

May 2, 2018

To: Members of the Licensing & Standards Committee, City of Toronto

Re: Presentation by the Pool & Hot Tub Council of Canada on the Issue of Pool Barriers/Fencing

Introduction: Isolation fencing can be an effective safeguard, but only if appreciated by the pool owner. In the absence of active enforcement isolation fencing has the potential to fail. Also, based on feedback received from a consumer survey, a sizeable majority of citizens are not in favour of mandated four-sided fencing installed around residential pools and ponds. The PHTCC endorses a layered approach to safety, rather than reliance on a single solution. The layered approach to safety is supported by virtually all organizations involved in drowning prevention, including the Canadian Red Cross, Lifesaving Society Canada and the U.S. Consumer Product Safety Commission. Elements include:

- ◆ Adult supervision
- ◆ Physical barriers – fencing, safety covers, doors, window locks
- ◆ Warnings - access alarms, wave detectors, immersion alarms
- ◆ Safety equipment - shepherd’s hook, ring buoy, lifeline, flotation devices
- ◆ Posted signs, rules and painted notices (e.g., ‘No Diving’)
- ◆ Education – swimming lessons, public awareness programs

The layered approach offers pool owners a variety of digital and mechanical options to select from. This tends to encourage buy-in.

Considerations:

- ◆ *Existing versus New Installation:*
 - Young families who have recently purchased a pool may be more attuned to issues of water safety than other pool owners, in part due to their research and focused interest on the topic. Moreover, the Pool/Spa industry is the first contact for new pool owners. Builders customarily discuss safety options and provide orientation manuals that include information on safety in and around the pool.
 - The same cannot be said for families moving into a house that has a pool already in place in the backyard. They may not be as cognizant or mindful of the need for adult supervision and other safeguards.

- ◆ *Scope:* The four-sided fence is intended to protect toddlers.
 - Imposing the installation of isolation fencing on families without children under the age of five is tantamount to requiring each and every car owner to install infant seats even if they do not have young children.
 - Toddlers are at equal risk around new or existing pools. Having a By-law that affects only new installations is blatantly capricious in terms of defending child safety, and is seen as disingenuous by many citizens.

- ◆ *Statistics:* The Drowning Report issued by the Chief Coroner of Ontario based on the 2010 Life Saving Society study demonstrated that 7 children drowned in pools over the covered time period. Of those children the settings were as follows;
 - 2 children drowned in above ground pools (typically 5' high walls).
 - 3 children drowned in pools that had four-sided fences.
 - 2 children drowned in pools where it is unknown if there were any fences in place or not.

5 out of the 7 drownings (71%) had either 5' walls (Aboveground Pool) or four-sided fencing in place. While a limited sample size, these figures suggest that mandatory four-sided fencing is not an especially helpful deterrent in terms of preventing drownings. Homeowners who loathe the additional side of fencing too often dismantle the gate or leave it propped open.

Experience: Proponents of four-sided (i.e., isolation) fencing have made claims that 7 out of 10 drowning incidents could be prevented by the addition of a fence separating the house from the pool. However, results have been underwhelming and have failed to come close to meeting original expectations.

- ◆ A case in point is Australia, which has had mandated four-sided fencing in place since 2004. If any country in the world should have seen a marked improvement in drowning prevention it should have been Australia, as two of its states had no regulations in place whatsoever prior to the regulation being enacted (i.e., not even a requirement for three-sided fencing). After some initial improvement, the 2015 Drowning Report from Australia indicates a decline in effectiveness to the point where the country is rethinking its current policy.
- ◆ No state in the U.S.A. has legislation that makes four-sided fencing mandatory.
- ◆ New Zealand revoked the existing pool fencing law in the autumn of 2016.
- ◆ While the City of Phoenix, Arizona has a four-sided fencing regulation in place, its mandated application is limited to pools of single family dwellings in which a child under the age of six (6) resides or regularly visits the property. Alternatively, an automatic safety cover may be deployed. The City has also invested in local water safety programs.
- ◆ The City of Ottawa requires the gate of a three-sided fence around the yard to be locked when the pool is not in use. Drowning prevention ads have been aired in cinemas during summer months.
- ◆ While France has fencing regulations in place, the country also permits modern technologies to be used as alternative safety measures (e.g., pool enclosures/shelters).
- ◆ Since issuing the 2011 report on drowning, Dr. Roger Skinner, Regional Supervising Coroner of the Office of the Chief Coroner of Ontario, has stated, *“I have polled my colleagues and we are not aware of any death investigations that involved automated pool covers.”* Authors of the report admitted not to have considered other safeguards at the time and are now open to other options, with the overall objective being to protect toddlers.

Recommendations:

- ◆ We strongly encourage the City of Toronto to support a layered approach to backyard water safety in and around swimming pools. Practical alternatives as barriers should be endorsed within existing By-laws.
- ◆ We urge the City of Toronto to help educate pool and spa owners. Ideally websites, brochures and messages to citizens should include available options outlined in “*A Model Residential Pool Enclosure By-law for Canadian Municipalities*”.
- ◆ We recommend the establishment of a public awareness program for the municipality that addresses the layered approach to water safety. No matter what physical safeguards are put in place, there is absolutely no substitute for adult supervision when toddlers are present.

Summary: This issue is every bit as much about human behaviour as it is about the installation of physical barriers. The enactment of an imposed singular safeguard in the absence of public awareness has met with only limited success. In reality, the ideal solution to child safety concerns is the direct and constant supervision of children around bodies of water, and this requires education.

Four-sided fencing, as one available option as a physical barrier, can be effective in preventing drowning incidents, but only if it is the preferred safeguard chosen by the homeowner. If not, its gate will likely be ignored, left in disrepair or propped open, especially in the absence of active enforcement by the city. Giving a homeowner a variety of effective options to select from has met with greater success, especially in jurisdictions that have invested in public education on drowning prevention. This is consistent with the layered approach to safety.

We are prepared to work the city of Toronto in establishing a public water safety awareness campaign. Such programs have proven to be extremely effective (e.g., London, Ontario).

Yours truly,



W. Robert Wood
Executive Director, PHTCC

In Support of the Layered Approach to Swimming Pool Safety

Presentation to the Licensing & Standards Committee
Toronto, Ontario
May 4, 2018



Pool & Hot Tub Council of Canada

Introduction

- ◆ The Pool & Hot Tub Council of Canada recognizes the importance of creating a safe backyard pool and spa environment for all families. We have a long history of working with water safety and drowning prevention organizations, local Boards of Health, and provincial ministries to promote safety in and around pools, spas and water features.
- ◆ Our objectives:
 - ◆ Ensure that all municipalities have Swimming Pool Fence By-laws in place;
 - ◆ Promote a layered approach to safety in and around pools and spas;
 - ◆ Work with communities to strengthen existing By-laws;
 - ◆ Educate homeowners on key elements of water safety and drowning prevention;
 - ◆ Foster public awareness of the importance of adult supervision;
 - ◆ Develop and implement pool safety educational programs in co-operation with municipal health authorities across the country.

The Best Solution

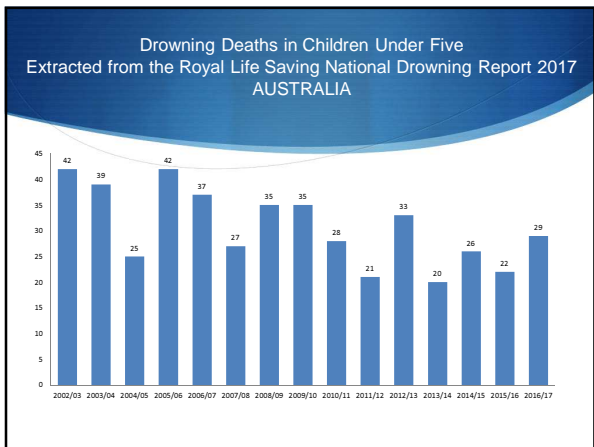
- ◆ Keys to drowning prevention are to:
 - ◆ Mandate that all communities have Swimming Pool Fence By-laws in place
 - ◆ Recommend the institution of a layered approach to safety. In order to maintain an effective level of protection it is imperative to:
 - ◆ Avoid absolute reliance on any one mechanical/electronic device that might be overridden or disengaged.
 - ◆ Allow for select combinations of safeguards that will create a safer environment around the pool and spa.
 - ◆ Build awareness of the vital role of adult supervision (i.e., no substitute).
 - ◆ Establish public education and safety awareness programs

The Layered Approach to Swimming Pool Safety

- ◆ The layered approach has been endorsed by virtually all organizations involved in promoting water safety, including the Red Cross and the Lifesaving Society. Elements include:
 - ◆ ADULT SUPERVISION
 - ◆ Physical barriers – fencing, safety covers, doors, window locks
 - ◆ Warnings - access alarms, wave detectors, immersion alarms
 - ◆ Safety equipment - shepherd's hook, ring buoy, lifeline, flotation devices
 - ◆ Posted Signs, Rules and Painted Notices (e.g., 'No Diving')
 - ◆ Education – swimming lessons, public awareness programs

The Layered Approach to Swimming Pool Safety


- ◆ Safety is best served by having the homeowner take ownership of whatever “layer of protection” measures that he or she is committed to using. Such approaches achieve greater compliance and have been successful in reducing child incidents.
- ◆ HOW?
Institute a multi-level approach that is predicated on integrating elements of supervision, physical barriers, safety devices, signage, public awareness and education.



Inherent Risks of Mandated Isolation Fencing (used in isolation)

Leading proponents of the single, quick-fix solution of isolation fencing: continue to reference outdated studies by Vimpani, G. (1982) and Wintermute, G.J. (1990), that were conducted prior to the introduction of new safeguarding mechanisms based on modern digital technology and automated controls.

frequently have drawn comparisons to regions that previously had no regulations in place whatsoever. This has led to inflated projections and unrealistic expectations.



Effective Physical Barrier Options

A) Four-sided (Isolation) Fencing

The Pool & Hot Tub Council of Canada recognizes that an **isolation fence**, at least 1.5m in height, built of a non-climbable material, completely isolated from any other barrier, with correctly functioning self-closing and self-latching gates provides protection.




- ◆ Nevertheless, gates are not fail-safe. Latches are too often broken or gates are left propped open. There are other safeguards that can offer effective layers of protection as alternatives.

Effective Physical Barrier Options

B) Three-sided fencing with wall

Three-sided fencing (≥ 1.5 m in height) with the fourth side being the wall of a house with **self-closing, self-locking access door(s)** outfitted with **protective devices or alarms** installed on all egresses that access the pool level.


- ◆ Applying the same technology to doors that is accepted on gates creates an equivalent level of protection. A door outfitted with an access alarm offers the additional benefit of an alerting mechanism.



Effective Physical Barrier Options
C) Three sided fencing with Juliet gate

Three-sided fencing (≥1.5 m in height) with the fourth side being the wall of a house with self-closing, self-locking access door(s) plus a **Juliet gate**, and protective devices or alarms installed on all egresses that access the pool level.


- ◆ a restricted-access gate forms part of the deck



Effective Physical Barrier Options
D) Three sided fencing with Safety Cover


Three-sided fencing (≥1.5 m in height) with the fourth side being the wall of a house with self-closing, self-locking access door(s) plus an approved **safety cover**, and protective devices or alarms installed on all egresses that access the pool level.

- ◆ Modern automatic safety covers, some of which are lockable, are designed to take the weight of many adults and will effectively keep a child out of the water.



Effective Physical Barrier Options
E) Lockable Pool Enclosures/Shelters

Three-sided fencing (≥1.5 m in height) with the fourth side being the wall of a house with self-closing, self-locking access door(s) plus an approved **enclosure/shelter**, and protective devices or alarms installed on all egresses that access the pool level.




Supplementary Layers of Safety

Pool Motion Detectors/Alarms - Motion alarms and detectors will sound off if there is any motion in the water or around the perimeter.



Supplementary Layers of Safety

"Kiddie" Fencing - "Baby gates" are safety-approved products that can be installed to further separate a play area in the backyard from the swimming pool and hot tub. This type of fencing will not allow young children access to the restricted area, and can be removed at a later date when no longer required.



Supplementary Layers of Safety

Safety immersion wrist alarms - made for children and adults

Personal Flotation Devices



Supplementary Layers of Safety

- ◆ Safety Equipment - There should be basic life saving equipment readily accessible in the vicinity of the pool, hot tub or water feature, such as...

a Ring buoy



a Shepherd's hook



a Lifeline



Supplementary Layers of Safety

Development and enforcement of pool rules and the posting of signs and warnings:



Supplementary Layers of Safety

- ◆ Education
 - Swimming lessons
 - CPR and lifesaving training
 - Public awareness campaigns



Adult Supervision the cornerstone of protection for toddlers

Lifesaving Society: "If you are not within arms' reach of your child, you've gone too far."



Public Education on Water Safety (e.g., bus posting)



Summary: Possible amendments to create a safer and more secure pool environment...

We strongly encourage the City of Toronto to amend its existing swimming pool enclosure By-law to incorporate elements of "A Model Residential Pool Enclosure By-law for Canadian Municipalities". Consistent with a layered approach to backyard swimming pool safety...

- 1) All pools, old and new, should be required to have fencing on all three sides, and a gate that is self-closing, self-latching, and locked when the pool is not in use.
- 2) Families with children of six (6) years of age or fewer should be required to select and install one or more of the recommended physical barrier options and deploy supplementary safeguards to assure additional layers of protection.

We also recommend the establishment of an educational program that addresses water safety.

To create a safer and more secure pool environment...

We are prepared to work with City Officials to promote pool safety and increase the level of public awareness in communities across the country. There are positive examples to draw upon. Platforms of past success:

- Model Municipal By-law development with the B.C. Ministries of Public Safety and Housing & Social Development
- Safety sign in collaboration with Lifesaving Society, Canadian Red Cross, St. John Ambulance
- Aquatic recreation industry regional radio and television announcements, water safety brochures, bus shelter advertising, cinema ads, etc.

PHTCC Contacts

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www.poolcouncil.ca & www.safepools.ca

Public Education on Water Safety






Message to PHTCC from Coroner's Office
January 29, 2016

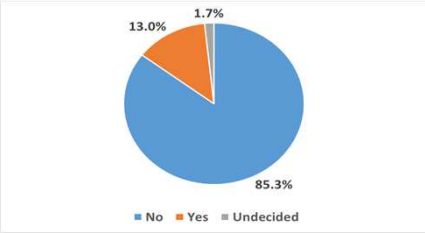
♦ "I have polled my colleagues and we are not aware of any death investigations that involved automated pool covers. One colleague did report a personal experience in which a cover was partially retracted such that the deep end was still covered. The pool owner thought that this would prevent the children from entering the deep end. The problem, of course, is that this would impair visibility and rescue. This just speaks to the proper use of any safety device, whether a cover or a fence/gate. Thank you again for your efforts to improve pool safety. Please contact me if I can be of assistance." ... Roger

Dr. Roger P. Skinner, BA, MD, CCFP(EM)
Regional Supervising Coroner
Office of the Chief Coroner for Ontario
Toronto, West Region
Forensic Services and Coroner's Complex
25 Mentor Skulman Avenue,
Toronto, Ontario



Public Opinion
Survey conducted by Pioneer Family Pools
361 Respondents, Spring 2016

Do you think it should be mandatory to fully enclose your pool within your yard?



Response	Percentage
No	85.3%
Yes	13.0%
Undecided	1.7%

Endorsements for the Layered Approach to Safety

The layered approach to safety is endorsed by the U.S. Consumer Product Safety Commission. (Note: Not one State in the U.S.A. mandates isolation fencing as the sole option.)

The International Code Council, through the *International Swimming Pool & Spa Code*, specifies the use of a series of optional safeguards – a layered approach. (It also sanctions the independent use of automatic safety pool covers.)

The City of London (Ontario) has a sensible and effective water safety program in place. The municipality also supports an active public awareness campaign annually. The result is an exemplary record of pool safety. A model program exists.

Related Experiences [fostering consumer compliance]

Phoenix, AZ: Mandates barriers for residences with a pool where one or more children under the age of six live (or regularly visit): Barrier Options: isolation fencing, or self-latching and self-closing rear doors and gates, or motorized safety covers. Plus, window and door specifications.

Ottawa, ON: All gates in a pool enclosure must be self-closing and equipped with a self-latching device and a lock located inside the enclosed area at least 1.35 metres (4 ft 6 in) above the bottom of the enclosure. Every gate in the enclosure must be closed and locked at all times, except when the pool area is in use. Also, a public awareness campaign has been launched (cinemas).

Municipalities that are serious about making a positive difference:
 → apply rules to all swimming pools (new and existing).
 → support a layered approach to water safety in the backyard.

Canadian Drowning Report 2015

Drowning Prevention Research Centre Canada

- ◆ % of all drownings 2003-2007 in private pools = 6%
- ◆ % of all drownings 2008-2012 in private pools = 6%
- ◆ % of all drownings 2003-2007 in private hot tubs = 1%
- ◆ % of all drownings 2008-2012 in private hot tubs = 2%
- ◆ % of all drownings 2003-2007 in bathtubs = 8%
- ◆ % of all drownings 2008-2012 in bathtubs = 9%

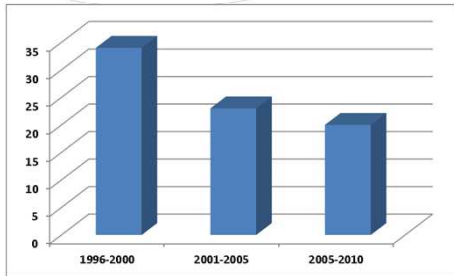
Australian Drowning Report 2015 issued by the Royal Life Saving Society

- ◆ Australia introduced swimming pool barrier policy in May 2004
- ◆ Prior to that, two states had **no** fencing requirements in place
- ◆ As expected, initial progress saw an improvement in the drowning rate of young children

◆ Progress has tapered off: Drowning Deaths (ages 0-4 years)

2002-03	42
2011-12	21 (recorded low)
2014-15	26
10-yr. avg.	31

Number of Preventable Water Related Deaths (0 - 4 years) Canadian Drowning Report (Lifesaving Society Canada) All settings



Additional Considerations

- ◆ **Lifesaving Society Ontario Drowning Report of 2008:**
Since 1987 total drowning deaths in Ontario have been reduced to half, during the same period in which the province experienced the largest growth in new pool construction.
"On or near the water alone" - 95% of children under the age of five were alone when the drowning occurred.
- ◆ **A Phoenix, AZ Children's Hospital study concluded that:**
One-half of the child drownings that occurred in Phoenix between 1982 and 1989 took place in just one percent of all residential pools -- those which had four-sided fencing.

Inherent Risks of Mandated Isolation Fencing (used in Isolation)

SafeKids Canada Pool Fencing Discussion Paper (August 2007) stated: *"In most drowning cases the pools (95%) had inadequate safety gates."*

Based on similar such findings, it has been determined that four-sided isolation fencing when deployed in the absence of other safeguards -

- gives a false sense of security and encourages complacency on behalf of pool owners,
- creates a potentially dangerous situation since gates can be propped open by adults and older children,
- incorrectly assumes that "one size fits all",
- hinders the development and implementation of new, innovative layers of protection,
- may or may not have the support of the pool owner.

To create a safer and more secure pool environment...

We encourage the City of Toronto to:

- consider a strategy that has proven successful in other jurisdictions, specifically the endorsement of a layered approach to water safety;
- endorse practical alternatives as barriers within existing By-laws;
- educate pool and spa owners on available options outlined in "A Model Residential Pool Enclosure By-law for Canadian Municipalities";
- establish a public awareness program for the municipality that addresses the layered approach to water safety.





First Edition – January 2013

A Model Residential Pool Enclosure By-law For Canadian Municipalities

Introduction

Canadian municipalities are strongly recommended to enact By-laws that address backyard swimming pool enclosures. This model By-law is offered by the Pool & Hot Tub Council of Canada (PHTCC) as a template for communities across the country. The underlying objective of the combined articles outlined in this model By-law is to make the backyard swimming pool a safe environment for all citizens. Based on an extensive review of injury prevention literature, practical experiences in the field, and an assessment of existing by-laws and legislation, this document supports the fostering of the Layered Approach to Swimming Pool Safety. This intervention has proven to be the most effective way of safeguarding residential swimming pools. Key elements of this model By-law have been derived from the collective expertise garnered from relationships with sister organizations that also address water safety concerns.

The PHTCC is a voluntary, not-for-profit association representing the interests of the aquatic leisure industry. As such it is not considered a harmonized organization, and therefore does not qualify as an accredited national standards-writing body. Notwithstanding the above, municipalities are encouraged to adopt sections of this document in whole or in part.

Additional information on swimming pool safety can be obtained from the website: www.safepools.ca

Scope

- *This model By-law specifically addresses private residential swimming pools. It is not intended for commercial or public swimming pools that are already effectively regulated at both provincial and national levels.*
- *This model By-law can be applied to new installations as well as existing swimming pools.*
- *This model By-law does not apply to a spa that has a substantial, structurally adequate hardcover permanently attached to its supporting structure, provided that this same cover is securely fastened and locked to prevent access at all times when the spa is not in use. This model By-law is applicable to all other spas.*



The Layered Approach to Swimming Pool Safety

Several key elements need to be in place in order to maintain an effective level of protection and prevent residential pool drownings and accidents:

- a) Municipalities must ratify Pool Enclosure Barrier By-laws**
- b) Public Awareness/Educational programs focussing on water safety need to be established**
- c) Regulatory measures must support the Layered Approach to Swimming Pool Safety. The Layered Approach places a series of hurdles that deters unwanted access to the pool area, and includes:**
 - i) Responsible Adult Supervision – No matter what other safeguards are in place, there is no substitute for adult supervision. Vigilance is required at all times.**
 - ii) Physical barriers – fencing, automatic safety covers, doors, window latches**
 - iii) Warning systems – access alarms, wave detectors, immersion alarms**
 - iv) Supplemental safeguards - safety equipment (shepherd’s hook, ring buoy, lifeline)**
 - posted signs, rules and painted notices (e.g., ‘No Diving’)
 - personal flotation devices for young children and weak swimmers
 - swimming lessons and first aid training for all family members
 - a telephone installed poolside with emergency numbers listed

Safety is best served by having homeowners take ownership of whatever “layers of protection” measures that they are committed to using. Such approaches achieve greater compliance and have been successful in reducing child incidents.

The Layered Approach to Swimming Pool Safety avoids reliance on one sole mechanical/electronic device that might be overridden or disengaged. It allows for select combinations of safeguards that create a safe environment in and around the swimming pool.

A Model Residential Pool Enclosure By-law for Canadian Municipalities makes up one component in the series of safety measures that are required.

Reference Materials:

- i) PHTCC Recommended Guidelines – Suction Avoidance Provisions (G-0109)**
- ii) PHTCC Recommended Guidelines – General Safety Provisions for Pools and Hot Tubs (G-0209)**
- iii) Safety Sign – Backyard Pool and Spa Safety Rules**
- iv) American Society of Testing and Materials Standard, ASTM F 1346-91 – Swimming Pool and Spa Covers**
- v) Association française de normalisation (AFNOR) Standard NF P 90-309 – Abris de piscines**

A BY-LAW TO PRESCRIBE THE DESCRIPTION AND SPECIFICATIONS OF LAWFUL RESIDENTIAL POOL ENCLOSURE BARRIERS

The Municipal Council of _____ enacts as follows:

1. This Bylaw may be cited as _____ Pool Enclosure Bylaw (DATE).

2. Definitions

As used in this article, the following terms shall have the meanings indicated:

- **“Barrier”** means a fence, wall or building or any combination thereof;
- **“Chief Building Inspector”** means the Chief Building Inspector of _____ and such other persons as he or she may designate from time to time as his or her assistants;
- **“Child-Resistant Window”** means a window equipped with a window guard that limits the window opening to less than 100mm;
- **“Effective Grade Level”** means the highest level of ground at a fence location within a horizontal distance of 0.5 m either side of its respective location.
- **“Enclosure”** means a fence, wall, cover or other structure, including any permitted door, gate or other opening, which surrounds and restricts access to an outdoor swimming pool.
- **“Entrance”** means a door, doorway, window, gate, or any other structure or opening providing for a means of entry or exit or both.
- **“Exterior”** means the outside surface of a fence, swimming pool enclosure, deck or ramp which does not face toward a swimming pool or swimming pool area, or towards the contained portion of the property that it is intended to delineate.
- **“Fence”** means a free-standing barrier, guard, railing, or any structure that encloses property or an area of property, except a structural part of a building or wall.
- **“Gate”** means any part of a swimming pool fence which opens on hinges and includes a door located in the wall of an attached or detached garage or carport which forms part of the swimming pool fence.
- **“Hot Tub”** means a hot tub, whirlpool, hydro massage pool, or spa.
- **“Inflatable Pool”** means a pool, as defined in this by-law, consisting of an air supported structure which is capable of containing water with a depth in excess of 0.61 metres at any point.
- **“Non-climbable”** means a minimum of a 1.52 m vertical face presented to the exterior of a swimming pool enclosure. For an enclosure of chain link construction, means a mesh which is no greater than 38 mm square for a minimum of 1.52 m vertically. For all other enclosures, means that there are no horizontal openings greater than 38 mm for 1.52 m vertically. For an enclosure of vertical panel wood construction, means top and bottom rails at least 1.2 m apart for any Fence having a height of 1.53 m or less, and horizontal rails a minimum of 0.60 m apart for any Fence having a height greater than 1.53 m.
- **“Owner”** includes the registered owner of a property and any lessee, tenant, mortgagee in possession, or person occupying or in charge of a property.
- **“Person”** means an individual, firm, corporation, partnership, association, or organization.

- **“Pool”** means a structure, basin, chamber or tank containing or capable of containing water, and is designed to be used for swimming, wading, or bathing, and:
 - a) has a depth at any point equal to or exceeding 0.75 m; and
 - b) has an open exposed surface area equal to or exceeding 1 m²; and
 - c) includes, without limitation, in-ground swimming pools, above-ground pools, wading pools, and landscape pools, and
 - d) is not under the jurisdiction of the Building Code; and
 - e) is not completely inside a building; and
 - f) is not owned by government or a local board or commission constituted under any statute or by-law; and
 - g) is not a pond or reservoir to be utilized for farming purposes; and
 - h) excludes spas; and
 - i) excludes storm water management ponds.
- **“Self-closing device”** means a mechanical device or spring which returns a swimming pool fence gate to its closed position within 30 seconds after it has been opened.
- **“Self-latching device”** means a mechanical device or latch which is engaged each time the swimming pool fence gate is secured to its closed position; which will not allow the swimming pool fence gate to be re-opened by pushing or pulling, and which will ensure the swimming pool fence gate remains closed until unlatched by either lifting or turning the device itself directly or by a key.
- **“Spa”** shall include those pools commonly referred to as a hot tub, a whirlpool, a Jacuzzi or a hydro massage pool.
- **“Temporary Pool”** means an Inflatable Pool or other Pool which is designed to be installed temporarily and removed periodically on a seasonal or more frequent basis.
- **“Wall”** means a solid, free-standing barrier that encloses property or an area of property.

3. Prohibitions

3.1 No Person shall construct or install a Pool, cause a Pool to be constructed or installed, or commence with construction or installation of a Pool, without first obtaining a Pool Enclosure permit from the City. The Chief Building Inspector may optionally request a site inspection prior, during or upon completion of the construction of any new Pool and Pool Enclosure.

3.2 No Person shall construct or install a Pool, or cause a Pool to be constructed, or installed, which is not completely enclosed by a Pool Enclosure in accordance with this by-law.

3.3 No Person shall use any Pool Enclosure unless it is constructed, installed and maintained in accordance with this By-law and any applicable provincial Building Code requirements.

3.4 (a) No Person shall place water in a Pool or cause or permit water to remain in the Pool if the required Pool Enclosure is not completely constructed in compliance with the requirements in this by-law.

(b) Despite subsection 3.4(a), where a Person is constructing or causing to be constructed a Pool for which a Pool Enclosure permit has been issued, a Person may place water in a Pool or cause or permit water to remain in the Pool if there is temporary fencing in place in compliance with section 10 of this by-law, but only where such temporary fencing is in place for no longer than 120 days after the issuance of the Pool Enclosure permit.

(c) Despite subsection 3.4(a), where a Pool is in existence on the date of the passing of this by-law, a Person may place water in a Pool or cause or permit water to remain in the Pool if there is temporary fencing in place in compliance with section 10 of this by-law, but only where such temporary fencing is in place for no longer than 30 days, or such longer period of time if approved in writing by the Chief Building Inspector.

3.5 No Person shall remove any part of a Pool Enclosure if the Pool is filled with water.

3.6 No Person shall construct or maintain a double gate access to a Pool without one of the two gates having a Self-closing device and a Self-latching device. The gate of this double gate access without a Self-closing device and a Self-latching device must have a device permanently affixed to the ground or other non-movable object that prevents access through this gate without lifting or removing this device and then releasing the latch.

3.7 No Owner shall fail to ensure that:

(a) all gates forming part of the Pool Enclosure meet the standards of this by-law;

(b) all entranceways to a Pool Enclosure through a Wall of a main building meet the standards of this by-law;

(c) all entrances forming a part of a Pool Enclosure are locked when the area is not actively in use; and

(d) a Hot Tub is fitted with a lockable lid or cover that complies with the American Society of Testing Materials (ASTM) Standard F1346-91 (2010) as amended, or a guard as specified in Section 13.1(b).

3.8 No Person shall place, pile, attach or lean any object or material against or near a Pool Enclosure so as to facilitate climbing of the Pool Enclosure, diminish the structural integrity of a Pool Enclosure or render the Pool Enclosure to be in non-conformity with the provisions of this by-law.

3.9 No Person shall fail to comply with the terms set out in this by-law.

4. Pool Enclosure General Requirements

4.1 Every Owner of a Pool shall maintain in good repair a sturdy, Non-climbable enclosure around the entire Pool area having:

(a) a minimum vertical height of 1.52 m above the effective grade level where the Pool Enclosure Barrier includes Fence or Wall sections;

(b) except in the case of a building Wall, no opening greater than 100 mm wide at its least dimension and no opening greater than 50 mm between the bottom of the enclosure Barrier and the effective grade at the base of the Barrier;

(c) except in the case of a building Wall, no access through the Barrier except by way of one or more Self-closing, Self-latching gates and the latch and lock located on the swimming Pool side of the gate at a height of not less than 1.0 m above the effective grade level at the base of the gate.

4.2 Pool Enclosure Barriers may not consist of hedges, shrubs, bushes, trees and other plants.

5. Standards for Fences as Pool Enclosures (Refer to Appendix A for examples of permanent fencing barriers)

5.1 No Person shall erect a Fence as a Pool Enclosure Barrier or part thereof unless such Fence shall consist of:

(a) chain link construction, with;

(i) a mesh not greater than 38 mm consisting of 12 gauge galvanized steel wire, or of 11 gauge steel wire covered with vinyl or other product which has been approved by the chief building official which would yield a total thickness equivalent to 12 gauge wire;

(ii) no horizontal rails, bracing or exposed attachments or members on the Exterior side of the Pool Enclosure for a height of 1.52 m above grade and with a minimum vertical distance of 0.86 m between the lower two horizontal members;

(iii) the top and bottom rails firmly fastened to the upright posts, which rails shall consist of at least 32 mm galvanized steel pipe except where a continuous galvanized steel tension rod of at least 5 mm thickness is substituted for the bottom rail; and

(iv) if constructed of alternate products or methods, the same shall have been pre-approved by the Chief Building Inspector.

(b) vertical panel wood construction with:

- (i) vertical members of at least 25 mm nominal thickness attached to a top and bottom rail in such a manner as to not facilitate or permit climbing from the Exterior and which vertical members shall be spaced not more than 100 mm apart;
- (ii) supported by posts at least 100 mm x 100 mm nominal dimensions, spaced not more than 2.4 m apart, which posts shall extend at least 0.6 m into the ground for any Fence having a height of 1.53 m or less and shall extend at least 0.9 m into the ground for any Fence having a height greater than 1.53 m, and which posts shall be securely embedded into the soil and any portion thereof below grade consisting of wood shall be treated with an approved wood preservative or be of pressure treated wood; or posts are attached to steel brackets that have been sunk into a concrete footing;
- (iii) top and bottom rails of at least 38 mm x 100 mm nominal dimensions;
- (iv) top and bottom rails at least 1.2 m apart for any Fence having a height of 1.53 m or less, and horizontal rails a minimum of 0.60 m apart for any Fence having a height greater than 1.53 m;
- (v) if constructed of alternate products or methods, the same shall have been pre-approved by the Chief Building Inspector.

(c) metal picket construction with:

- (i) vertical members spaced not more than 100 mm apart which are attached to a supporting structure not containing any diagonal members or framework in such a manner that would not facilitate or permit climbing from the Exterior;
- (ii) supporting posts firmly embedded into the ground spaced not more than 2.4 m apart which posts shall extend at least 0.4 m into concrete footings for any such Fence having a height of 1.53 m or less and shall extend at least 0.5 m into concrete footings for any such Fence having a height greater than 1.53 m; and
- (iii) has minimum 55 mm diameter top and bottom rails permanently connected to the vertical members, such rails to maintain minimum 1.2 m vertical separation at all locations, and
- (iv) if constructed of alternate products or methods, the same shall have been pre-approved by the Chief Building Inspector.

(d) interlocking polyester mesh construction with:

- (i) Fence poles permanently secured and spaced a maximum of 1.0 m on centre to the decking surface;
- (ii) each pole on the Fence and on the gate having a locking sleeve anchored to the deck with an approved adhesive. Each locking sleeve shall have a minimum of two stainless steel screws anchored to the aluminum or stainless steel poles;
- (iii) each sleeve embedded into the decking surface to a minimum depth of 88 mm, into a hole of minimum diameter 15 mm, and permanently affixed with an approved adhesive;
- (iv) a Self-latching and lockable gate;
- (v) fencing and gate having no top crossbars;
- (vi) each fencing system having been approved by an independent testing laboratory and meeting the requirements of American Society for Testing and Materials (ASTM) Standard F-2286, and
- (vii) if constructed of alternate products or methods, the same shall have been pre-approved by the Chief Building Inspector.

(e) safety glass of the laminated or tempered type or wired glass construction with:

- (i) glass panels positioned so there is no opening of more than 38 mm between the panel and the post where horizontal.

(f) such other materials and construction that will provide an equivalent degree of safety as shall have been pre-approved by the Chief Building Inspector; or

(g) a combination of (a), (b), (c), (d), (e) and (f).

5.2 No Person shall use any Fence that forms part of a Pool Enclosure which:

(a) contains barbed or razor wire, electrified wiring, sharp projections or any other unsafe or dangerous characteristics on either the Exterior or interior; or

(b) is located less than 1.2 m from the nearest inside wetted surface of the Pool wall.

6. Standards for Walls as Pool Enclosures

6.1 Except outbuildings to service the Pool such as a changing room or storage shed for pool maintenance equipment, no Person shall use the Wall of a building as part of the required Pool Enclosure Barrier unless:

(a) the main Entrance to the building is not located within the Pool area and unless the service Entrance if located therein is lockable.

6.2 No Person shall erect a dividing Wall or retaining Wall as a Pool Enclosure Barrier or part thereof unless such Wall:

(a) is constructed of concrete block/pavers, poured concrete, dry stone/boulder, stone veneer, brick, wood/timber, gabion or a combination thereof;

(b) is Non-climbable.

7. Standards for Certified Safety Covers as Pool Enclosures

7.1 No Person shall install a safety cover as a Pool Enclosure or part thereof unless:

(a) such cover meets or exceeds Association for Testing and Materials (ASTM) F1346 - 91(2010) Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs, and

(b) such cover is kept locked at all times except when the Pool is in use and being supervised by a responsible adult Person.

(c) the main Entrance to the building is not located within the Pool area and unless the service Entrance if located therein, has a Self-closing door equipped with a Self-latching device located not less than 1.5 m above the bottom of the door; and

(d) only child resistant windows provide access to the enclosed Pool area.

8. Standards for Certified Shelters as Pool Enclosures

8.1 No Person shall erect a shelter as a Pool Enclosure or part thereof unless such shelter:

(a) meets or exceeds Association Française de Normalisation (AFNOR) Standard NF P 90-309

(b) is kept locked at all times except when the Pool is in use and being supervised by a responsible adult.

9. Standards for Pool Enclosure Entrances

9.1 No Person shall erect an Entrance which forms part of a Pool Enclosure unless such entrance:

(a) is of construction type and height at least equivalent to that of the required Pool Enclosure;

(b) is supported on hinges of sufficient quantity and strength to safely and adequately support the entrance at all times;

- (c) is self-closing and equipped with a self-latching device placed at the top or on the interior of the entrance; and
- (d) is equipped with an operable locking device, and
- (e) is Non-climbable.

- 9.2 No Person shall construct, or use any Entrance to a Pool area which forms part of the Pool Enclosure Barrier, unless such Entrance is kept locked at all times except when the Pool is in use and being supervised by a responsible adult.
- 9.3 No Person shall construct, or use an entrance to a Pool area through a door from a detached or attached garage unless the door complies with Sections 9.1 and 9.2 of this by-law.

10. Temporary Fence During Construction (Refer to Appendix B for example of temporary fencing barrier)

10.1 The Owner shall ensure that temporary fencing meeting the requirements of this section is in place during all phases of construction of the Pool such that unauthorized access to the site is prevented.

10.2 During construction of a Pool a temporary enclosure is required to consist of a minimum 1.2 m high mesh Fence having a mesh not greater than 38 mm, with a steel T-bar support post every 3.0 m maximum and a 9 gauge galvanized steel wire located at the top and bottom of such Fence. The clearance between the underside of the temporary Fence and the Effective Grade Level shall not exceed 50 mm. Temporary fencing approved for use at industrial construction sites also may be deployed for this purpose. The temporary enclosure may be constructed of other material that will provide an equivalent degree of safety and provided that the alternative has been approved by the chief building official.

10.3 Notwithstanding section 4.1(a) of this by-law, if a Pool Enclosure is damaged and requires replacement or repair, water may remain in a Pool enclosed by a temporary Pool Enclosure with the permission in writing of the Chief Building Inspector pending the replacement or repair of the Pool Enclosure, subject to any time limits which may be imposed by the Chief Building Inspector.

11. Above-Ground Pools

- 11.1 For the purposes of this By-law above-ground Pools are deemed to be the same as in-ground Pools, and require the same Pool Enclosure around the entire Pool area except as provided in Subsection 11.2.
- 11.2 No Person shall construct, or use an above-ground Pool unless all access points are maintained in accordance with Section 9 of this By-law. Above-ground Pools with vertical sides which extend at least 1.5 m above the effective grade level and are constructed in such a manner that would not facilitate or permit climbing from the Exterior need not have a Pool Enclosure around the perimeter, provided access points are maintained in accordance with this By-law. Access ladders connected to above-ground Pools must be retractable and Self-latching.
- 11.3 No Person shall construct or use a deck or ramp or part thereof serving a Pool area with a height greater than 0.6 m above the effective grade level unless a continuous safety rail is constructed and maintained around the Exterior perimeter of the deck or ramp in conformance with the applicable provincial Building Code.

12. Temporary Pools

- 12.1 If a permit has been obtained with respect to the Pool Enclosure for a Temporary Pool, the Temporary Pool may be reinstalled and refilled with water without additional permits or inspections provided there have been no alterations to the Pool Enclosure.

13. Hot Tubs

13.1 No permit or Pool Enclosure is required for a Hot Tub which is:

- (a) equipped with a substantial cover in accordance with Section 3.7(d) of this by-law; or
- (b) equipped with a guard not less than 1.0 m in height, measuring from the surface of the platform or deck.

14. Application

14.1. Every owner shall ensure any Pool existing as at the date this By-law is passed complies with this By-Law on or before _____ [1 year from date By-law passed]

15. By-law Inspection and Enforcement Provisions.

15.1 (a) A Building Inspector may issue Orders under this by-law, directed to an owner or to any Person or Persons whom he or she believes to have care and control of property on which a Pool or Pool Enclosure is located:

- (i) if, in the opinion of such issuer, a Pool Enclosure is not constructed, used and maintained in good working order in accordance with any of the provisions of this by-law, or;
- (ii) if the construction of a Pool Enclosure is, in the opinion of such issuer, substantially suspended or discontinued or incomplete, or;
- (iii) if, in the opinion of such issuer, a Pool Enclosure permits, presents, or causes an unsafe condition or hazard to exist.

(b) Such orders issued under this section shall specify the nature of the contravention, the section of the by-law contravened and the time allotted for the contravention to be abated.

(c) Upon receipt of an order, the issuee(s) shall ensure no water shall be placed in the Pool or allowed to remain therein until the Building Inspector certifies that the contravention has been abated and the Pool Enclosure prescribed by this by-law is in place and in good repair.

15.2 No Person shall hinder or obstruct, or attempt to hinder or obstruct any building inspector in the exercise of a power or the performance of a duty under this by-law.

15.3 Subject to the related section(s) of the *Community Charter*, a building inspector may enter onto property at any time if the inspector is of the opinion that his or her presence is necessary to address immediate health and safety conditions which appear to present imminent danger or hazards to persons.

15.4 A Service of the Order shall be executed:

(a) The order shall be served on the owner of the property and such other persons affected by it as the inspector determines and a copy of the order may be posted on the property.

(b) An Order required by this by-law is to be served personally or by regular mail sent to the known address of the Person to whom notice is to be given or to that Person's agent for service.

(c) If the Order is sent by regular mail the service shall be deemed to have been made on the third day after the day of mailing.

16. Offences

16. (a) Every Person who violates any of the provisions of this by-law or who causes, suffers or permits any act or thing to be done in contravention or violation of this by-law, or who neglects or refrains from doing anything required to be done by any of the provisions of this by-law shall be guilty of an offence.

(b) Every Person who commits an offence contrary to the provisions of this by-law is liable on summary conviction to the penalties provided in the *Offence Act* and to the costs of prosecution.

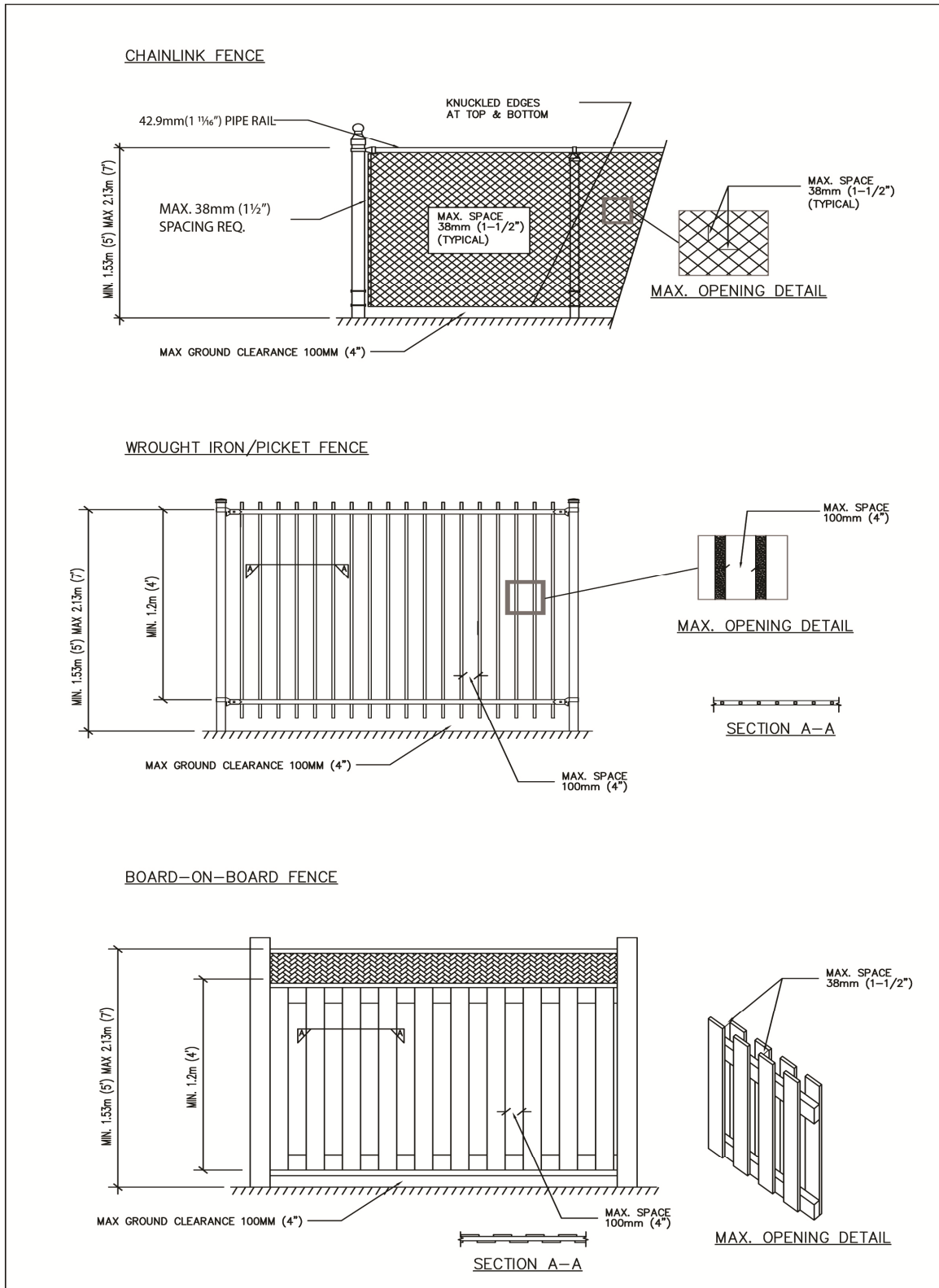
(c) The City may enforce the provisions of this by-law through the issue of a ticket under the City's Municipal Ticket Information by-law.

17. Repeal (if applicable)

17. *[provision repealing any prior Pool Enclosure regulations of this jurisdiction]*



Appendix A: Examples of Permanent Fencing Barriers



Appendix B: Example of Temporary Fencing Barrier

