.

Contact:

613-258-3203

hello@seniorscs.ca

www.seniorscs.ca

Beth Donovan Hospice

Supporting individuals and families through life-limiting illnesses and end-of-life transitions. Contact:

613-258-9611

www.bethdonovanhospice.ca bdh@bethdonovanhospice.ca

Home and Community Care Support Services Champlain

Health care services offered at home and in the community, as well as access to supported living programs and long-term care.

Contact:

310-2222 (no area code req'd)

1-800-538-0520

healthcareathome.ca/region/champlain

Financial/Housing

Habitat for Humanity Thousand Islands

Providing opportunities for affordable homeownership.

Contact:

613-342-3521

admin@habitat1000islands.org

www.habitat1000islands.org

Kemptville Salvation Army Food Bank

Operates the local food bank and provides other support.

Contact:

(613) 258-0111

www.thesalvationarmykemptville.com kemptvillesalvationarmy@gmail.com

House of Lazarus

Operates a food bank and outreach programs offering clothing, household goods, furniture, and housing support to those in need.

Contact: 1-613-989-3830

cashby@houseoflazarus.com

www.hol.community

United Counties of Leeds and Grenville Community and Social Services Division

Offering services related to Ontario Works, childcare, and housing, including subsidies, affordable housing, and homelessness support. Contact:

613-342-3840

www.leedsgrenville.com/en/government/community-and-social-services.aspx

CSE Consulting Employment Services

Helping job-seekers find employment. Contact:

613-258-6576

www.cseconsulting.com

Health and Crisis Services

Leeds, Grenville & Lanark Health Unit, Kemptville

Located at 80 Shaver Crescent on the Kemptville Campus. A variety of public health services are available, including immunization, sexual health, infant feeding clinics, quit smoking and vaping supports, speech and language support, and a needle syringe program.

Contact:

613-258-5941

contact@healthunit.org

www.healthunit.org/contact-us/kemptville

Leeds and Grenville Interval House

Providing services for women and children who have experienced violence.

Contact:

24 Hour Crisis Line 613-342-8815 or 1-800-267-4409 info@lqih.ca • www.lqih.ca

Victim Services Leeds & Grenville

Providing supports and services to victims of crime.

Contact:

1-800-939-7682

info@vslg.ca

www.vslg.ca

Youth

Kemptville Youth Centre

Providing mentorship and programming. Contact:

613-258-5212

manager@kyc.team

www.kyc.team

Girls Inc. Of Upper Canada

Providing programs and experiences for girls.

Contact:

613-345-3295

admin@girlsinc-uppercanada.org www.girlsinc-uppercanada.org

Leeds and Grenville Big Brothers Big Sisters

BBBS Offers individual and group mentoring programs amongst adults and youth.

Contact:

613 345 0281

bbbs.leeds@bigbrothersbigsisters.ca www.leeds.bigbrothersbigsisters.ca

Kemptville Area Family Resource Centre

Providing family programs and events .

Contact:

613 258 0138

kafrc.office@gmail.com

www.kafrc.weebly.com

2SLGBTQIA+

North Grenville Pride

Supporting the 2SLGBTQI+ community and their families.

Contact:

www.ngpride.ca info@ngpride.com

North Grenville Rainbow Youth Alliance

Providing programming and support for 2SLBTQIA+ youth.

Contact:

northgrenvillerainbowyouthalliance.com NG.RainbowYouth@gmail.com





Committee Agenda Report

Committee Name: Equity, Diversity, and Inclusion Advisory Committee (EDIAC)

Meeting Date: Thursday, February 13, 2025

Submitted By: Hillary Geneau, Director of Corporate Services

Topic: Review the Significant Dates Calendar

Background:

The Communications division has updated the calendar on the municipal website to include significant dates. The dates automatically appear when the calendar is first loaded. Users may also select "Significant Dates" from the category drop down to see only them. Staff are working on populating the calendar for the entire year using calendars published by various organizations. EDIAC members are encouraged to send any dates with a brief description that may have gotten missed.

Figure 1: Calendar with "All categories" selected

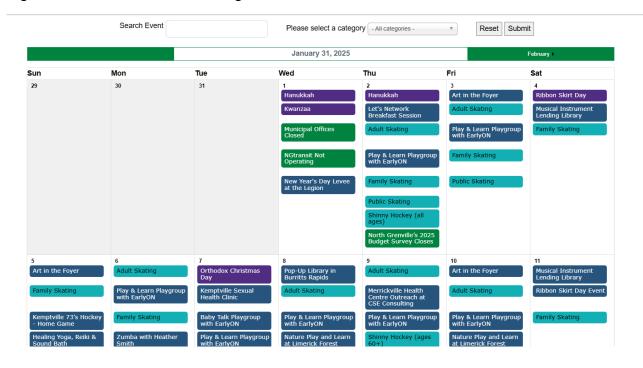


Figure 2: Calendar with "Significant Dates" selected



How does this relate to the Committee:

One of the actions included in the Equity Diversity, and Inclusion (EDI) Strategy is:

Develop a calendar recognizing dates of significance from many traditions. Bring to EDIAC for review and suggestions

How does this relate to the community strategic plan:

Strategic Pillar 5: A Caring Community

Strategic Priority 5.3: Continue to Improve Equity, Diversity, Inclusion, and Reconciliation

Outcome:

Review the calendar and provide any feedback.

Equity, Diversity, and Inclusion (EDI) Strategy Progress Report

Equity, Diversity and Inclusion Strategy Report Created On: Jan 17, 2025

Report Legend

Priority

No Update

Overdue

Priority 1

Embedding EDI in Policy

Description	Last Update
Review of current policies, including human resources, procurement, and facility management by a subject matter expert on EDI. This should include community engagement.	Next Steps: • Staff to bring key NG policies and example of other communities' policies to February 2025 EDIAC meeting
Provide a timeline for the completion of the review and table the recommendations to the EDI Advisory Committee.	Next Steps: • Staff to provide a timeline at the February 2025 EDIAC meeting
Create a matrix to apply when developing new policies (consider the needs of equity-deserving groups and key EDI issues).	Following an initial review of policies, staff to work with EDIAC to create a matrix. The matrix should consider the wheel of power and privilege.
Develop a calendar recognizing dates of significance from many traditions. Bring to EDIAC for review and suggestions	Accomplishments: Added filter to NG calendar Next Steps: EDIAC members to review calendar and send any suggestions to staff. Staff to build out the full year of the calendar. Staff to look at what events are considered significant (eg. not office closures)
Ensure that there is diverse representation in marketing and communications materials.	

Priority 2 **Dedicating EDI Resources**

Description	Last Update
Earmark resources for EDI in the annual budgeting process.	• Funds included in Corporate Services budget, including the EDI Fund Next Steps: • Review the EDI Fund at the February 2025 meeting
Conduct a needs assessment to explore whether resources can be made available for additional transportation services, enhanced internet services, safe spaces, and any developing concerns.	
Develop a catalogue of resources/directory, include new resident resources.	 Next Steps: Staff to provide the welcome package material for EDIAC's review at the February 2025 meeting. Staff to explore ways to get the package to new residents (eg. developers, real estate agents, sending out via mail or online, welcome wagon). Staff to provide resource list that is used on NGtransit and confirm if it is in the welcome package.
Ensure that EDI considerations are reflected in communications materials (inclusive language, accessible information).	
Strike an internal EDI staff committee to support employees to create an inclusive workspace and to identify ways to better serve the community.	
Connect with leading municipalities on the matter of EDI to learn about best practices.	Next Steps: • Connect with Ottawa

Priority 3

Establishing Strategic EDI Partnerships

Description	Last Update
Offer EDI related resources and training to staff and interested community members.	 Next Steps: Investigate Human Library Advocate for English Language Learner (ELL) services such as conversation groups Hold community discussions, e.g. book clubs, on EDI issues Provide Employer education
Actively address threats to personal safety	 Provided article to NG Times on a community issue Established protocol whereby Co-Chairs are mandated to call a special meeting to discuss advising on any appropriate action in response to a community incident. The Mayor on behalf of Council may choose to issue a statement. Person(s) affected should be consulted if possible.
Explore and advocate for more effective access to internet and technology for all community residents	Next Steps: • Explore a technology training program with the Library
Partner with health partners to enhance health services for equity-deserving community members.	Next Steps: • Staff to investigate the closure of the local OHIP physio offices

Description	Last Update
Connect with equity-deserving groups in meaningful ways, including supporting and promoting events and outreach efforts.	 Accomplishments: EDI Fund created to support community initiatives Next Steps: NG Times series featuring equity-deserving groups in our community Create safe spaces online or in physical space Advocate to have additional social services where everyone feels welcomed. Part of this is ensuring there are social services that are not linked to a specific faith or ideology. Request Housing Advisory Committee to integrate EDI considerations